

## Norfolk Bird Report – 1992

Editor/Recorder: MICHAEL J. SEAGO County Recorders/Editorial Assistants:

P.R. ALLARD, P.R. CLARKE, D.A. DORLING,

G.E. DUNMORE, M.A. GOLLEY, A. HALE, P.J. HEATH,

J.B. KEMP, A.J. PRATER & J.R. WILLIAMSON

Editorial	425
Yarmouth's Little Terns	430
Brancaster Harbour Turnstones	431
Nesting Mediterranean Gulls – New to Norfolk	433
The Wash Oystercatchers	434
Ruppell's Warbler – New to Norfolk	436
Red-necked Stint – A first for Norfolk	437
Diets of Hen Harriers & Merlins	439
Waterfowl Counts	444
Birds of Estuaries Enquiry	445
Ringing Report	448
Classified Notes	454
Check-list of the Birds of Norfolk	498
Contributors	526

## Norfolk Mammal Report – 1992

Editor: REX HANCY assisted by EDDIE BOOSEY

Editorial	528
The aptly named Harvest Mouse?	530
Norfolk Badgers 1982-1992	533
Classified Notes	539
Contributors	544

Published by the NORFOLK & NORWICH NATURALISTS SOCIETY, Castle Museum, Norwich NR1 3JU (*Transactions* Volume 29 Part 6 August 1993) in conjunction with NORFOLK ORNITHOLOGISTS ASSOCIATION, Aslack Way, Holme-next-Sea, Hunstanton, PE36 6LP.

#### ISSN 0375 7226

Keepsake back numbers are available from Mrs M. Dorling, 6 New Road, Hethersett NR9 3HH.

Front cover painting: Bearded Tits by J.C. Harrison (reproduced by courtesy J.C. Harrison Trust).

Back cover painting: Harvest Mice by J.M. Last

Price £4.50

# NORFOLK BIRD REPORT 1992



## **Editorial**

The Council of the Norfolk & Norwich Naturalists Society, in conjunction with Norfolk Ornithologists Association, is pleased to present the annual report on the birds of Norfolk.

## Our Editor — A Unique Record

Ten years ago I wrote that the 1982 issue of the *Norfolk Bird Report* represented an important milestone in the publication's history. It was the first issue produced under the partnership of the Society and the Norfolk Ornithologists' Association and was the thirtieth number to be edited by Michael Seago. The first report covering the County as a whole, was published in 1954 and dealt with the events of 1953.

This fortieth issue records the main ornithological happenings in Norfolk for 1992 and thus passes another major milestone for the publication and, more particularly, for its Editor. A total of forty county reports under the editorship of one person is, we believe, a unique record for the Country as a whole. Michael's meticulous attention for detail has maintained the highest of standards throughout, resulting in the Norfolk Report's wide popularity and well deserved reputation for accuracy.

During this long period many important innovations have been introduced to make eeach issue attractive as well as an accurate record of events; for example line drawings to break up the text were an early feature, soon to be followed by photographs, initially in black and white, but since 1986 in full colour. New this year is a full check-list of the (County's birds which briefly gives the status of each recorded species against which current and future sightings can be measured.

Michael began his interest in bird watching in the mid 1940s. In addition to his editing, he has written regularly in the local press and produced two editions of his book *Birds of Norfolk*, the first appearing in 1967. He has also taken an active part in local rnatural history organisations, serving at various times as Honorary Secretary to the Great Yarmouth Naturalists Society, Council member and Vice-President of the Norfolk Naturalists Trust and Council member, Vice-President and, currently, President of this Society. He has also devoted much time and effort on conservation matters including giving advice on reserve management and encouraging the protection of rare breeding birds. In recognition of this long and dedicated service, Michael was presented with the Sydney Long Memorial Medal at the Annual General Meeting of the Norfolk Naturalists Trust in May this year.

Everyone involved in the production of the *Norfolk Bird Report* offer their congratulations to Michael on his many achievements and repeat the hope expressed ten years ago, that he will continue his sterling work for many more years to come.

D.A.D.

#### Review of the Year:

January was drier and milder than usual, becoming foggy and colder towards the close. Good birds remaining from 1991 included Ring-billed, Laughing and at least 6 Mediterranean Gulls, inland Great Northern and Black-throated Divers and Black-necked Grebe. A remarkable offshore movement of Red-throated Divers was reported with 711 off Walcott and 487 off Paston on 4th and 820 east at Sheringham on 29th. A Rough-legged Buzzard wandered widely round Wighton, a Peregrine took up winter residence at Holkham and the traditional Broadland roost contained 6 Hen and 5 Marsh Harriers together with 5 Merlins.

Welney's winter haven attracted a record 4641 Bewick's and 739 Whooper Swans; over 400 Bean Geese featured in the Yare valley. A Black Brant at Lynn Point on 19th stayed well into March. Sea duck numbers were impressive: 100 Long-tailed Ducks off Hunstanton and 2000 Common Scoters in Holkham Bay – among them 160 Velvet Scoters. Only 2 Smew appeared.

Mild, dry weather continued into **February**, notably during the last ten days. Sawbills remained scarce. Over 2250 Bramblings assembled on uncut linseed at Wereham with a Ring-billed Gull at King's Lynn docks and an Iceland Gull at Sheringham on 6th. A Puffin provided a surprise inland at Welney where 300 Icelandic Black-tailed Godwits paraded on 11th. Five Black-throated Divers at Holme/Hunstanton suggests a small wintering population. Raptors included Peregrine and Rough-legged Buzzard; also 4 Buzzards at West Acre.

Mild weather continued to the last week of March. It then became cold and unsettled with much needed rain. A Red Kite wandered in Broadland on 20th/21st. Iceland Gulls were noted at Cley, Weybourne, Sheringham and Mundesley. A Spoonbill at Berney on 22nd was the forerunner of many sightings of up to 4 birds at the usual localities.

Migration remained slow in the first half of **April** which was unsettled. With their breeding season beginning in early June, Waxwings were in no hurry to leave and lingered at Eaton until 23rd. The final week, however, provided a taste of things to come. Another Red Kite and a total of 6 Black-necked Grebes were welcome visitors; also Kentish Plover at Pentney on 22nd. The 24th saw a second Kentish Plover – at Cley,



Alpine Swift (M. Elliott)

431 Whimbrel massed at Breydon and Alpine Swift at Kelling, Cley and Holkham with another (or the same) at Cromer next day when a Hoopoe reached Beeston Common. A Purple Heron was a welcome arrival on 26th when a Red-footed Falcon appeared at Winterton followed by 3 Tawny Pipits.

Settled anticyclonic conditions, a warm south-easterly airflow and almost 300 hours

of sunshine resulted in non-stop excitement for rarity seekers during May. The month opened with yet another Ring-billed Gull, Serin and Little Egret at Cley and Short-toed Lark on Blakeney Point. A splendid Glossy Ibis dropped all too briefly into Cley and Kelling water meadows on 6th when a Siberian Stonechat was at Burnham Norton. The first of 25 spring Temminek's Stints arrived on 8th. Next day 5 Cattle Egrets showed well in the Welney/Denver/Downham Market area with 2 staying until 20th. Roseate Tern, Red Kite and Ortolan Bunting all followed before 14th which heralded a remarkable period.

A vast anticyclone established over Seandinavia produced classic conditions for south European birds to overshoot. Twelve Red-footed Faleons arrived on 14th (part of a spring total of over 40 in the county). A Sardinian Warbler, 11 Red-throated Pipits, the first of 13 springtime leterine Warblers and the forerunners of a massive influx of Greyheaded Wagtails became travelling companions as the falcon influx continued. A Woodehat Shrike on 15th was followed by 2 Black-winged Stilts and Purple Heron next day. A Black Tern movement peaked around 18th when 75 passed through Cley followed on 20th by Marsh Sandpiper at Gunton lake and 8 Mediterranean Gulls at Breydon (part of an unprecedented spring movement). A Bluethroat on 26th preceded Pacific Golden Plover at Breydon and Lesser Yellowlegs at Cley, both on 28th. The last two days of the month saw an interesting sequence of visitors including Little Bittern at Holkham, Bee-eater at Blakeney and 2 Greenish Warblers; also featured at this time were 6 Savi's Warblers, 3 Searlet Rosefinehes and Pectoral Sandpiper.

Anticyclonic conditions remained during the first half of **June** with late drift migrants still appearing. The month was hot and dry with only a single day of rain. The 2nd produced Kentish Plover and Hoopoe. Seawatehers were given early encouragement with 4 Mediterranean Shearwaters. Little Egret, Broad-billed Sandpiper, Marsh Sandpiper and 2 additional Siberian stonechats all followed. A will-o'-the-wisp Bee-eater tantalised watehers at East Harling on 17th. Roseate Tern, Red Kites, 3 Rednecked Phalaropes, 4 Marsh Warblers, 6 Searlet Rosefinehes (the latter two species having record spring passages), 3 Icterine Warblers and 2 Golden Orioles completed the

set. Last of 19 spring Red-backed Shrikes appeared on 26th.

A total of over 20 Quail were heard calling while Marsh and Montagu's Harriers, Honey Buzzard, Goshawk, Hobby, Stone Curlew, Avoeet, Woodlark, Nightjar and Little Tern all enjoyed breeding success. Foxes, high tides and summer storms played havoc in the tern colonies. Once again only 8 booming Bitterns were recorded – the decline may have paused, but for how long will the mysterious boomer remain on the county breeding list?

In contrast to the first half of the year, **July** produced above average rainfall. A remarkably site-loyal Bluethroat stayed at Holme from the 1st until mid-August to moult. Cley produced a Broad-billed Sandpiper on 1st. Not to be outdone Breydon attracted another Ring-billed Gull (remaining to the year-end) on 3rd. Following easterly winds a superb Great Spotted Cuekoo visited Blakeney Point from 7th with Franklin's Gull at Titchwell on 21st. Red Kite and 2 Roseate Terns put in appearances. Wader passage was slow, but included Pectoral Sandpipers at Titchwell and Welney. A Little Egret took up lengthy residence at Breydon from 25th.

Rain was the main feature of **August** with south-westerly gales dominating the last days of the month. It began in spectacular fashion with Red-necked Stint at Cley on 2nd (a county first) and Spotted Crake trapped in the mid-Yare valley the same day. Wader movements picked up with Greater Sandplover on 5th, Baird's Sandpiper 18th to 20th, 3 Red-necked Phalaropes and 800 Black-tailed Godwits at Ousemouth. Among sea-watching highlights were 3 Long-tailed Skuas and 2 Mediterranean Shearwaters. Other good records included Little Egrets at Burnham Norton and Ousemouth. Raptors showed

well: 6 Honey Buzzards early in the month, a long-staying Osprey at Strumpshaw with 2 together at Stanford Water. Star raptor of the month was a Black Kite at Stiffkey on 24th. South-easterly gales on 30th brought 1090 Knot, 152 Curlew Sandpipers, 98 Bartailed Godwits and 87 Black Terns to Breydon.

Passerine migration was disappointing; Barred Warbler and Red-backed Shrike were best until another county first – a Ruppell's Warbler – appeared at Holme on 31st attracting birders from far and wide.

Atlantic depressions brought more rain during **September** until another anticyclone developed mid-month creating drift migration conditions from 18th. Sea-watching featured strongly with a major passage of Black Terns including 710 off Sheringham and 350 off Cley on 11th. Arctic Skuas passage peaked at 330 on 4th. Ten Long-tailed Skuas, 2 Mediterranean Shearwaters and Sabine's Gull were other highlights during the month.

Wader passage faded although 2 Red-necked Phalaropes and 6 Pectoral Sandpipers put in appearances. A Corncrake was a casualty at Gorleston on 6th. Passerines arrived from 18th, highlight being the fourth county record of Yellow-breasted Bunting on 20th/21st supported by such exciting vagrants as 32 Richard's Pipits, Thrush Nightingale, Red-throated Pipit, 4 Tawny Pipits, 4 Barred and 10 Yellow-browed Warblers, Red-breasted Flycatcher, 4 Ortolans and 5 Red-backed Shrikes.

Drifting passerines continued arriving into the first week of **October**, a cool and quite wet month with ground frosts. Sea birds again featured with over 90 Sooty, 11 Mediterranean and a lone Cory's Shearwater during the first ten days. Autumn 1991 was notable for its Long-tailed Skuas; this year it was the turn of Pomarine Skuas to provide excitement. Some 55 were reported during the month. Three Leach's Petrels fed off Sheringham all day on 7th. Five Grey Phalaropes were noted also Sabine's Gull, 3 Black Guillemots and 600 Little Gulls moving east off Holme on 11th. For rarity seekers October can be the most exciting period of the year. The 1992 tally featured 4 Olivebacked Pipits, 2 Pallas's Warblers and Red-rumped Swallow supported by 4 Siberian Stonechats, 25 Yellow-browed Warblers, Barred Warbler, 2 Red-backed and 9 Great Grey Shrikes, Bluethroat and 6 Red-breasted Flycatchers. Peregrines and Rough-legged Buzzards were welcome visitors as were 2 Cranes.

**November** – mild, wet and windy – was dominated by south-westerly winds. Migration virtually ceased, although another Little Egret commenced a lengthy stay at Breydon on 6th. Little Auks peaked at just six. Raptors included Red Kite, a second Peregrine and 5 roosting Merlins in Broadland. Three Waxwings passed over Titchwell on 29th.

**December** was bright and mainly dry, but with the lowest mean temperatures for ten years. With such hints of winter 32 Shore Larks continued residence at Titchwell, with others elsewhere in the county, giving hope that flocks may become a feature once again. Passerines of interest were a very late Richard's Pipit on 31st and 2000 Bramblings at Thetford. Surprisingly another Corncrake casualty was recorded: taken by a Horstead cat on 23rd. Wildfowl again became the centre of attraction although 6 Mediterranean Gulls were again wintering. Smew remained scarce, but at Hunstanton over 1000 Eiders and 70 Velvet Scoters had massed. Another record count (830) of Whooper Swans at Welney was followed by over 33,000 Pink-footed Geese at local roosts on 28th. Small groups of Barnacle Geese arrived, notably 30 at Breydon. Finally, a Ring-necked Duck, probably a returning long stayer, was found in Broadland on the last day of the year.

(Summary by J. Williamson)

Recording: Records should be submitted to Michael J. Seago, 33 Acacia Road, Thorpe St. Andrew, Norwich NR7 OPP by the end of January. It is regretted that some observers are still failing to comply with this deadline which is essential in meeting printing schedules. All observations should be prepared in the order appearing in this issue of the Norfolk Bird Report. It will be appreciated that notes submitted in diary form cannot be considered. In order to minimise the work involved records will not normally be acknowledged, but names of all contributors will be published. Records of national rarities considered by British Birds Rarities Committee need to be submitted to the Editor with full details as soon as possible after observation and not left until the year-end. There are omissions in this year's Classified Notes of national rarities as decisions are still awaited. In addition some observations have been excluded as full details are still awaited by BBRC.

Details of species and sub-species considered by the County Records Committee are listed in the 1990 Report and arc also available from the Editor. The need for field descriptions in certain cases is explained in the 1991 Report. Membership of the local Records Committee dealing with 1992 observations (and outstanding 1991 records) is as follows: Vernon Eve, Mick Fiszer, Dave Holman, Richard Millington and Andy Stoddart.

In order to obtain as complete a coverage as possible of the bird-watching year records have been extracted from the files of Birdline East Anglia, Nar Valley Ornithological Society and Norfolk Ornithologists Association. However, records of semi-rarities appearing in such publications will not be published in the *Norfolk Bird Report* unless details including the name of the observer(s) have been submitted. All correspondents are accordingly requested to submit their sightings of semi-rarities to the address given at the head of this section.

Acknowledgements: Thanks are due to the following artists and photographers: T. Andrewartha, N. Arlott, J. Baxter, A. Bloomfield, N. Borrow, N. Bowman, D.W. Burns, J.J., Buxton, S. Cale, R. Chittenden, N.S. Clayton, M. Cornish, D.M. Cottridge, J. Cox, A.S. Disley, C. Donner, D.A. Dorling, M. Elliott, P. Haddon, J.C. Harrison Trust, B.W. JJarvis, P. Jones, R. Jones, D.J. Kjaer, C.R. Knights, C. Lansdell, the late J.M. Last, J. Levene, T. Loseby, R.G. Millington, P. Morris, E. Phillips, R. Rowley, J. Reed, the late IR.A. Richardson, D. Scott, A. Tate, R. Tidman, P. Wheeler, G. Wright, J. Wright and S. Young.

Acknowledgement is also due to Birdline East Anglia, BTO (Birds of Estuaries Enquiry), Cley Bird Club, English Nature, Gt. Yarmouth Bird Club, Nar Valley Ornithological Society, National Trust, Norfolk Bird Club, Norfolk Naturalists Trust, North Sea Bird Club, Rare Bird Photographic Library, RSPB, Stanford Training Area Bird Club, Wildfowl and Wetlands Trust (National Waterfowl Counts), P.R. Allard (county archivist), G.E. Dunmore (liaising with British Birds Rarities Committee and acting as Secretary of the County Records Committee, J.B. Kemp long-serving member of the County Records Committee, Mrs M. Dorling, Mrs S.F. Seago and all other contributors.

#### RARE BIRD PHOTOGRAPHIC LIBRARY

Catalogues available from Robin Chittenden, 65 Sandringham Road, Norwich NR2 3RZ (Tel. 0603 633326)

### Yarmouth's Little Terns

Chris Durdin

Little Terns have nested at Yarmouth North Denes, off and on, at least since the second world war. A protection scheme, run by the Royal Society for the Protection of Birds, started in 1986.

Here, as at many colonies, they were successful in the early years of protection, but it was only a question of time before predators started to take their toll. This cycle can be seen in the following table:

Little Terns at Yarmouth North Denes 1986-1992									
1986 1987 1988 1989 1990 1991 1999									
Pairs	55	70	140	180	201	277	252		
Fledged	95	96	244	160	15*	12**	181		
Young fledged per pair***	1.7	1.4	1.7	0.9	0.07	0.04	0.7		

- \* 119 clutches of eggs taken by hedgehogs
- \*\* An estimated 300 chicks taken by kestrels
- \*\*\* A productivity of about 0.5 young per pair is needed to keep the population stable

Having lost nearly all the Little Tern chicks to Kestrels in 1991, the Kestrels' return in 1992 was highly likely. No method has yet been found to deter them so we decided on a high-risk experimental approach of providing supplementary food in the form of dead laboratory white mice, supplied to us ready-frozen. Two pairs of Kestrels were nesting roughly equidistant – just over 2 kilometres – from the colony; a third pair, in Nelson's monument, were too distant to trouble the terns.

The Kestrels were nesting in a hawthorn at West Caister and on a building in Gt. Yarmouth near the end of the Acle New Road. Both pairs were hunting in the area of the colony; from their direction of flight and hunting style they were reasonably easy to tell apart. Supplementary feeding started on 17th June at West Caister while the Yarmouth pair were left as a 'control'. The result was as expected; the West Caister pair slowed then stopped their tern predation, whereas the Yarmouth pair continued taking Little Tern chicks until supplementary feeding there started on 21st June.

The feeding of the West Caister brood was stopped, experimentally, from 25th to 27th June. They then started hunting the Little Tern colony again, slowly at first but taking five chicks on 27th June before supplementary feeding was re-started the following day. However when the mice supply was withdrawn from the Yarmouth pair on 27th June they did not return to the colony, instead preferring to fly west to hunt over the marshes.

The final result was that 249 pairs fledged 176 young. The Kestrels took about 120

chicks; a domestic cat or cats took at least 7 adult terns and a Hedgehog took 20 clutches; nine clutches were washed out by a high tide in mid-June.

More work on the supplementary feeding technique is needed, but these early indications are that it can succeed in greatly reducing Kestrel predation on Little Terns. Harry Paged-Wilkes, Lloyd Joyce and a team of RSPB volunteers and staff deserve credit for their efforts. Thanks are also due to Yarmouth Borough Council for their continuing cooperation.



Little Tern (P. Haddon)

On 5th March 1993, the Department of the Environment declared Great Yarmouth North Denes a Special Protection Area (SPA) under the European Community's Wild Bird Directive. Though already the North Denes was notified as a Site of Special Scientific Interest in 1992, this recognises the European importance of the UK's largest Little Tern colony. The SPA includes the foreshore of the Winterton-Horsey dunes, recognising that there is an east Norfolk Little Tern population that moves within the area according to the state of the beach and pressures from people and predators.

### **Brancaster Harbour Turnstones**

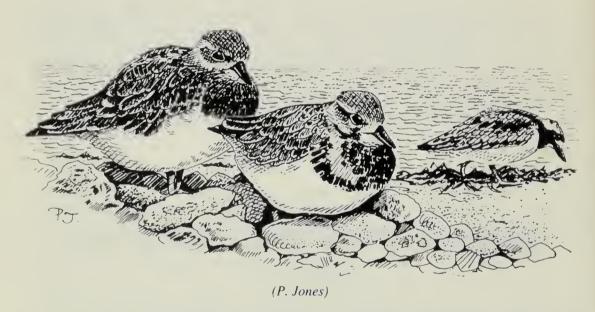
John Brown

Brancaster harbour is a winter home for some 200 Turnstones. Traditionally the birds take advantage of the various stages of the Mussel harvest, from collection in the low water lays, through grading and most importantly seizing the spoil that remains.

This association with shell-fishing has existed probably for centuries. The nearby Saxon shore fort of Branodvnvm (Brancaster) revealed that Oysters formed a large part of Roman diet. Since 1900 Cockles and Whelks have also formed a significant part of the industry within Brancaster harbour. And for over a century Mussels have been gathered in the Wash, relaid here to grow in low water lays.

Turnstones wintering at Brancaster breed in the high Canadian Arctic and also in Greenland. Ringing results from the Wash suggest that Scandinavian birds are passage migrants passing through mainly in autumn. Mussel harvesting commences in late September when relatively few Turnstones are present. It is not until October when the industry is in full swing that numbers increase. The Mussels are transported from the

lays to the mainland in boats resulting in disturbance of large amounts of mud containing thousands of juvenile Shore Crabs. The birds readily alight on the boats during the journey. Once at the mainland the Mussels are laid out on hard ground and as the tides wash over them a plentiful food supply is exposed. Most favoured are adult Shore Crabs carrying eggs. These delicacies, once upturned, become a magnet for a crowd of Turnstones. During grading many Mussels are broken and fearless Turnstones will rush in and seize them. In an attempt to escape the attention of others, individuals will fly off with these broken Mussels. Each item freely changes owner. Normally each bird is displaced without aggression, but when two evenly ranked birds meet a squabble follows. The two confront each other with tails down, back hunched uttering a chattering call, One usually gives way, but occasionally the contest ends in a beak-to-beak battle. Flock structuring has been researched by Dr Philip Whitefield at Edinburgh University. He has found that each Turnstone maintains the feeding technique adopted in its first winter. Also, birds can recognise each other from facial and head plumage thus avoiding fighting. Elsewhere in the harbour other feeding methods are followed. Some spend much time along the tidelines flicking through seaweed or seeking edible flotsam including such items as the remains of a stranded Long-finned Pilot Whale. Other Turnstones glean remains from Mussel and Cockle shells after being dropped by larger Gulls or prised open by Oystercatchers. At nearby Wells advantage is taken of any spilt grain cargoes on the quayside.



Turnstones roost communally occupying moored boats near feeding sites when the tide is high. Vessels are used in daytime and overnight, the birds welcoming shelter. Often they are joined by Rock Pipits. Such roost-sites give an insight into the smaller food items taken. At times droppings contain Laver Spire Shells which often accumulate around creek edges following stormy weather. When the creeks are frozen and Redshank and Grey Plovers begin suffering, the Turnstones continue feeding on the spoil that remains from the Mussel grading. This is deposited on the trackways leading to each site and every passing vehicle by crushing undersized Mussels provides food even during snowy spells.

Overnight roosting in boats and a guaranteed supply of food results in a stable and long-lived population. For example, a colour-ringed Turnstone in Brancaster harbour during February 1992 had been ringed as an adult at Teesmouth in May 1977.

# Nesting Mediterranean Gulls: New to Norfolk



(J. Wright)

At the time of publication of the first 'new look' *Norfolk Bird Report* covering the events of 1953 the Mediterranean Gull remained a rarity. But during the 1952/3 winter an adult took up residence at Sheringham, returning for a further four winters and establishing a pattern which still continues with individuals reappearing at the same localities year after year.

Breeding was recorded in both Britain (Needs Oar Point in Hampshire) and in Holland in 1968. After a sporadic beginning numbers have steadily increased both in this country and in Europe. In Holland – which has become *the* stronghold in north-west lEurope – 90 breeding pairs were recorded in 1990. The following year the total had increased to 125 pairs of which 60 were in a single colony. The majority of pioneer colonisers formed mixed pairings in colonies of Black-headed Gulls, but obviously it is no longer difficult for Mediterranean Gulls to find partners of their own species in this country.

All inland occurrences in Norfolk continue to be published in the county Report. However, coastal observations appear nowadays in summary form having become so numerous and space taking.

It is not altogether surprising, therefore, that Mediterranean Gulls nested, for the first time, at two localities in north Norfolk in 1992. At Titchwell Marsh RSPB Reserve two of these Gulls (one a full adult and the other a second-summer bird) were first seen on 20th April. Presumably a pair at Gore Point 12th April were the same individuals. Both displayed jet black hoods. Already firmly paired they swam together, engaged in bill touching, begging for food and alternately collecting, wetting, and then dropping nesting material. Copulation was noted on several occasions; the male being the younger bird. Soon they were regularly observed close to the nest-site, the male vigorously pursuing Black-headed Gulls. Activity declined towards the end of May when both parents became very unobtrusive often being observed only at change-over times and giving the impression of no real activity. This behaviour led to doubts concerning success of any nesting attempt.

However on 15th June a very young bird was seen with both parents in attendance. It was being fed by the male regurgitating food directly into its open bill. It remained downy and uniform pale grey in appearance. Nearby young Black-headed Gulls showed more contrast between body and wing colouring.

During the following three days the parents continued to feed the single young, protecting it from nearby Gulls with aggressive bill stabs. The single young appeared to be thriving, taking food, entering the water and regularly wing-stretching. But sadly after 19th June it was not seen again. Both adults put in appearances during the next two days with the male lingering over the marsh until 25th June. The nesting site was on an island in the freshwater marsh at the edge of a colony of 150 pairs of Black-headed Gulls. This site, 120 metres in extent, was covered in Nettles, Shrubby Seablite, Sea-Beet and Orache. Early in September the island was visited. It was found that the Mediterranean Gulls had nested about a metre from the water's edge and less than half a metre from neighbouring Black-headed Gulls (R. Spowage Assistant Warden, R. Kimber, R. Skeen and M. Thomas)

Two adult summer-plumaged Mediterranean Gulls visited Cley Marsh on 4th April where they were observed by Mark Golley. Later in the month territory was occupied (further to the west) and a nest located in a colony of Black-headed Gulls on the 29th. Nest-building appeared to be complete and a clutch of 4 eggs appeared. Both adults were incubating daily until 26th May when their behaviour changed. Three chicks hatched by the 29th and the fourth, smaller, egg hatched by the 31st.

The chicks were much greyer than young Black-headed Gulls giving a 'punky' appearance due to the exposed ends of the feather shafts. The adults brought in food until 1st June. Then disappointment. Appearances became spasmodic and then the adults and the nestlings all disappeared, shortly after 4th June. During incubation the less immaculate adult spent most time on the nest where it was fed periodically. During these visits bill-rubbing regularly took place.

Both Mediterranean Gulls were regularly harassed by ever aggressive Black-headed Gulls. The strangers displayed a less defined sense of territory often wandering within the colony with unfortunate results. No search was made for the nestlings. It is possible Herring Gulls or Black-heads were responsible for their demise. Perhaps the parents were unable to provide sufficient food.

(D. McNeill and J. Reed).

# The Wash Oystercatchers

Nigel Clark BTO National Centre for Ornithology

The Birds of Estuaries Enquiry, organised by the BTO, has shown that the number of Oystercatchers on the Wash has been steadily increasing. The wintering population rose from around 15 000 - 20 000 in the 1970s to around 30 000 in the mid 1980s, with a more dramatic increase to a peak of over 45 000 in 1988. The numbers then declined to less than 30 000 in the winter of 1991/92. Last autumn there were 25 000 - 30 000 until November, declining during December so that by January 1993 only 12 000 remained on the Wash.

Throughout the autumn unusually large numbers of Oystercatchers were being found

dead around the Wash. The BTO received a steady trickle of ringing recoveries, many of which were juvenile birds, and it was not until late autumn and early winter that ringing recoveries of adults started to arrive.

Just after Christmas there was a spate of ringing recoveries which coincided with the period of cold weather over Christmas. This has continued with over 60 recoveries of Oystercatehers from the Wash in January 1993 alone – over ten times the number of Oystereatchers that are normally found dead around the Wash in a whole year.

Many of the recoveries from the Wash had been ringed many years before, so it is not just very young birds that have died. Three birds had been ringed as long ago as 1967 and 1968 and are some of the oldest ringed birds to be found on the Wash.

By January, most juveniles had left the Wash to go elsewhere, and there were very few recoveries of juveniles.

The Wash Wader Ringing Group has been making regular catches throughout the winter to assess Oystereateher condition. They have found that the eondition of the birds is consistently slightly below levels that would be expected for the time of year. In addition, many birds were still moulting their flight feathers in mid January when they would normally have completed moulting by the end of November, suggesting that most individuals were finding it difficult to survive.

The Oystercatehers have been showing some unusual habits too, with large numbers moving on to fields inland around the Wash. Whilst it is normal to see one or two Oystereatehers feeding on fields around the Wash, large flocks are an unusual sight. In other parts of the country inland feeding by Oystereatehers is very common, but not on the Wash.

Inland feeding around the Wash started extensively in late November and has continued through the winter. Indeed, there have been large numbers of birds feeding on the grass in roundabouts and on playing fields in the King's Lynn area and flocks have been seen up to ten miles inland of the Wash.

These birds are not feeding on the inter-tidal area at all during daylight hours, and some of them are obviously in poor condition. Others were coping quite well, feeding on the fields and finding large numbers of worms. This is clearly a successful feeding strategy so long as the weather remains mild and the fields remain unfrozen.

The plight of Oystercatchers on the Wash seems to result from a combination of factors. Low numbers of cockles and mussels means more search effort is required per food item found. Poor condition of the cockles and mussels means the return for each food item is lower. Thus it becomes very difficult for Oystercatchers to get enough food to balance their daily energy requirements.

However, 1992 was an excellent year for cockle recruitment. If the large numbers of young survive the winter storms, then in one or two years time there should be plenty of cockles for Oystercatchers to feed on. The situation for mussels is rather more bleak, and it could be a number of years until the populations recover.

Publication of this feature has been subsidised by a donation from Mr. Christopher Cadbury.

#### WILDLIFE PHOTOGRAPHY

Roger Tidman A.R.P.S.
142 Fakenham Road, Briston, Melton Constable (Tel. 0263 860776)

## Ruppell's Warbler - New to Norfolk

Gary Hibberd

On August 31st I was bird-watching in the Forestry, an area of scrub in the dune habitat at Holme Dunes Nature Reserve. I was exploring one of several rides running through clumps of sea buckthorn and elder when a pale warbler caught my eye. Views were brief but the general shape and long tail made it clear I was looking at a *Sylvia* Warbler. It seemed a very long half-hour before the bird reappeared in a bramble close-by, but with the light behind me I was able to obtain good views. The most striking features were its overall paleness, very distinctive whitish edges to all the flight feathers, pale pinkish-orange legs and red iris surrounded by an indistinct eye-ring. The bird soon disappeared and armed with what I thought were sufficient details I went to alert Reserve staff and check field guides.

Back at The Firs the two guides available were *The Shell Guide to the Birds of Britain and Ireland* and *The Macmillan Field Guide to Bird Identification*. After a hurried read I eoncluded that the bird was a young female Subalpine Warbler. After viewing the stranger Bill Boyd rang Richard Millington to relay the news onto Birdline. Richard thought the colouration of the upperparts slightly odd for Subalpine Warbler and with this in mind RGM and Steve Gantlett soon arrived. On observing the bird Richard was certain it was in fact a Ruppell's Warbler. Such a confident statement led to a certain amount of panic, but it became elear that certain elements of the bird's plumage had to be checked more thoroughly to eliminate Sardinian Warbler. By this time Subalpine Warbler had been totally removed from everyones thoughts. The bird in question was too large and far too grey. Lars Jonsson's guide to *Birds of the Mediterranean and Alps* was consulted and realisation dawned. The plate of female Ruppell's Warbler seemed perfect. Debate followed and the same conclusion was made: Holme was playing host to a Ruppell's Warbler – only the fourth record for Britain and Ireland.

#### Description

Slightly larger than Lesser Whitethroat and much paler. The overall appearance was of a small Barred Warbler. Head and upperparts were cold bluish-grey. Wings dark ash grey strikingly edged buffish white, broader on the tertials, the tips of the primaries were neatly edged white and the secondaries more buff-white. Greater covert centres were the same colour as the upperparts; these too were broadly edged whitish. The largest feather of the alula was black with a fine white edge. Tail was a dark ash-grey startlingly rimmed in white. Underparts were clean whitish, the belly and flanks showing a greyish east. The upper breast revealed a pinkish tinge at times, but this was possibly due to berry staining. The throat was white and at some angles a cleaner white sub-moustachial was noted. The ear-coverts were well demarcated from the throat. The bill was longish and at times appeared slightly decurved at the tip, it was dark grey with a paler bluish-grey base. In a good light the iris was a distinctive brownish-red. An indistinct brownish-orange eye ring was easier to discern in photographs. Legs were pinkish-straw or orange. After an inspection of skins lan Lewington decided that the bird was an adult female possibly in its second ealendar year (Birding World 5:9).

Being the first mainland occurrence it was certain to be a popular bird. Identification agreed the next task was to organise viewing. There was only room for thirty people at a time to view the bird so a queuing system was organised just south of the ride. Apart from some 150 people beaten by failing light on the first day, most observers had good views and deservingly so. Many queued for up to four hours! Fortunately from the

Reserve's point of view the bird was very loyal to the one sheltered site, only briefly leaving this area on the first day. But with clear skies and light winds on the night of September 4th it departed.

Considering the huge number of visitors involved and the fragile habitat in this part of the Reserve, damage was light. This was due mainly to the sedentary behaviour of the bird, but intensive wardening – including temporarily roped-off areas – and the patient behaviour of birders were important factors. Over the five-day period NNT staff and volunteers collected £2700 in permit fees and £115 in donations. The whole event was very enjoyable.

The year will be remembered at Holme for a very long time. Not only did we have a memorable spring, but also a 'summering' Bluethroat and the Ruppell's Warbler. As if this wasn't enough, a Yellow-breasted Bunting arrived – the first recorded in Norfolk since 1913. The smooth running of both twitches was due to an excellent team of volunteers. Thanks are due to Steve Baker, Colin Cross, John Crossthwaite, Vernon Eve, Simon and Annic Harrop, Bob Image and Neil Lawton for their assistance.

# Red-necked Stint at Cley – a first for Norfolk

Mark Golley

July 29th had been pleasant but not exactly earth-shattering. A good day by most localitics standards: a dozen Curlew Sandpipers, a pair of Garganey and an impressive Yellow-legged Gull were all present. But it was just a standard Cley July day. The weather had been fine until mid-afternoon when it clouded over. By early evening it was dull, damp and cool.

I was walking from North hide towards the East Bank about 6.30pm and I casually glanced at a furtive group of waders on the brackish pools: some 20 Dunlin and the first 'Little' of the autumn. As this was the first stint I had a closer look. Using a fence post as a tripod I 'scoped the bird which was decidely unco-operative. Three or four glimpses revealed an interesting salmon wash on the throat, but soon the flock moved off heading towards North Hide. My subconscious prompted me to find the stint again: it deserved another look. An initial scan revealed nothing. Neither did the second nor the third. After a brief chat on the two-way radio, I scanned again and three islands back was the squat stocky stint shuffling through vegetation. My pulse quickened following my first good 'scope views. So many good features, but why no robin-like throat? I was excited, exasperated and frustrated all at once. I began taking in every detail with my battered Kowa. All seemed to fit Red-necked Stint . . . surely not? And still – in my naivety – why didn't it have a red neck?!

I willed someone to arrive. After the fourth peep out of the hide there was Eddie Myers. Relief! I motioned him into the hide and he agreed – it had to be a Red-necked Stint. The low slung posture, flat back and round body all fitted. Plumage was difficult to note fully, but the dark capped appearance, dark mantle with straw-coloured 'tramlines', dark scapulars contrasting with grey-looking coverts, unmarked salmon bib and black chevrons on the breast sides all demanded Red-necked Stint. After 20 minutes or so, the flock flew to Simmond's Scrape.

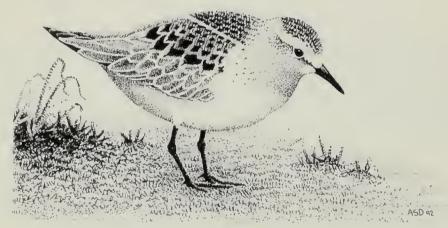
We must have broken the land speed record pedalling down the Beach Road! As we began running to Daukes Hide we encountered a birder just coming off the Reserve. He agreed that the stint looked interesting. However, with light failing there was not going

to be a firm commitment – not tonight at least. Despite poor conditions the stranger warranted more attention than others gave it.

There was no sign of the bird the following day. Not until August 2nd was it seen again. In good light and with a battery of optics everyone agreed it was indeed a Rednecked stint. There is no doubt that the bird found by Richard Millington on the 2nd was in fact the same as that found on 29th. Few who saw it on the two dates can really argue with that conclusion.

The overall 'jizz' of the bird was subtly different from a Little Stint not looking at all small headed or round bodied, but square headed and short-billed. The low slung posture was very apparent as was the already mentioned shuffling feeding action. Although larger looking, the Red-necked Stint showed a minimal primary projection similar to Little Stint together with a distinct tricoloured appearance: dark upperparts, grey wings and white underparts. Other features included straw-coloured mantle braces, pale supercilia and the infamous warm flush to the breast. The bird performed well all day, but after a distinct change in the weather and one too many Sparrowhawk flushes it departed high and westwards on the morning of August 3rd.

The Red-necked Stint is the east Asian counterpart of Little Stint. It breeds in north-east Siberia and winters from south-east Asia to Australasia. This the first record for Norfolk and only the second for Britain, the only other sighting coming from Blacktoft Sands RSPB Reserve, Humberside, in 1986.



(A. S. Disley)

#### Description

Upperparts The mantle was dark brown, streaked blackish, bordered by creamy 'braces', and the scapulars were equally dark, with extensive blackish centres, rich chestnut fringes and pale tips. The whole of the closed wing was contrastingly grey; all the coverts, and tertials, were plain, dull steely grey with paler, silvery edgings. The cap was brown, streaked blackish, and isolated from the mantle by the pale creamy, lightly streaked nape and from the suffused dark loral stripe and rear ear coverts by quite broad off-white supercitia which met across the forehead.

Underparts The ehin appeared off-white, but the whole of the 'face', throat and upper breast were washed with a clear, pale tangerine, richest and most luminous on the centre of the upper breast where it formed, head-on, an orangey halter effect. Since no dark streaking pervaded the colour, the bib appeared delicately translucent. A gorget of fine dark chevrons bordered the lower rim of the orange breast, and these fanned out into a series of small black arrowheads on the white of the upper fore-flanks. The lower breast to vent was pure white.

Bare parts The bill, as well as being shorter than that of Little Stint, was distinctly deeper at the tip and appeared very slightly decurved. It, and the legs, were black.

# Diets of Hen Harriers and Merlins Roosting at Roydon Common

Roger Clarke and Graeme Hewson

Roydon Common is an outstanding example of a series of habitats associated with a valley mire – an area of dry heath merging into wet heath, bordering on an overgrown fen in a valley bottom. Situated some 9km from the Wash and just 3km from the outskirts of King's Lynn. It is a designated SSSI and Norfolk Naturalists' Trust reserve. Despite its status, recreational use by model aeroplane fliers and motorbike riders has regularly caused disturbance at the site. Motorbikes threaten to cause major erosion of the fragile heathland habitat and have persisted despite earthworks and posts designed to exclude them. Straying from the footpaths by birdwatchers can also be damaging.

It is well known that Hen Harriers and Merlins have roosted at Roydon Common in the winter for many years. Although both raptors regularly appear there at roosting time and are viewed by many birdwatchers, little is known about how these birds spend the day. We collected Hen Harrier and Merlin pellets from the site and analysed them to determine whether the diets of these two open-country raptors using the same roost differed or not and to try to determine whether they used coastal or inland habitats for hunting.



Methods: The pellets were collected in January, February and March 1989. Hen Harrier pellets were picked up from roosting forms of pressed-down grass in the wet heath part of the common. Some of these places were on mammal runs through the grass and in Cross-leaved Heath dominant in this part of the common. Merlin pellets were collected from the ground at the bases of dead Silver Birches used as perches in both the wet and dry areas of the heath. To avoid disturbing the birds, pellets were collected in the middle of the day, or early in the morning after the birds had been seen leaving the site.

The pellets were allowed to dry at room temperature. The dimensions and weights of the dry pellets were recorded. Dissection was achieved by dissolving the pellets in water and washing the remains, which were then placed on absorbent paper, allowed to dry and stored for subsequent identification.

Bird remains in the harrier pellets consisted of feathers (whole or fragments), notably

the alula, wing covert and contour feathers from passerines, bills (separate upper and lower mandibles falling apart into their constituent bone, sheaths and palatal thickenings), gizzards, lengths of bone, skin and claws from the feet. The colours of the feathers had not been affected. Bird remains in Merlin pellets were similar in character but in much smaller quantities, being from much smaller pellets, and rarely included bill parts. Bird remains were identified by matching feathers and other parts to a reference collection. The remains of small mammals in harrier pellets typically consisted of fur, parts of skulls, lower jaws, molar and incisor teeth, along with an inconsistent number of bones. These were identified from the keys in Yalden & Morris (1990). Harrier pellets containing lagomorph (rabbit or hare) remains were particularly large and were identified by the distinctive hair, confirmed by microscopic examination of the medulla (the pattern made by air bubbles in the core of each hair) and matching these to the key in Day (1966). Lagomorph pellets usually contained a few fragments or short lengths of tubular bone and occasionally a few teeth.

Results are presented as the number of prey items identified:

 Table 1.

 Prey identified in Hen Harrier pellets collected at Roydon Common

	Jan	Feb	Mar	Total
Grey Partridge		1	3	4
Snipe		1		1
Skylark	6	32	13	51 (40%)
Meadow Pipit		1		1
Wren		1	2	3
Dunnock	6	6	5	17 (13%)
Blackbird	1			ĺ
sparrow	3	3	1	7
Chaffinch	1			1
Greenfinch	3	9	5	17 (13%)
Linnet	2	1	1	4
Yellowhammer	1	1	1	3
unidentified small passerines	1	2		3
Field Vole		2	1	3
Bank Vole	1		1	2
unidentified small mammals	1		1	2
Lagomorph		2	6	8
number of prey items	26	62	40	128
number of pellets	17	38	30	85

Hen Harrier Diet: A total of 85 harrier pellets were analysed (Table 1). Birds, particularly small passerines, made up the bulk of the Harriers' diet (88%); Skylark being the most frequently taken (40%). Greenfinch and Dunnock also featured significantly (13% each). Other passerines taken were Meadow Pipit, Wren, Blackbird, Sparrow (House not distinguishable from Tree), Chaffinch, Linnet and Yellowhammer. The only wader remains found in the harrier pellets were those of a Snipe in a February pellet. Larger

Golden Orioles have summered since 1967 and breeding was first proved in 1971 (C.R. Knights)

Avocets returned as regular nesters in 1977 (C.R. Knights)
Black-tailed Godwits have nested on the Ouse Washes since 1952 (T. Andrewartha)





Over 2200 Bramblings appeared at Wereham early February 1992 (C.R. Knights) Whooper Swans, regular winter visitors to the Thurne Broads (N. Bowman)





Black Terns, often abundant in spring, nested at Welney in 1969 and 1975, but not subsequently (C.R. Knights)
After attaining peak numbers in 1954 Bitterns have become a Broads rarity (R. Jones)





Oystercatchers and Redshank massed at high tide, Snettisham (C.R. Knights) Red-necked Phalarope at Cantley, August 1992 (B.W. Jarvis)



gamebirds were represented solely by Grey partridge, which made up just 4% of the diet. Mammals made up the other 12% of prey, with lagomorphs accounting for 6% (mainly in March) and the occasional vole throughout.

1Table 2.
| Prey identified in Merlin pellets collected at Roydon Common

	Jan	Feb	Mar	Total
Grey Partridge			1	1
small wader	4	5		9 (13%)
Skylark	6	31	2	39 (56%)
'Meadow Pipit		2		2
Dunnock		1		1
Blue/Great Tit			1	1
sparrow	1			1
Chaffinch		2		2
Greenfinch	1	3		4
Goldfinch		1		1
1 Linnet		2		2
Twite		1		1
'Yellowhammer		4		4
unidentified small passerines		2		2
number of prey items	12	54	4	70
number of pellets	10	49	3	62

Merlin Diet: A total of 62 Merlin pellets were analysed and the diet consisted solely of birds (Table 2). Skylarks were the most important (56%). Small waders also made up a significant proportion (13%). Apart from the remains of a Grey Partridge in one pellet, the remainder of the prey consisted of a range of small passerines, being Meadow Pipit, Dunnock, Blue/Great tit, Sparrow, Chaffinch, Greenfinch, Goldfinch, Linnet, Twite and Yellowhammer.

**Roost Observations:** Up to four adult male and one ringtail (adult female or first winter male) Hen Harriers were seen roosting at the Common in the three months we collected the pellets, and a maximum of three Merlins (two males and a female).

Discussion; The results of the analysis of the pellets show that both the Harriers and Merlins were primarily hunters of small passerines. Hen Harrier diet has also been studied at Wicken Fen, Cambridgeshire (Clarke 1988) – 60 km inland of Roydon. The Skylark was by far the most important prey at both Roydon and Wicken, being 40% and 27% respectively, January to March. The range of other passerines taken appeared to be a little more restricted at Roydon, and reflected a greater dependence on Skylarks there. Although the Hen Harrier has a reputation as a predator of gamebirds, especially of Red Grouse on heather moorland, this and other studies show that Partridges and Pheasants are not a significant part of the diet in lowland England.

The harrier diet at Roydon showed a swing towards lagomorphs in February and March, but this was weaker than found at Wicken in early spring and passerines remained predominant in the diet in March at Roydon. A possible explanation of this is the high proportion of male harriers at Roydon during the three months involved. Being

smaller and lighter than the female, the male Hen Harrier is more agile and is generally considered to be better adapted to take small passerine prey.

Part of the fascination of pellet analysis is that you never know quite what you are going to find. Two of the harrier pellets containing Greenfinch remains (one collected in February, the other in March) also contained metal BTO rings. Details from the BTO revealed that these Greenfinches, a first winter-male and a first-winter female, had been ringed 6 kilometres away at East Winch, late in 1988. These first-winter birds were possibly more vulnerable to predation by raptors.

A study of Merlin diet in Northumbria during the breeding season (Newton *et al* 1984) found that Meadow Pipits and Skylarks made up 56% and 12% of the diet by number, respectively. The predominance of Skylarks in the diet of the Roydon Merlins probably reflects their greater availability compared to Meadow Pipits in lowland England. Skylarks also formed the largest proportion of prey (56.7%) in pellets collected from an inland Merlin roost in the Nord region of France in February 1989 (Clarke & Tombal 1989).

Given the relatively close proximity of Roydon Common to the Wash, it came as little suprise to find that waders featured in the diet of the Merlins roosting there. Unfortunately, identification to species was not possible due to the small amounts of remains in the pellets. A number of observations provide evidence of Merlins hunting/preying on waders on the Wash. One Merlin was observed carrying a wader at Terrington (Wash Wader Ringing Group Report 1989-90). On another occasion, a Merlin was observed chasing a Dunlin. The latter landed in the sea to try and evade capture, but the Merlin turned and picked the luckless bird off the surface of the water (A. Evans pers comm). A study in North America reported a success rate of 22.5% for hunting flights of Merlins preying on Dunlin at estuarine areas in Western Washington during winter (Buchanan et al 1988). In spring and fall in Alberta, Canadian shorebirds taken by Merlins included Sanderling; Least, Bairds, Pectoral and Stilt sandpipers and Red-necked Phalarope, as well as several unidentified sandpipers (Dekker 1988). Thus, where they are readily available it is clear that small waders form an important part of the diet of Merlins in winter.

On the face of it, the presence of Grey Partridge remains in a Merlin pellet may suggest contamination of the sample with pellets from other raptors, which may perch on the Silver Birch stumps from time to time. Although such contamination could not be ruled out completely, and we saw a harrier use such a perch early one morning, we are reasonably certain that the great majority of the pellets were from Merlins. Kestrels or Sparrowhawks may cast pellets of similar size. The absence of small mammals in the Merlin pellets indicates that contamination with Kestrel pellets was unlikely. If there was significant contamination with pellets from Sparrowhawks, a higher proportion of woodland birds would have been expected. Comparison of the size of the Merlin pellets with those from the Hen Harriers revealed, as expected, that the Merlin pellets were generally far smaller. This is illustrated by comparison of the dry weights of the Roydon pellets:

	mean weight	Range
	(grammes)	(grammes)
Hen Harrier	1.326	0.323-3.226
Merlin	0.613	0.059-1.237

There was, however, some overlap in size and it is possible that the 'Merlin' pellet containing the remains of Grey Partridge was in fact a harrier pellet, particularly as the harriers took a small number of Grey Partridges. This is by no means an inevitable conclusion, though. Newton *et al* (1984) noted one partly-grown juvenile Grey Partridge in the diet of Merlins breeding in Northumbria. In Finland, Bergmann (1961) mentioned a wintering female Merlin preying repeatedly on a flock of 12 Grey Partridges until all were eventually killed, but he qualified this by saying that it was 'quite extraordinary'. So, it is not inconceivable that a Merlin could take a Grey Partridge, particularly if it were a weak individual.

When a direct comparison of the diets of the Merlins and the Hen Harriers roosting at Roydon is made, both similarities and differences are apparent. It is clear that both raptors depend to a large extent on Skylarks as a food source. Statistical comparison of the bird prey of each raptor split into the five classes: small wader, Skylark, Dunnock, Greenfinch, other birds and using the chi-square statistical test, however, revealed a highly significant difference ( $x^2 = 23.733$ , df = 4, p<0.001) in the diets. This difference appears to be due to the higher proportions of Greenfinch and Dunnock taken by the Hen Harriers (13% each) and the higher proportion of small waders (13%) taken by Merlins. Another notable difference was the presence of mammalian prey, particularly lagomorphs, in the diet of the harriers. Hunting associations have often been recorded between the two species in the literature. Merlins may benefit by taking small birds flushed by harriers and harriers may benefit by taking on the ground small birds too frightened to fly because of the presence of a Merlin. Merlins and Hen Harriers roosting at Roydon may compete for the same quarry at times, but clearly they each have prey resources which cannot be easily exploited by the other, in the form of waders for the faster Merlin and lagomorphs for the larger harrier.

Acknowledgements: We thank Bill Boyd (Holme and Roydon NNT Warden) for allowing access to the roost areas. Thanks are also due to Michael Seago for making roost observations from other observers available and to Nick Bird, Bert Dickson and Mike Nicholls for commenting on various aspects. Data from this study have already formed part of a paper in the proceedings of the 1991 Hawk and Owl Trust international conference *Biology and Conservation of Small Falcons*, published in 1993 by the Hawk and Owl Trust (editors M.K. Nicholls and R. Clarke).

References: BERGMANN, G. (1961) The food of birds of prey and owls in Fennoscandia. Brit. Birds 54: 307-320. BUCHANAN, J.B., SCHICK, C.T. BRENNAN, L.A. & HERMAN, S.G. (1988) Merlin predation on wintering Dunlins: hunting success and Dunlin escape tactics. Wilson Bull. 100: 108-118. CLARKE, R. 1988. The diet of Hen Harriers roosting in Wicken Fen. Cambridgeshire Bird Report 62: 52-58. CLARKE, R. & TOMBAL, J.-CH. 1989. Le régime alimentaire de Faucons émerillons Falco columbarius hivernant dans le Nord de la France. Le Héron 22: 149-154. DAY, M.G. 1966. Identification of hair and feather remains in the gut and faeces of stoats and weasels. J. Zool. 148: 201-217. DECKER, D. 1988. Peregrine falcon and merlin predation on small shorebirds and passerines in Alberta. Can. J. Zool. 66: 925-928. NEWTON, I., MEEK, E.R., & LITTLE, B. 1984. Breeding season foods of merlins (Falco columbarius) in Northumbria. Bird Study 31: 49-56. YALDEN, D.W. & MORRIS, P.A. 1990. The Analysis of Owl Pellets. The Mammal Society, London.

## 1991/92 Norfolk Waterfowl Counts

(including Welney Washes)

	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Little Grebe	44	62	134	103	129	61	91
Great Crested Grebe	170	207	143	107	97	117	167
Cormorant	472	673	555	606	532	806	629
Mute Swan	322	368	387	374	499	378	404
Bewick's Swan	_	47	2182	4338	4903	3343	915
Whooper Swan	_	15	488	666	730	714	644
White-fronted Goose	_	12	33	178	228	354	56
Grey-lag Goose	2701	1969	1885	1144	1743	1445	899
Canada Goose	1077	1471	524	342	420	386	296
Brent Goose	3	3575	14021	13088	14231	14992	4992
Egyptian Goose	216	207	80	39	22	36	46
Shelduck	847	6043	4684	5811	12993	8424	12998
Wigeon	1674	14822	27557	31218	31442	21761	15602
Gadwall	975	419	584	157	515	335	501
Teal	3272	3213	6370	4814	6738	3805	2024
Mallard	4115	4032	4606	4276	7217	4464	2737
Pintail	304	2879	1718	2037	1750	405	299
Shoveler	334	501	694	314	462	704	664
Pochard	134	290	466	266	1533	1764	698
Tufted Duck	467	508	834	761	921	773	814
Scaup	_	20	25	17	6	12	6
Eider	49	32	12	45	60	37	48
Long-tailed Duck	_	1	25	68	53	45	48
Common Scoter	11	101	3220	3112	1206	431	734
Velvet Scoter	_	-	47	126	167	125	82
Goldeneye	1	18	102	139	268	206	116
Red-breasted Merganser	_	38	146	81	39	79	58
Coot	1374	2033	1994	1529	2548	2367	1665

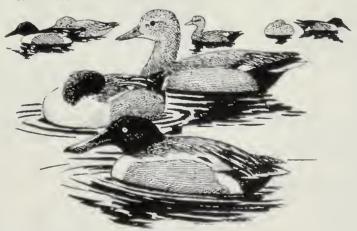


Velvet Scoters (N. Arlott)

#### Birds of Estuaries Enquiry 1992 Complete Wash Counts

	JAN	FEB	MAR	APR	MAY	JULY	AUG	SEPT	OCT	NOV	DEC
Great Crested Grebe	5	6	7	27	14	14	51	44	55	31	41
Cormorant	100	171	118	92	62	105	180	134	171	206	154
Mute Swan	22	12	11	8	2	8	3	4	_	8	18
Bewick's Swan	3	14	21	_	-	_	_	_	4	56	47
- Brent Goose	27518	26647	11524	9021	7044	24	16	2437	10998	18466	17737
Shelduck	20089	10243	12596	4624	1100	1355	261	3669	9454	10884	18465
Wigeon	3625	894	131	3	_	8	14	3203	1897	2341	2559
Gadwall	48	12	6	15	3	-	7	3	_	32	15
Teal	238	196	128	18	_	_	103	613	423	669	660
' Mallard	4044	1058	611	221	135	90	283	1026	440	1752	2133
+ Pintail	3503	35	22		-	_	-	317	19	75	291
Shoveler	3	6	1	1	-	5	13	7	3	8	14
Tufted Duck	66	15	18	19	4	20	12	46	43	75	63
Eider	692	381	686	188	172	63	134	18	108	61	800
1 Red-Breasted Merganser	29	66	48	32	1	-	-	-	32	47	21
Oystercatcher	15973	22693	16623	14523	7442	9415	19063	24259	13738	26618	20621
Avocet	-	4	25	39	2	238	49	38	35	-	2
Ringed Plover	11	182	221	106	1055	218	1096	673	136	59	42
Golden Plover	975	1966	2149	755	-	894	8391	1730	1624	2263	7657
Grey Plover	5786	3767	10100	13090	12240	1781	9202	11421	4607	6050	5921
Lapwing	2046	4744	71	30	22	4713	909	5984	1090	3498	74281
1 Knot	79407	40589	30498	23629	5713	7430	20903	118057	53165	186892	
Sanderling	209	91	355	75	51	372	1153	143	202	30	116
Purple Sandpiper	-	12	8	-	_	_	_	_	-	12	l
Dunlin	22136	20804	43768	47340	21889	14476	15731	37561	17083	28453	26571
' Snipe	4	6	5	3	_		228	62	22	37	7
1 Black-tailed Godwit	321	101	118	195	2	521	383	522	203	218	854
Bar-tailed Godwit	7488	9807	2448	1544	664	3752	5696	14413	4908	10774	11098
Whimbrel	_	-	1	8	22	177	165	24	2051	2104	2224
Curlew	1575	1967	2897	2793	362	3559	4267	6408	3051	3194	3234
Spotted Redshank		- + + 0.0	2201	2110	2 673	128 3200	123 4355	23 3052	13 1489	3787	1666
Redshank	1522	1498	2391	3449		182	4333	5052	1489		1000
Greenshank	_	-	-	254	44				325	376	289
Turnstone	643	197	635	754	234	302	739	617	223	3/0	209





Shoveler and Gadwall (N. Arlott)

#### Birds of Estuaries Enquiry 1992 North Norfolk Complete Counts (Holme-Salthouse)

	JAN	FEB	MAR	AUG	SEPT	OCT	NOV	DEC
Little Grebe	36	19	19	6	7	10	34	20
Slavonian Grebe	1	_	1	_	_	2	1	1
Red-necked Grebe	1	1	_	_	1	1	_	1
Great Crested Grebe	10	5	6	5	22	13	4	16
Cormorant	73	59	50	72	72	57	87	90
Mute Swan	62	44	55	49	57	36	56	74
White-fronted Goose	103	141	5	_	_	_	_	75
Greylag Goose	256	248	134	104	340	325	139	380
Canada Goose	106	99	38	101	6	36	156	165
Brent Goose	10214	12502	4206	21	17	5080	8522	6164
Shelduck	1064	849	617	80	64	317	764	1090
Wigeon	9356	8802	807	14	613	5539	5122	8816
Gadwall	108	91	98	77	71	105	92	133
Teal	1804	1329	362	554	804	757	1623	2805
Mallard	896	533	331	979	725	555	915	988
Pintail	953	135	46	3	77	151	547	916
Shoveler Pochard	119	111	138 15	116	173	63 5	71	115
Tufted Duck	11	20	24	11	2 2	11	12	16
Eider	60	37	4	29	26	30	39	188
Long-tailed Duck	50	43	47	<i>49</i>	20	3	14	47
Common Scoter	1205	430	728	312	24	95	52	764
Velvet Scoter	167	125	82	-	_	3	4	704
Goldeneye	117	92	23	_		_	52	65
Red-breasted Merganser	27	44	26	_	1	27	36	47
Coot	103	230	199	181	118	74	135	126
Oystercatcher	2813	2498	2578	3284	3943	2341	3327	4025
Avocet	_	2	92	47	30	12	1	_
Ringed Plover	105	312	435	1054	1021	187	242	159
Golden Plover	2052	3274	138	25	90	9	605	3151
Grey Plover	698	1036	1226	749	487	651	811	1254
Lapwing	4315	2574	451	279	66	548	1571	6653
Knot	1385	1760	1550	782	40	860	339	1554
Sanderling	213	297	299	246	218	325	320	358
Little Stint	_	_	_	_	7	6	_	_
Curlew Sandpiper	_	_		2	15	_	_	
Purple Sandpiper Dunlin	2894	2257	2409	1252	770	1122	2022	2500
Ruff	2894	3357 50	2498 33	1352 19	778 56	1122	3922	2509
Snipe	5	18	29	55	76	- 8	27 131	22
Black-tailed Godwit	2	13	21	35	24	51	50	8
Bar-tailed Godwit	683	1225	587	382	550	59	493	834
Whimbrel	-	1225	507	84	5		773	0.54
Curlew	445	405	485	190	594	181	336	517
Spotted Redshank	_	1	5	5	8	5	3	J17
Redshank	595	463	442	319	621	361	551	512
Greenshank	_	. –	-	25	28	_	-	5.2
Turnstone	173	242	193	138	164	84	210	143

### Birds of Estuaries Enquiry 1992 Breydon/Berney Marshes Counts

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Little Grebe	17	9	17	10	10	16	12	14	14	10	9	26
Great Crested Grebe	18	6	3	9	7	26	34	19	12	8	11	10
Cormorant	93	91	89	41	29	57	97	122	119	89	63	77
Spoonbill	-	_	1	_	3	1	_	-	_	1	1	_
Mute Swan	159	119	116	84	42	49	41	61	52	74	93	96
Bewick's Swan	91	351	275	4	_	-	_	-	_	19	26	78
White-fronted Goose		158	50	_	_	_	_	_	_	-	1	42
Greylag Goose	97	91	73	64	74	46	87	70	77	25	61	74
Canada Goose	_	40	35	28	9	36	24	61	6	55	41	55
Barnacle Goosc	1	1	-	1	3	2	_	-	_	-	1	30
Brent Goose	28	1	11	5	1	1	_	_	5	54	2	18
Shelduck	534	465	532	516	593	408	261	47	107	190	177	291
	2000	2400	1300	100	6	10	6	1	50	1000	700	3800
Gadwall	13	20	25	20	12	12	_	_	5	2	22	8
Teal	200	150	130	100	20	22	11	31	49	200	300	700
Mallard	226	205	61	35	39	59	37	110	87	122	169	303
Pintail	157	171	128	1	1	_	_	11	5	61	76	116
Garganey	-	-	-	-	6	4	1	_	1	-	- 12	120
Shoveler	172	216	110	105	25	15	4	3	2	12	43	120
Pochard	_	2	5	6	4	7	1 9	5 4	- 6	2	17	1 3
Tufted Duck	2	7	422	220	6	8 140	334	293	124	148	172	231
Oystercatcher	181	333	423 10	330 10	187	7	334	293 5	124	4	1/2	231
Avocet	2	6	10	10	3	5	8	4	12	-		
Little Ringed Plover	99	- 77	46	61	206	27	29	286	302	174	81	85
Ringed Plover	2300	1700	1500	550	200	1	60	150	561	1000	2000	5100
Golden Plover Grey Plover	72	60	28	29	69	9	5	15	17	44	43	38
· ·	6000	1500	800	90	43	300	750	600	750	1600	14000	41000
Lapwing l Knot	251	261	242	17	38	14	12	1090	11	40	12	154
Sanderling	21	23	47	36	7	_	1	26		31	34	28
Little Stint		25	- 7/	_	7	_	_	5	2	_	_	_
Curlew Sandpiper		_	_	_	10	_	13	152	4	_	_	
Dunlin Dunlin	1600	1400	1800	1400	2000	28	350	680	750	1300	850	1090
Ruff	6	3	17	88	75	2	8	25	49	15	20	9
Snipe	53	20	60	45	3	3	26	13	11	20	21	74
Black-tailed Godwit		3	3	7	38	10	40	42	30	21	44	44
Bar-tailed Godwit	11	15	13	32	44	23	21	98	11	4	5	7
Whimbrel	_	_	_	431	200	2	200	50	25	_	_	_
Curlew	637	649	568	671	81	142	662	803	755	671	541	589
Spotted Redshank	_	_	2	6	2	8	2	2	10	5	2	1
Redshank	520	580	830	610	51	121	511	460	610	883	530	610
Greenshank	_	_	_	7	8	3	16	14	6	1		_
Green Sandpiper	_	_		1	2	4	6	3	2	_	_	_
Wood Sandpiper	_	_	_	_	2	_	1	1	2	_		-
Common Sandpiper	_	_	_	2	8	1	20	15	2	_	-	-
Turnstone	23	25	23	16	6	1	5	12	11	8	14	13
Little Gull	_	_	_	4	1	3	1		4	_	-	_
Black Tern	_	_	_	_	14	2	1	87	16	-	-	-
Twite	31	27	35	11	_	_		_	_	35	46	46
Lapland Bunting	30	9	2	_	_	_	_	_	_	3	24	21
Snow Bunting	23	22	4	-	-	_	_	-	1	13	28	40

## **Ringing Report**

Allan Hale



Brambling (J. Baxter)

The following codes have been used:

Age when ringed:

- l pullus (= nestling or chick)
- 3 hatched during calendar year of ringing
- 5 hatched during previous calendar year
- 2 fully grown, year of hatching unknown
- 4 hatched before calendar year of ringing, but exact year unknown
- 6 hatched before previous calendar year, but exact year unknown

Sex: M = male F = female

Recovery detail: X found dead

+ shot or killed by man

V alive, caught and released, not by a ringerVV field sighting, includes colour marked records

NN as VV – nesting

R caught and released by a ringer

B as R – breeding

// condition on finding wholly unknown

#### NORFOLK RECOVERIES NOTIFIED DURING 1992

During the past few years intensive ringing has been taking place at Icklesham, Sussex, on 20 hectares of farmland which have been allowed to flood and are managed for birds and ringing. Many Norfolk birds pass through Icklesham, and in addition to the recoveries summarised below, two Sand Martins, five Sedge Warblers and seven Reed Warblers were re-trapped there during 1992 after being ringed in Norfolk.

**Spoonbill:** An interesting history of a bird that breaks all the rules regarding the migration route for Dutch Spoonbills. Note that the Italian site is a new Spoonbill breeding colony.

were ringed in Norfolk during the year. This total included Spotted Crake, Sardinian Warbler and Red-backed Shrike. Thanks are extended to all

Over 23,000 birds of 129 species

Thanks are extended to all Norfolk ringers for submitting the data from which this report was compiled. Particular thanks to Steve and Alison Wakeham for supplying Wash Wader Ringing Group recoveries and their interpretation.

The recoveries are arranged by species, with ringing details on the first line and recovery data on the second.

		28.05.88	Boschplaat, Terschelling, The Netherlands
	١٧٧	16.09.88	Etang de Nerizelec, Finistere, France
l	١٧٧	19.09.88	Baie d'Audierne, Finistere, France
	VVV	19.05.91	Parco delle Lame del Sesia, Oldenico, Italy
	١VV	09-17.08.92	Rush Hills, Hickling

**Whooper Swan:** A case of old friends returning! The 1990 ringing report detailed a family of Icelandic Whooper Swans at Waxham during the later months of that year.

During 1991 the same adults reared three cygnets in the same part of north-central Iceland, but neither adults nor young were noted during the following winter.

The 1992 summer saw the same pair rearing a further four young in Iceland, the whole family being seen (again near Waxham) during November 1992. This time they were accompanied by an adult male which was ringed on 2.8.92 in north-central Iceland.

Two entirely separate birds (both adult females) were ringed in eastern Iceland in late July 1991. They were seen together at Waxham in late December of that year, and again

at Birsay, Orkney in March 1992 (still together).

Another pair of non-breeding adults, ringed in eastern Iceland 17.08.88, had regularly wintered at Welney since. They raised their first cygnets in Iceland during 1991, the whole family being seen at Marlingford Merc (near Norwich) during March 1992. Curiously they had not been located anywhere during the earlier part of the winter. At Marlingford they were together with an unsexed adult ringed 04.08.91 in northern Iceland.

1 Brent Goose: The second record from the breeding area in as many years. Additionally a pair ringed together on the Dutch island of Terschelling 18.05.86, were seen (still together) on two dates during December 1991. Regrettably they had not brought any young with them.

Taymyr Peninsular, Siberia X 27.06.91 Blakeney Point

4,600 km WSW



Red Kite (R. A. Richardson)

**Red Kite:** This bird rested on the gas platform at 53°06'N 01°46'E (some 30 miles ENE of Cromer) for three hours. Although an apparently rapid post-fledging movement, there are several records of Welsh-bred birds moving into the Home Counties in a similar time frame.

1	15.06.92	Site confidential, Central Wales	
VV	19.07.92	Phillips Gas Platform, Hewitt Field, North Sea	440km ENE

**Sparrowhawk:** The first international movement since the population crash of the 1950's.

5F	16.04.90	Helgoland, Germany	
X	22.12.90	Sheringham	464 km WSW

Oystercatcher: This movement is typical of Wash-ringed Oystercatchers, with over 500 now to Norway. A new Wash longevity record was established during the year with a bird of 25 years and 2 months (the national record stands at over 31 years).

8	10.02.90	Heacham, Hunstanton	
В	13.07.92	More-Og-Romsdal, Norway	1,102 km NNE
•	Frey Plover: The	first Wash bird to Poland, and the first to an	ny west coast estuary in
В	ritain.		

4M	04.11.90	Terrington Bund, King's Lynn	1,215km E
R	12.09.91	Kosakowo, Gdansk, Poland	
6	21.08.86	Terrington, King's Lynn	393 km WSW
X	01.01.92	Haverfordwest, Dyfed, Wales	

**Knot:** The first Wash bird to Portugal (the finding date is correct so perhaps there are others in the pipeline!)

4	11.08.71	North Wootton, King's Lynn	
R	19.04.81	Ribatejo, Portugal	1,716 km SSW

Curlew Sandpiper: Only the ninth recovery of a Wash-ringed Curlew Sandpiper and the second to Portugal. The previous recoveries were from the previous U.S.S.R. (3), Finland, Sweden, Tunisia and Senegal.

3	26.09.88	Terrington, King's Lynn	
R	17.08.91	Gdansk, Poland	1,240 km E

**Dunlin:** The second example in two years of a Dunlin recovered 'at sea', the chances of which are remote. This bird was taken by a Merlin, north-west of Iceland (and presumably devoured on board a fishing vessel).

Next is one of three Spanish-ringed Dunlin to be caught on The Wash and notified during 1992, taking the total to five. Over 20 birds have travelled in the opposite direction.

The last movement shown is only the second to Orkney. It is hard to answer why a second year bird which arrived on autumn passage at The Wash in mid-August should

then return so far north in the same season.

Not detailed, but of further interest, are the 5th, 6th and 7th movements to the Western Isles; two movements to Walney Island, Cumbria, showing that autumn Wash birds move onwards to use west coast estuaries during the spring, and a new national longevity record of 18 years and 8 months.

2	04.10.83	El Grove, Pontevedra, Spain	1,334 km NNE
R	25.07.90	Terrington, King's Lynn	
6	21.08.90	Terrington, King's Lynn	2,143 km NW
X	03.06.92	65 50'N, 27 58'W, Arctic Ocean	
5	10.08.91	Terrington, King's Lynn	747 km NNW
R	15.10.91	North Ronaldsay, Orkney	

**Black-tailed Godwit:** Until fairly recently this species had only been present in small numbers on The Wash, the total caught between 1959 and 1991 numbering just 47 birds. Catches of 14 on 30th July and an unprecedented 100 on 31st July contained four British-ringed birds, all of which came from a large catch made at Guardbridge Saltings, Fife, on 20th October 1991.

**Curlew:** The 5th Curlew from Belgium. A new Wash longevity record was set during the year with a bird of 20 years and 3 months.

4M	14.02.88	Nieuwpoort. West-Vlaanderen, Belgium	
R	12.08.91	Terrington, King's Lynn	249 km NW

**Turnstone:** This sets a new national longevity record for the species, beating the previous record by over a year, to now stand at 19 years 2 months.

4	28.08.72	Terrington, King's Lynn	
R	23.11.91	Heacham, Hunstanton	16 km NE

Black-headed Gull: A typical spread for Norfolk's winter Black-headed Gulls. In spite of the Lithuanian bird being ringed as a nestling its arrival in Norfolk was not exceptionally early. Note that well over a thousand of this species ringed in the Baltic States have been recovered in Britain.

6	01.01.79	Sheringham	585 km ENE
X	28.06.92	Struxdorf, Schleswig-Holstein, Germany	
6	08.02.86	Sheringham	653 km E
VV	21.03.92	Rostock, Germany	
6	14.01.87	Norwich	873 km ENE
VV	31.08.91	Frihavnen, Copenhagen, Denmark	
6	28.07.85	Pildammsparken, Malmo, Sweden	805 km WSW
X	29.09.92	near Great Yarmouth	

1	14.06.91	Klaipeda, Lithuania	
V	12.08.91	Cromer	1,316 km WSW

**Common Gull:** This fits into the normal pattern of the last decade when 12 of the 18 foreign movements have involved Scandinavia.

5	09.02.92	East Winch, King's Lynn	
VV	06.01.92	Bronshoj, Sjaelland, Denmark	826 km ENE

Lesser Black-backed Gull: The Lesser Black-backed Gull is probably at its most common in Norfolk as a passage migrant. This movement, therefore, comes as no surprise.

1	01.07.89	South Walney, Cumbria	
X	27.09.92	West Acre, King's Lynn	294 km ESE

**Swallow:** There were five Swallow recoveries in South Africa during the late 1960's and early 1970's, but these represent only the third and fourth since.

3	25.08.92	Newshot Island, Strathclyde, Scotland	
R	13.09.92	Gardoldisham, Diss	524 km SE
3	17.09.91	near King's Lynn	
R	21.02.92	Pretoria, Transvaal, South Africa	9,130 km SSE
3	15.09.91	near King's Lynn	
V	02.03.92	Trappes Valley, Bathhurst District, Cape Province,	
		South Africa	9,913 km SSE

**Rock Pipit**: An example of colour-ringing showing the origin of one of Norfolk's wintering Rock Pipits and demonstrating the return to its natal island the following spring.

1	03.06.91	Malon, Onsala, Halland, Sweden	
VV	Until 23.08.91	Malon, Onsala, Halland, Sweden	
VV	06.02.92	Lynn Point, King's Lynn	950 km ENE
VV	26.03.92-14.0	4.92 Malon, Onsala, Halland, Sweden	

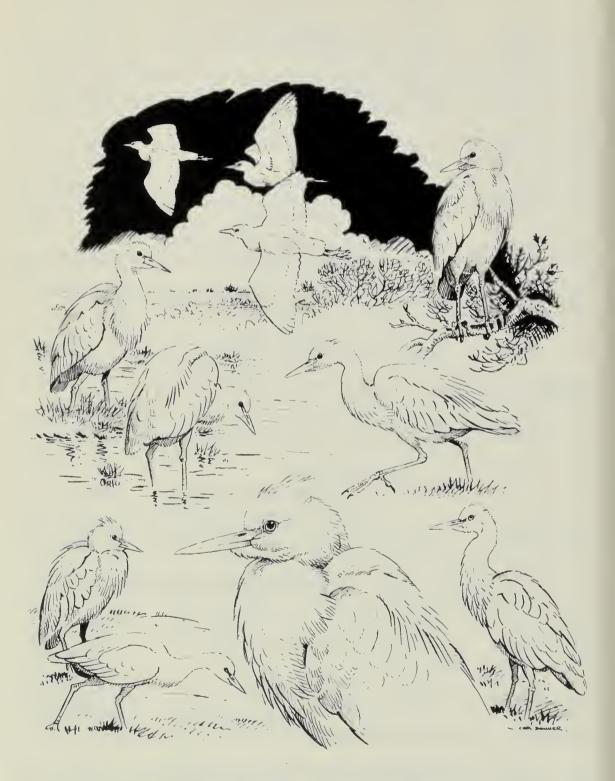
Blackbird: Very few British-ringed Blackbirds venture further south than this.

5 X	20.02.92	Hevingham, Norwich Gennes Sur Glaize, Mayenne, France	558 km SSW
Sed	ge Warbler:		
3 R	01.08.92 09.09.92	Cantley, Norwich Trimley St Mary, Felixstowe, Suffolk	70 km SSW
3F	05.08.91	Queen Adelaide, Ely, Cambridgeshire	70 KIII 35 W
R	11.08.92	Earlham, Norwich	68 km FNF

Reed Warbler: Some clues to the route southward including two from the British-sponsored expedition to Djoudj (see last years report for further details). Movements to or from Belgium are relatively scarce.

Ш						
	:3 FR	24.07.92 15.08.92	Middle Fen, South Lopham, Diss St Ouen, Jerscy, Channel Islands	416 km SSW		
	3 `X	15.08.92 03.09.92	Middle Fen, South Lopham, Diss St Albans, Hertfordshire	113 km SW		
-	4M R	04.08.90 13.06.92	Cantley, Norwich Pitsea Marshes, Basildon, Essex	134 km SSW		
-	3F IR	21.08.90 28.07.91	Sint Margriete, Oost-Vlaanderen, Belgium Cantley, Norwich	199 km NW		
	3 1 R	25.08.90 19.04.92	Earlham, Norwich Parc National du Djoudj, Senegal	4,312 km SSW		
	3   R	17.06.89	Stanford Water, Thetford			
l	R 29.03.92 Parc National du Djoudj, Scnegal 4,290 km SSW  Blackcap: This demonstrates the date when some of our Blackcaps leave the county.					
	3F R	12.09.92 20.09.92	Middle Fen, South Lopham, Diss Trimley St Mary, Felixstowe, Suffolk	50 km SSE		
	Starling: Typical movements for Norfolk's winter Starlings.					
	5m X	14.01.89 16.05.92	East Winch, King's Lynn Wirdum, Friesland, The Netherlands	359 km E		
	5M X	14.02.91 30.01.92	Beechamwell, Swaffham Alkmaar, Noord-Holland, The Netherlands	282 km E		
	3F R	26.12.84 18.01.92	Boston, Lincolnshire Norwich	95 km ESE		
	<b>Greenfinch:</b> Movements to and from Norway are becoming increasingly common. These are the 4th and 5th; only one of which occurred prior to 1989.					
	4F R	25.01.92 14.04.92	Hardley, Loddon Froyland, Sokndal, Rogaland, Norway	713 km NNE		
	6M R	24.11.90 16.02.91	Bongsto, Mandal, Vest-Agder, Norway Hevingham, Norwich	707 km SW		
			s doubtless on passage at both sites.			
	4M R	07.04.91 25.03.92	Waunfawr, Gwynedd, Wales Garboldisham, Diss	357 km ESE		

# **Classified Notes**



Spring Highlight: Cattle Egrets Welney Marsh (C. Donner)

The order used follows the sixth edition of the Checklist of Birds of Britain and Ireland published by the BOU in 1992. The English names which are most familiar have been retained. Scientific names appear in the complete county checklist commencing on page 498. Observations refer to 1992, unless otherwise stated. To save space, all but the most essential initials have been omitted. Records are of single birds unless stated otherwise.

### **Red-throated Diver**

Coastal records until May 14th and from Aug 15th. A highlight of the early year was unprecedented numbers offshore throughout Jan and Feb including 711+ north at Walcott and 487+ west at Paston Jan 4th, 192 west at Paston Jan 18th and at Sheringham 820 east Jan 29th, 270 east Jan 30th, 210 west Feb 8th, 205 east Feb 12th and 270 west Feb 17th. Movements of this species are always difficult to interpret appearing to be both migratory and feeding movements, the birds sometimes apparently moving between feeding grounds inshore and far offshore.

Two notable spring movements: at Sheringham 200 east March 10th and 110 east on 24th. Typically, there were fewer in autumn/early winter. Best counts: 105 Sheringham Oct 30th, 100-160 regularly at Sheringham during Dec and 182 east Paston Dec 10th.

Inland: Breydon Jan 4th, Heigham Sounds Feb 8th, Ranworth Broad Feb 19th and Downham Market April 2nd.

### Black-throated Diver

There appeared to be a small overwintering population in the Wash with intermittent sightings at Holme/Hunstanton Jan 1st to March 8th; singles on 11 dates, 3 Jan 26th (SH) and 5 Feb 28th (HR). Singles at Holme March 21st/22nd, April 5th/6th and 17th-22nd may also have been overwinterers. Typically very scarce elsewhere at this time, the only records Scratby Jan 28th-31st, Holkham Bay Feb 23rd and Winterton March 4th-8th.

First autumn arrivals: Winterton Sept 5th/6th and Holme Sept 15th followed by 14 coastal reports from between Hunstanton and Horsey Oct 1st to Nov 3rd (all singles other than 2 Holkham Bay Oct 23rd and 2 Horsey Oct 26th. Further singles at Titchwell Nov 20th, Weybourne Dec 22nd, Overstrand Dec 28th, Holme Dec 29th-31st and Holkham Bay 3 Dec 30th with 2 on 31st.

Inland: The 1991 bird remained at Rollesby/Ormesby/Filby Broads until Feb 17th.

### **Great Northern Diver**

Regular sightings of the handful of birds overwintering between Hunstanton and Scolt Head until May 15th and from Sept 19th; 1-2 monthly and 3 on Dec 13th. Elsewhere only a few autumn occurrences: Holkham Bay Oct 10th and 18th, Snettisham Oct 29th, Paston Nov 7th and Sheringham-Blakeney Point 1-4 on 17 dates Oct 5th to Nov 21st.

Inland: The 1991 Potter Heigham bird remained until Jan 6th.

### Little Grebe

Most notable breeding concentrations received were 39 pairs at Holkham NNR and 15 pairs in the Breydon area, largest winter gatherings: 49 Snettisham Jan 11th, 22 Hickling Jan 22nd, 48 Snettisham Dec 27th and 26 Breydon on 31st.

### **Great Crested Grebe**

Largest autumn gatherings: 70 Holme Oct 1st and 35 Hunstanton Oct 13th.

## Red-necked Grebe

Between Hunstanton and Titchwell regular sightings of up to 3 in Jan and 2 in Feb with occasionals thereafter until April 23rd. Elsewhere at this time singles in Blakeney harbour Jan 3rd, Jan 24th and March 22nd; Wells harbour Jan 23rd-March 7th and Scolt Head March 15th. August singles at Titchwell on 21st and Happisburgh on 23rd. Very scarce

in Sept when singles at Hunstanton, Holme, Holkham and Cley, but frequent sightings from coastal sites between Lynn Point and Waxham Oct 1st to Nov 12th – usually ones and twos but at Sheringham in Oct there were 13 on 4th, 4 on 5th and 3 on 6th all flybys. Only reports after Nov 12th: Sheringham and Burnham Overy Dec 12th.

Inland: Rollesby and Filby Broads Jan 1st-23rd.

#### Slavonian Grebe

Recorded regularly Hunstanton to Titchwell until April 6th with up to 4 in Jan, 2 in Feb and singles March/April. Blakeney Pits Jan 8th and Holkham Bay 1-2 Jan 14th-18th and one March 22nd were the only other reports at this time. Frequent observations between Hunstanton and Cley Sept 20th to Nov 14th, mainly singles but 5 Holme Oct 13th and 17th, 5 Titchwell Nov 1st and 5 Holkham Bay Nov 3rd. Sightings of 1-2 Snettisham and Hunstanton – Holkham Bay Dec 16th-31st presumably wintering birds.

Inland: Welney Nov 9th.

### Black-necked Grebe

The Breydon 1991 bird remained until Jan 23rd. In addition Blakeney Point Jan 25th followed by a series of more typical spring records: Welney 2 April 13th with one remaining until 15th, Snettisham 2 April 17th and one May 19th, Titchwell April 18th to 26th, Holme April 23rd, Hickling May 10th to 13th and Pentney May 14th/15th.

In autumn Happisburgh Aug 24th and Titchwell Oct 20th.

### Fulmar

A continued decline in the breeding population (due mainly to Fox predation) noted between Weybourne and Sheringham with only 14 young fledged. For the first time since colonisation began, no distinct 'absentee' period in late autum with daily records of local birds to Sept 29th and from Oct 29th and 1-2 present Oct 3rd-12th, 19th and 26th. Only other breeding data received was 78 large young in Hunstanton colony Aug 10th.

Largest movements noted off Sheringham: 90 Jan 9th and 235 Aug 14th. Blue-phase birds at Sheringham April 23rd and Holkham June 6th. Inland: Breydon June 18th, Wereham July 27th and Fring Sept 10th.

### Cory's Shearwater

Mundesley Oct 10th (CA JA KB MF).

### Sooty Shearwater

Due to problems of duplication of sightings, maximum count at any one site is given for each date records (singles unless otherwise stated). Off north coast (Hunstanton to Sheringham) recorded Aug 9th and 14th, Sept 11th, Oct 4th (50 Sheringham), 5th (3), 6th (2), 7th (2), 9th (6) and 10th (2), Nov 11th and 17th. Off north-east coast (Mundesley to Scratby) recorded Sept 4th (4), Oct 3rd (2), 4th (22 Paston) and 10th (3).

#### Manx Shearwater

A rare winter occurrence at Sheringham Feb 16th (KBS SCV). Spring/summer records from Holme March 27th and April 15th with 2 there May 1st and 2 June 7th; 3 Cley June 6th; 10 Yarmouth June 18th and 17 there next day; Sheringham July 1st and Lynn Point July 5th. Frequent sightings Aug 8th to Oct 20th with best counts 40 Cley Aug 14th, 55 Holme and Sheringham Sept 4th and 35 Sheringham Oct 4th.

Top: Red-footed Falcons. Left: Kelling Heath, May 1979 (R. Tidman). Right: Winterton,

May 1992 (J. Levene)

Centre and bottom: Marsh Harriers (J. Buxton)





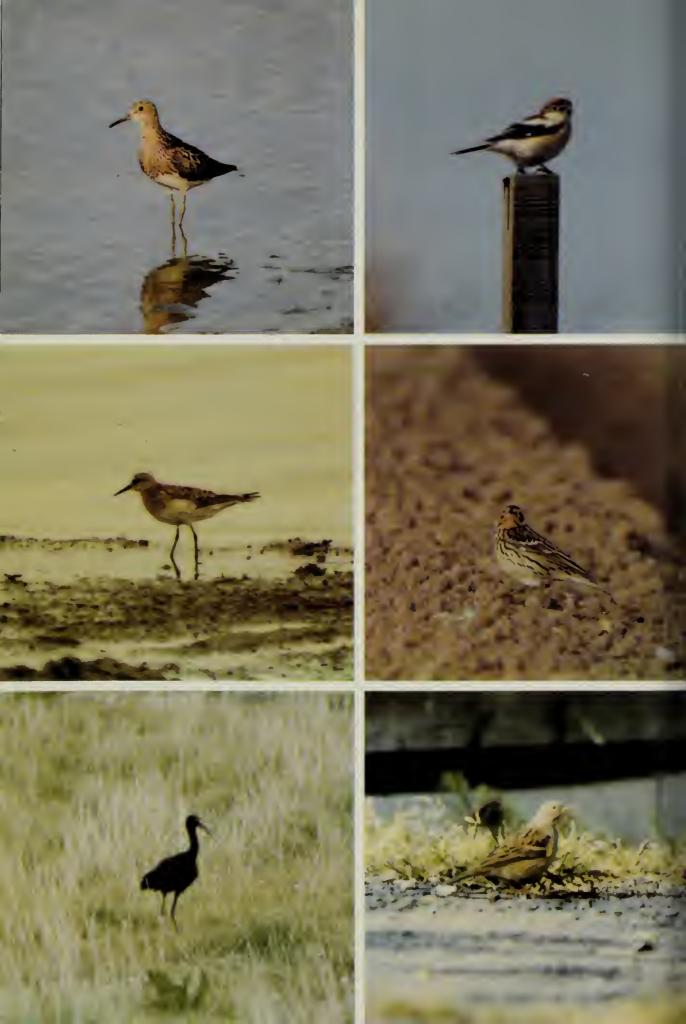
dramatically, but in contrast autumn occurrences are very unusual nowadays. The White Storks which remained many months on Halvergate Levels from April 1967 (M. J. Seago)





These Cranes form part of a long staying group in Broadland first established in 1979 (J. Buxton)





### Mediterranean Shearwater

ITen observations: 4 Cley June 6th (MAG), Cley (MAG) and Sheringham (KBS et al) Aug 14th, Sheringham Aug 15th (KBS), Sheringham (KBS) and Waxham (DA) Sept 11th, 2 Cley (MAG et al) 4 Sheringham (KBS et al) and 4 Paston (MF et al) Oct 4th and Sheringham Oct 5th (KBS MY-P)

### Leach's Petrel

Hunstanton Sept 6th and King's Lynn (London Road) on 25th which unfortunately died later. Then recorded daily at a variety of sites Oct 4th to 7th with maximum counts all at Sheringham of 9 on 4th, 7 on 5th, 4 on 6th and 3 on 7th, the latter 3 spending all day off-shore. Also Holkham Bay Oct 10th and Holme on 11th.

#### (Gannet

Largest movements were all-day counts of 690 Sheringham Sept 4th and 1600 Sheringham and 2320 Paston Oct 4th.

### (Cormorant

Only reported evidence of breeding was a nest built at How Hill and an immature which began building at Snettisham Pits. Main roosts at Welney, Snettisham and Ranworth. At Welney monthly maxima of 164 Jan, 182 Feb, 187 March, 82 April, 51 Aug, 92 Sept, 164 Oct, 208 Nov and 233 Dec. At Snettisham 31 Jan, 24 Feb, 24 March 15 April, 20 May, 25 June, 46 July, 75 Aug, 87 Sept. 43 Oct, 34 Nov and 34 Dec. At Ranworth 100 Jan, 319 Feb, 167 March, 212 Sept, 271 Oct, 208 Nov and 244 Dec.

### Shag

(Only coastal records in the early year and spring: Yarmouth Fcb 4th and Winterton April 6th. Autumn records Aug to Dec mainly from Hunstanton (maximum 8 Oct 20th-22nd) and Sheringham-Overstrand where up to 9 in Scpt, 8 in Oct, 4 in Nov and 3 in Dec. Other noteworthy observations: 8 flying inland at Lynn Point Oct 5th and 8 roosting on a moored boat at Brancaster Oct 7th.

Inland: Colney GP Feb 23rd, Tottenhill GP 2 Oct 9th with one remaining until 14th and Thetford Oct 11th.

#### Bittern

Only 8 boomers in the county (as in 1990/1991): 6 on north coast and 2 in Broads. Non-breeding records from Barton Turf, Berney, Burgh Castle, Glandford, Holme, Snettisham, Strumpshaw and Woodbastwick.

#### Little Bittern

Holkham a female May 30th to June 1st (MESR et al). First county record since 1984.

### Cattle Egret

Five in the Welney/Denver Sluice/Downham Market area May 9th to 15th, with one remaining on 16th/17th then 2 on 18th to 20th (JBK et al).

### 1992 highlights:

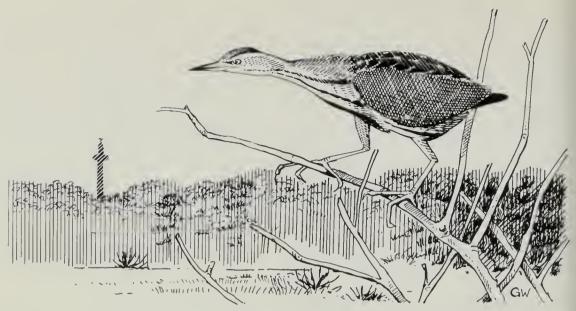
Top left: Pectoral Sandpiper, Titchwell, July (A. Tate)

Top right: Woodchat Shrike, Blakeney Point, May (R. Chittenden)

Centre left: Baird's Sandpiper, Cantley, August (A. Tate)

Centre right: Red-throated Pipit, Happisburgh, May (R. Chittenden)

Bottom left: Glossy Ibis, Cley, May (R. Chittenden) Bottom right: Ortolan, Yarmouth, May (R. Chittenden)



Little Bittern (G. Wright)

### Little Egret

Cley May 4th (TS), Berney Marshes June 14th (CS), Breydon July 25th to Oct 4th with possibly another Nov 6th to Dec 23rd (PRA KRD *et al*), Burnham Norton Aug 3rd (MESR) and Ousemouth Aug 5th (DA).

# **Grey Heron**

Nest counts received: 1 Black Dyke Feltwell, 7 Barton, 11 Burgh Castle, 1 Catfield Dyke, 1 Calthorpe Broad, 14 Colney Hall, 11 Didlington, 2 Fleggburgh Common, 33-36 Gt Witchingham, 5 Heigham Sounds, 45 Hilgay, 12 Holkham Park, 60 Islington, 2 Narford, 7-11 North Elmham, 2-5 Old Hunstanton, 12 Quidenham, 1 Ranworth, 10 Snettisham and 11 Sturston.

Notable counts of migrants heading west: 12 Holme June 27th, 18 Sheringham Sept 17th and 10 Holme Sept 29th.

# **Purple Heron**

A first-summer briefly at Cley April 26th (MPL KH) later flew east over Weybourne (JRW), Sheringham (MY-P), Horsey (MT) and Winterton (CB); also an adult Holkham May 16th (MESR).

Note: The Cley bird 16th June 1991 was found and identified by NAD,

# **Glossy Ibis**

One first at Cley, then Kelling water meadows, then flying off south-east May 6th arrived the same day as another at Minsmere in Suffolk (DAB MS BV PFW et al).

# Spoonbill

An early bird at Berney March 22nd was followed by one commuting between Kelling and Titchwell April 11th to 27th, briefly joined by another April 18th. Almost daily sightings somewhere in the county May 12th to Sept 4th. Most favoured sites: Breydon (up to 3), Cley (up to 2), Holkham (up to 3), Titchwell (up to 4) and Welney (up to 2) but because birds very mobile impossible to indicate number involved. Later singles at Breydon and Titchwell Sept 23rd and Breydon Oct 20th to Nov 3rd.

#### Mute Swan

Monthly counts at Welney: 139 Jan, 77 Feb, 109 March, 130 April, 220 Oct, 191 Nov

and 233 Dec.

#### **Bewick's Swan**

Welney monthly maxima: 4641 in Jan (a record), 2355 Feb, 592 March, 71 April, 640 Oct, 1972 Nov and 4283 Dec. During Jan a further 901 were found elsewhere on the Washes making a total of 5542 birds. Extreme dates at Welney 10th April and 8th Oct.

In south-east Norfolk at Breydon/Berney up to 351 Feb, 275 March and 40 Dec; and

at Ludham/St. Benet's up to 294 in Feb.

### **Whooper Swan**

Record numbers at Welney in both winter periods with monthly maxima of 739 Jan, 778 Feb, 761 March, 62 April, 320 Oct, 637 Nov and 830 Dec and extreme dates 23 April and 8th Oct.

At Horsey/Waxham up to 70 Jan, 74 Feb, 41 Oct, 47 Nov and 55 Dec.

#### Bean Goose

Yare Valley: The 405 present in 1991 were still here Jan 5th but had dropped to 390 by 129th. There was an early and rapid exodus with 50 departing in late Jan, another 75 by 1 Feb 10th, 193 by 13th and the last 65 on 14th.

The first 9 returned Nov 13th increasing to 47 by 17th (8, no doubt of this group seen coming in over Yarmouth on 14th), to 102 by 24th, 169 by 27th and 210 by 29th. During Dec numbers increased to a peak of 410 with 387 remaining at the year-end. 9 neck-banded birds were back by late Nov. Many birds foraged widely due to the poor condition of their favoured fields, being seen on Berney, Langley, Rockland and Claxton Levels. This behaviour resulted in at least one being shot.

Up to 5 were at Welney Feb 3rd to 23rd, visiting Hilgay Fen Feb 18th to 24th; during Dec 3 were there 25th to 31st. All were of the race rossicus. Elsewhere 24 at Cley Jan 17th, a rossicus at Holkham Feb 22nd and a remarkably late 4 there March 16th.

#### Pink-footed Goose

Peak totals noted in co-ordinated counts for the three roosts (Snettisham, Scolt Head and Warham Sands): 30615 Jan 6th and 7420 Feb 10th followed by a very early exodus. In the second winter period: 1616 Oct 19th, 22620 Nov 30th and 33880 Dec 28th when Snettisham contained 24400 – its highest count ever.

A flock seems well established at Heigham Holmes with monthly peaks of 100 Jan, 150 Feb and 100 March. Late in the year 1000 during Nov and 150 Dec. Elsewhere in Broadland 60 at Limpenhoe Jan 14th to Feb 8th.

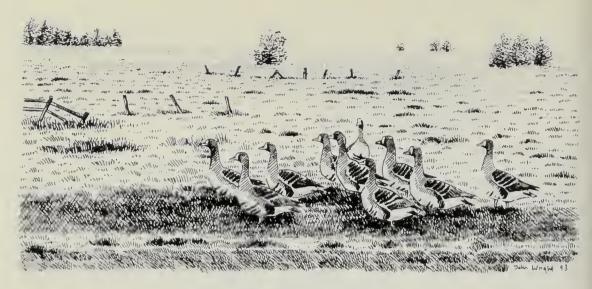
Last spring birds: 2 Snettisham May 10th and Holkham May 24th. Eight feral birds summered at Ranworth Broad. Autumn return began at Docking Sept 28th, at Snettisham Oct 4th and at Wells on 8th. A leucistic bird was seen at Choseley, Egmere and Holkham. A grass cover crop sown under set-aside rules was regularly grazed by geese at Flitcham.

#### White-fronted Goose

Maxima of the four principal assemblies: Mid-Yare 338 Jan, 310 Feb and 230 Dec: Breydon/Berney/Haddiscoe 6 Jan, 58 Feb, 50 March and 190 Dec; Heigham Holmes 50 Jan, 300 Feb but just 3 Nov and 5 Dec and Holkham fresh-marsh 350 Jan, 180 Feb, 300 March, 56 Nov and 152 Dec.

Elsewhere: up to 17 Welney Jan 1st to 30th; up to 37 at Cley Feb 15th to March 14th and 38 at Beccles Feb 6th to 11th.

In the summer 2 pairs at Cley produced 4 young. The first geese were back at Holkham Oct 12th and in mid-Yare Nov 9th.



White-fronted Geese (J. Wright)

#### **Barnacle Goose**

Despite the many feral birds there were influxes which must have involved wildbirds. A large flock was at Heigham Holmes Jan 4th to March 8th with peaks of 59 Jan, 65 Feb and 27 March. At Holkham up to 8 Feb 2nd to March 5th and at Cley 5 March 1st to 22nd.

Late in the year main groups at Heigham Holmes: 12 Nov 28th and 40 Dec 12th; 23 mid-Yare Dec 10th to 12th; 31 south-east over Overstrand Dec 28th and 30 Breydon/Berney Dec 28th to 30th.

#### **Brent Goose**

The co-ordinated counts for the Wash and north Norfolk feature on pages 445 and 446 Following severe weather in late Jan over 5000 flew east past Cley on 30th and 580 west at Sheringham Feb 12th. Some North coast birds fed far inland with flights almost to Docking. One was at Welney Jan 11th.

During June/July records of small numbers from the Wash, Holme, Titchwell, Brancaster, Blakeney and Breydon. First returning birds passed Sheringham Sept 16th. Largest westerly movements here were 1800 Sept 30th and 1700 Oct 3rd. The leucistic male returned, this time alone, on Sept 24th. Inland one at Buckenham/Cantley Oct 5th-9th. Summer 1992 proved to be a disastrous breeding season, only 2 juveniles reported.

Few of the pale-bellied race *hrota* appeared: singles at Cley Jan 25th and Feb 16th, Salthouse Feb 27th, Lynn Point March 27th and April 26th and at Holkham Dec 31st.

#### **Black Brant**

An individual of the North American race *nigricans* at Lynn Point Jan 19th to March 22nd (CD).

## **Egyptian Goose**

Largest gatherings noted during early July surveys: 144 Holkham Park, 94 river Bure, 61 Lyng Easthaugh, 56 Sennowe Park and 53 river Ant.

### Shelduck

At Ousemouth up to 4800 Jan, 4350 Feb, 2150 March, 1870 April, 158 July and 2250 Dec. At Snettisham up to 1295 Jan, 840 Feb, 800 March, 287 April, 197 May, 290 July, 1000 Oet, 1050 Nov and 800 Dec. Peak of 195 Welney in March and 534 Breydon in Jan.

### Mandarin

On the river Wensum between Guist and Bintree a female with ducklings, accompanied by 3 additional adults in mid-summer. Otherwise 1-4 recorded at Felbrigg, Flitcham, Gunton Park, Sandringham, Snettisham, Stalham and Welney.

### Wigeon

Welney monthly maxima: Jan 15353, Feb 6237, March 6405, April 938, Sept 1954, Oct 2789, Nov 5773 and Dec 10160.

Other notable counts: Buckenham/Cantley 5120 Jan 28th and 5800 Nov 23rd; Breydon 2400 Feb and 3800 mid-Dec and Cley 4500 Oct 30th.

#### + Gadwall

Largest gatherings: 113 Lynford GP Jan 18th, 75 Snettisham Jan 19th, 184 Welney in March, 80 Hoveton Little Broad July 16th, 373 Hardley Flood Sept 16th, 120 Strumpshaw Sept 19th, 255 Stanford Water Oct 16th and 80 Sennowe Park Nov 14th. Peak of only 75 Gunton Park Aug 22nd unusually low for this site.

#### Teal

Five pairs at Welney – the sole breeding record. Most impressive counts: 1911 Welney Jan, 800+ Horsey Jan 26th, 970 Rush Hills Hickling Oct 5th, 1500 Cley Oct 30th and 700 Berney Dec. An immigration of 890 west off Sheringham was the largest ever recorded there.

### 'Mallard

1 Highest numbers at Welncy: 2161 Jan, 1425 Feb, 715 March, 784 Sept, 2534 Oct, 1228 Nov and 1784 Dec.

### | Pintail

Peak counts all made in Oct when 400 Cley, 600 Tottenhill GP and 1765 Welney.

# (Garganev

Extreme dates March 17th to Sept 20th. Recorded at Babingley, Berney, Brancaster, Breydon, Burgh Castle, Burnham Norton, Cantley, Cley, Gunton Park, Hickling, Holkham, Horsey, How Hill, Kelling, Lound, Ludham, Lyng GP, Pentney GP, Salthouse, Strumpshaw, Surlingham, Titchwell, Tottenhill GP, Welney and Wroxham. Usually 1-4 birds but 6 Berney in May, 16 Welney in July and 5 Cantley in Aug.

Only evidence of breeding at Welney where 2 broods in early July.

### Shoveler

Largest numbers: 100 Narford Jan, 216 Breydon Feb, 100 Strumpshaw and 110 Berney March, 193 Welney April, 130 Cantley Aug, 128 Titchwell and 169 Hardley Flood Sept.

#### **IRed-crested Pochard**

Ones and twos at Cley, Colney, Holkham, Kelling, Martham, Pentney, Potter Heigham, Ranworth, Salhouse, Stiffkey and Welney. In addition 2 drakes spent the entire year on the Wensum between Pull's Ferry and Hellesdon Mill. None considered truly wild.

#### **Pochard**

EBreeding proved at Ant Mouth, Barton, Breydon area (4 broods), Buckenham. Cantley (3 broods), Gt Ryburgh, Hickling (2 broods), Holkham (11 broods), Hoveton Little EBroad, Hoveton Great Broad, Ludham, Ranworth (2 broods), Strumpshaw (2 broods), and Thurne.

Largest numbers at Welney as usual with up to 1275 Jan, 1442 Feb, 1045 March, 170 Sept, 508 Oct, 572 Nov and 1271 Dec. Other noteworthy counts: 108 Wroxham Broad Jan 30th, 108 Martham Broad Dec 6th, 130 Sennowe on 18th and 115 Snettisham on 27th.

### Ring-necked Duck

Presumably the same drake first recorded in Feb 1991 commuted between Ranworth, Salhouse and Wroxham Broads until April 9th, returning to Ranworth Dec 31st.

## **Ferruginous Duck**

A very approachable pair at Holkham NNR April 27th were joined by a second pair June 12th to mid-July, the original female re-appearing Sept 26th. Possibly escapes from a collection; breeding may have been attempted (VE MESR).

#### **Tufted Duck**

Breeding proved with broods seen at Alderfen Broad, Barton Broad, Bintree (2), Breydon area (4), Buckenham, Cantley (2), Cley (4), Cockley Cley, Heigham Sounds (2), Hillington (3+), Holkham NNR (12), Hoveton Little Broad (4), King's Lynn BF, Pentney (2), Strumpshaw (7), Welney (4), West Acre and Wroxham Broad (2).

Peak counts 336 Wroxham Broad Jan 29th, 320 Sennowe Dec 18th, 183 Colney GP on 20th and 354 Welney in Dec.

### Scaup

At Snettisham up to 20 Jan, 19 Feb and last 5 March 6th. Elsewhere at this time inland at Welney Jan 2nd to March 16th, Strumpshaw Jan 5th, Ranworth 1-6 Jan 5th-16th and Breydon Feb 7th.

Inland in spring at Wroxham April 5th and Tottenhill till the 7th.

Early autumn records from Breydon Aug 3rd. More frequent Sept 23rd to Oct 10th when up to 8 at Snettisham, 9 at Holme, 8 at Sheringham and 1-2 at several other localities, but scarce thereafter. Only 1-3 on 6 dates at various sites Oct 27th onwards.



Eiders (S. Cale)

#### Eider

An unusually large late autumn build-up at Hunstanton reached 1000 Dec 31st.

### Long-tailed Duck

Monthly peaks at Hunstanton/Holme/Titchwell: Jan 100, Feb 70, March 53, April 75, May 5, Sept 1, Oct 26, Nov 67 and Dec 46. Extreme dates May 18th and Sept 6th.

Very few records from elsewhere: Holkham Bay up to 11 in Feb and 3 in March; Snettisham Pits Jan 1st to Aug 30th; Horsey Jan 1st to 19th; Sheringham Feb 17th, and adult drake July 13th, Oct 5th and 26th; Titchwell lagoons 2 drakes and a duck June 16th/17th and Welney a first-winter drake Dec 13th-21st.

### (Common Scoter

Following the remarkable influx in autumn 1991 large numbers still remained into 1992 with 2000 Holkham Bay, 700 Holme/Titchwell and 300 Winterton/Horsey during Jan; 4000 Holkham Bay and 2000 Holme/Titchwell during Feb; 3000 Holkham Bay and 1500 Holme/Titchwell during March and 700 Holme during April. In contrast very few in autumn: 700 Hunstanton July 15th and 300 there Sept to Dec – the only counts of note.

At Breydon 12 June 10th and singles July 3rd and Aug 1st. Also inland: Tottenhill Jan 10th, 18 Welney April 20th and Wroxham Dec 2nd.

#### Surf Scoter

The Cley record Sept 18th 1982 (published in 1983 NBR) has been rejected by British Birds Rarities Committee after re-consideration.

#### 'Velvet Scoter

Recorded at many coastal sites until May 28th and from Sept 5th, best counts 45 Winterton and 160 Holkham Bay in Jan, 125 Holkham Bay in Feb, 42 Holme in March when 70 Holkham Bay and 70 Hunstanton in Dec.

# Goldeneve

Generally scarce, the only noteworthy counts being 50 Blakeney harbour Jan 6th, 76 Snettisham Jan 11th, 40 St. Germans Relief Channel Feb 26th and 71 Snettisham Dec 29th.

#### ! Smew

Two red-heads Thetford Jan 6th-8th, a pair at Hickling Feb 6th-March 4th, a drake Martham Feb 8th and a red-head there Dec 12th.

### **Red-breasted Merganser**

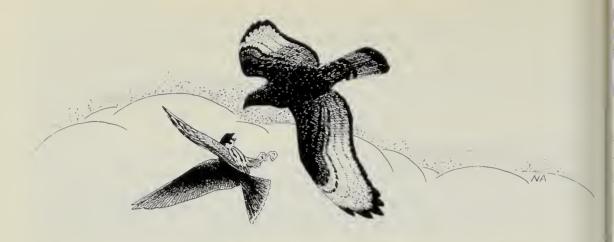
Notable counts: 48 west Sheringham Nov 9th, 40 Blakeney harbour Nov 21st and 47 Snettisham Dec 8th. A mid-summer bird at Wells July 25th. Inland records from Brandon Creek 2 Jan 27th and 3 Dec 3rd; Denver Sluice 2 Feb 15th and Ten-mile Bank Dec 22nd.

### Goosander

A handful of records until April 11th, mainly ones and twos but 8 Stowbridge Feb 26th, 6 Denver Sluice Feb 18th to March 17th and 20 Breydon March 29th/30th. Small numbers at a variety of localities from Oct 29th including 6 Breydon Oct 30th, 9 west Cley Nov 8th, 6 Lound Dec 10th and 6 Stanford Dec 22nd.

### **Ruddy Duck**

Recorded at Blickling, Breydon, Burnham Norton, Colney GP, Gunton Park, Hardley Flood, Heigham Sounds, Hickling, Lyng GP, Martham Broad, Pentney, Salhouse Broad, Sennowe, Shouldham, Snettisham, Swanton Morley, Titchwell, Thompson Water, Tottenhill GP and Welney. Ones, twos and occasionally threes but 5 Welney Nov-Dec and 8 Tottenhill Sept-Nov.



Hobby mobbing Honey Buzzard (N. Arlott)

## **Honey Buzzard**

At the locality where birds summered in previous years a male arrived May 20th with a pair present from 23rd. Successful breeding took place and 2 young fledged. A third adult was present from Aug 1st. Last noted at site Aug 31st.

A single at another likely breeding locality in May/June.

Migrants at Wolferton May 9th; Cley June 2nd/5th; Holkham/Wells/Stiffkey June 3rd/6th and Stanford Water Aug 7th.

#### Black Kite

Stiffkey Aug 24th (SMS).

### **Red Kite**

Numerous sightings probably relate 6 individuals as follows: to Winterton/Horsey/Hickling/Waxham March 20th/21st: Sustead April 12th: Winterton/Sheringham/Weybourne/Snettisham and Terrington St. Clement all May 13th; Blakeney/Guist June 14th/17th; Little Walsingham/Thursford July 11th/18th and Cromer Nov 24th.

Offshore: A juvenile alighted on a gas platform 30 miles ENE of Cromer July 19th staying 3 hours. The bird carried a grey ring and wing tags and had been marked as a well-grown chick in central Wales in June 1992 (PH).

#### Marsh Harrier

98 adults raised 114 young to the flying stage; 15 nests were in cereals. At one site a single male was mated to 3 females – each bred successfully. The Broads winter roost (shared with Hen Harriers and Merlins) held up to 5 Jan/Feb, 3 Oct, 4 Nov and 6 Dec.

In addition to the regular Broadland winter roosts in reedbeds, autumn roosts have become established in West Norfolk following the successful colonisation of that part of the county. 1991 saw outstanding numbers roosting in a wheatfield. 18 Marsh Harriers were present Aug 21st (including at least 6 males). The next evening harvesting was completed just before dusk and as the birds were arriving. Undeterred, a swarm of 14 Harriers after circling overhead dropped into a small area of nearby reed to roost. Numbers increased to a remarkable 36 by Sept 1st (including at least 10 males). A decline then followed with the reedbed being finally occupied by 3 Marsh Harriers on Sept 27th. Three, perhaps the same birds, roosted in nearby potatoes Oct 1st and the final roost sighting for the season was a single juvenile there on the 3rd.

In 1992 the autumn roost – again in wheat – built up to a maximum of 11 birds, on

Aug 19th. On this date they were joined by a ringtail Hen Harrier. The small reedbed holding such an impressive number of roosting birds the previous autumn built up to a total of 12 on Sept 12th. All were juveniles or females. Doubtless some of these birds had earlier occupied the wheatfield roost prior to harvesting. (RAI)

Marsh Harriers have enjoyed considerable breeding success in Norfolk during recent years. The totals of fledged young between 1983 and 1991 appear below.

1983	1984	1985	1986	1987	1988	1989	1990	1991
49	33	36	43	60	82	88	90	75

### Hen Harrier

Widespread records up to May 7th (Breydon), May 9th (Holkham) and May 19th when an adult male at Welney which was seen later in summer in Cambs. Next occurrence a Ring-tail Aug 19th roosting in a West Norfolk wheatfield with 11 Marsh Harriers; probably the same bird appeared at Snettisham Aug 22nd. No further records until Lynn Point Oct 9th.

Winter roosts: The main Broads sitc held up to 6 Jan, 5 Feb/March, 5 Oct, 7 Nov and 10 Dec; in second winter period this locality included a wing-tagged example marked as a nestling in North Wales. In North the combined monthly maxima at three sites was 14 Jan, 10 Feb/March, 9 Oct, 10 Nov and 12 Dec. Wing-tagged Ringtails present at Titchwell/Holme Jan 1st and Oct 24th; the bird reported on latter date had been marked in SW Scotland in the summer of 1992. In West 3 Jan, 4 Feb and 3 Dec. At Snettisham 2 tagged birds noted including one ringed as a chick near Inverness in 1991.

## 'Montagu's Harrier

Recorded April 21st to Scpt 12th. Breeding: A total of 3 males and 4 females nested or attempted nesting. Three females successful and 10 young fledged due to co-operation from farmers. Each nest in cereal crops. In addition singles mostly briefly at 17 other localities.

#### (Goshawk

At one traditional site a pair reared 4 young. A second pair summered at a regular locality but no proof of nesting. Another regular site was deserted in 1992, but at a fourth locality spring-time display noted.

Elsewhere scattered singles Hillington Jan 19th, Flitcham March 31st, Potter Heigham April 11th, Sandringham May 24th, Stanford Water Sept 12th, Grime's Graves Sept 25th, Burnham Norton Oct 21st, Roydon Common Oct 26th, Docking Nov 20th and Blakeney Dec 14th.

## **Sparrowhawk**

Widespread throughout the county. Regular observations within city of Norwich boundary and sightings extended to fen, farmland, marshes and estuaries. At Welney worrying habit of preying on Snipe.

Blackbirds and Collared Doves are the most frequently reported prey. Quarry extends to Moorhen, Ringed Plover, Song Thrush, Redwing, Green Woodpecker, Dunnock, Robin, Red-breasted Flycatcher, Starling and House Sparrow. In Yarmouth town centre a deceased female Sparrowhawk recovered in a Row only 4-5 feet in width 'had a dazed House Sparrow at its feet which soon fluttered off'; presumably the hawk was killed striking a building in such a confined space.

### Buzzard

Usual scattered reports of ones and twos, some probably of captive origin, and also 4 West Acre Feb 6th at 34 localities. Mostly during spring (March to May) and autumn (Sept to October).

Rough-legged Buzzard

During opening months of year a well-watched long stayer in the Warham/Wighton/Wells/Walsingham area Jan 1st to March 30th. Autumn arrivals, all singles, from Oct 4th at Aldeby (Nov 4th onwards), Burnham Overy/Holkham Park and Meals (Oct 18th to 26th), Holme, Little Massingham, Salthouse Heath, Waxham/Horsey/Winterton/Martham (Oct 17th to 28th) and West Acre.



Osprey (N. Borrow)

#### **Osprey**

Recorded between April 14th and Oct 16th. Noted at 33 sites. All singles except 2 at Stanford Water Aug 31st to Sept 11th with one lingering till the 19th. Another long-stayer at Strumpshaw/Massingham/Cantley Aug 30th to Oct 1st.

#### **Red-footed Falcon**

A remarkable county total of over 40 different birds representing a sizeable proportion of some 150 British records appeared between mid-May and the end of June. Many merely passed through and it is difficult to assess accurately the number involved. The total is far in excess of the previous record year (1973). By May 14th a vast anticyclone centred over Scandinavia had produced above average temperatures and surges of warm air from the south-east. These conditions resulted in large numbers of birds including Red-throated Pipits and Grey-headed Wagtails travelling far to the west of their normal routes from Africa to northern breeding grounds. Accordingly countries to the east and south-east of Britain played host to massive numbers of this enchanting falcon. France (60), Belgium (81), Holland (800), Finland (65) and Denmark all received impressive influxes.

The earliest occurrence was a female at Winterton April 26th to May 3rd followed

by an influx commencing May 14th when a female at Gorleston, a male and 2 females at Winterton, females at Horsey, Happisburgh and Cley, 1/2 males and 1/2 females on Blakeney Point, a first-summer male and a female at Titchwell and a second-year male at Holme. Next day (May 15th) a female appeared at Bradwell, a first summer female at Salthouse Heath and an adult female at Cley. Another female was found at Waxham May 16th.



Male Red-footed Falcons Hickling (N. Arlott)

Following a female at Titchwell May 21st a further influx commenced on 25th when females noted at Holkham and Holme. A male appeared at Welney May 26th remaining until the 31st. A female was at Winterton May 28th when an immature female at Horsey/Waxham stayed until June 1st and both a male and a female were at Holme. The north coast produced females on Blakeney Point, Holkham and Brancaster GC May 29th together with males at Titchwell and Holme. Another male passed over Happisburgh May 30th. Next day a first-summer female was noted near Guist where it remained until June 8th. Another in similar plumage arrived at Titchwell June 3rd.

Further records during June were all inland: a female at Potter Heigham, an immature female at Norwich (Sweet Briar marshes) and a male at Fakenham all on 7th. After the appearance of a first-summer female at Martham Broad on 13th, a first summer male lingered at How Hill/Reedham Water from 15th to 20th followed by 2 adult males which provided entertainment at Hickling June 28th. And the final record: a first-summer male at Cley July 11th.

During the 1973 influx, female Red-footed Falcons were the first to arrive here, the later males being well outnumbered by their counterparts. This year both sexes arrived simultaneously. Well over half the national records related to individuals aged as first-summer. Almost all well watched Norfolk sites provided observations during the influx, some birds lingering for lengthy periods. Birders could almost select which of these splendid vagrants they wished to see!

### Merlin

Widespread reports of singles, mostly at coastal localities up to May 10th (West Runton) May 11th (Holkham) and from Sept 10th (Snettisham) with unseasonal birds offshore at Horsey June 13th, Blakeney Point July 19th and Breydon (a casualty) July 28th.

The Broadland roost held up to 5 Jan, 4 Feb, 2 March, 2 April, 4 Oct, 5 Nov and 4 Dec. At the Warham roost 3 Jan and 2 Oct. In Fens at Welney now less frequently observed and roost along the Delph willows disrupted by increased shooting along Refuge boundary.

### Hobby

Records from 98 localities. Extreme dates April 24th (Weybourne, Kelling, Cley and Titchwell) and Oct 23rd (Holme). Breeding confirmed at 7 sites. Prey items included Swifts, Sand Martins and newly hatched Four-spotted Chaser Dragonflies.

## Peregrine

Records from 28 localities, mostly April/May and Sept/Oct. All singles except 2 at Wolferton Oct 31st. Long stayers at Holkham: a wintering bird till March 31st, a female Oct 12th into 1993 and a male from early Nov to year-end. Recorded Dersingham Fen Jan 19th to Feb 22nd.

## **Grey Partridge**

A covey of 50 feeding on linseed stubble at Flitcham considered wild as no local rearing.

# Quail

Calling birds at Anmer, Burgh Castle, Choseley, Flitcham (3), Grimstone, Holkham, Holme, Horsey Gap, Ludham (bred), Shouldham Warren, Stanford Battle Area (4), Stanhoe, Ten-mile Bank, Titchwell and Welney. Also one flying at sea off Blakeney Point May 29th. Extreme dates April 27th and Aug 17th.

### Golden Pheasant

Reported from 11 sites (7 in Brecks); largest group 12 at Wayland Wood.

#### Water Rail

Only proof of successful breeding at Whitlingham, but 7 pairs summered at Strumpshaw.

# **Spotted Crake**

After a two-year absence in county records, one caught and ringed in Yare valley Aug 2nd.

#### Corncrake

Casualties at Gorleston Sept 6th (struck a window – PRA) and at Horstead Dec 23rd (produced by a cat – per GED).

### Crane

The Broadland group of 5/6 present at the beginning of the year increased to 7 from mid-Oct onwards.

Away from the Broads 2 west Cley, Holkham and Titchwell March 17th, immature Welney April 2nd-4th, immature Breydon April 5th and 2 Eccles April 7th, immature west Kelling April 21st, one west W. Runton, Cley and Burnham Overy April 22nd was doubtless the same bird arriving at Holkham next day. Finally 2 over Glaven valley/Blakeney Oct 28th.

# Oystercatcher

Monthly maxima at Snettisham: 6000 Jan, 4700 Feb, 2000 March, 1520 April, 1030 May, 2700 July, 8000 Aug, 10500 Sept, 9400 Oct, 4200 Nov and 3000 Dec. The decline of the last two years continues, 3000 being the lowest mid-winter count since 1974. Depleted mussel and cockle populations in the Wash appear to be the cause of this decline. See page 434.

Main breeding sites; Blakeney Point 200 pairs, Cley 13, Holkham NNR 89, Scolt 57,

Wash Trial bund 67 and Snettisham 20. A minimum of 51 pairs on territory inland.

# FBlack-winged Stilt

Two at Rush Hills, Hickling, May 16th (ADB et al) with a different individual in the Burgh Castle/Breydon/Berney area May 20th-23rd (JLB et al).

#### Avocet

A minimum of 157 pairs summered in the county with some further extension of range. Over 147 young fledged though details incomplete. The winter months saw small numbers (1-6) at Breydon (Jan, Feb), Cley (Jan, Feb and Dec), Holkham (Dec), Titchwell (Feb), Holme (Dec), Snettisham (Dec) and Ousemouth (Feb).

Largest gatherings recorded were 110 Cley April 10th, 130 Titchwell July with 190 Aug, 150 Snettisham July 18th and 90 Ousemouth July 19th with 220 Aug 14th and still 23 Oct 31st. Only inland records at Welney March 29th, 6 May 14th and 2 July 12th although birds were regular at Holkham Lake April-Aug for the first time following lowered water levels.

#### Stone Curlew

Recorded in Brecks March 18th to the end of Oct. 46 pairs bred in Norfolk Brecks (17 pairs on grassland/heathland fledged 17 young while 29 pairs on arable fledged 15 young). Post-breeding flocks of 29 Aug 23rd and up to 48 Sept to cnd of Oct at two sites. Isolated sightings away from breeding areas at Gun Hill, Holkham, March 22nd, Sheringham April 26th and Kelling May 7th.

### Little Ringed Plover

Recorded March 22nd (Pentney GP) to Sept 19th (Salthouse). A minimum county total of 31 territorial pairs though the final outcome of any breeding attempt only recorded in a few cases. Largest groups: 23 Cantley BF July 12th, 20 Cley Aug 2nd, 12 Holkham May 14th, 8 Holme Aug 7th and 9 Wissington BF July 14th.

# **Ringed Plover**

Number of coastal breeding pairs: Yarmouth 8 within the Little Tern enclosure; Sheringham 3; Cley 23; Blakeney Point 70; Holkham NNR 55; Scolt 26; Brancaster 15; Holme 23 and Snettisham 40.

Inland breeding localities include Holkham Park in a carrot field; King's Lynn BF 2 pairs; Gooderstone 16 nests including some repeats; Hillington 2 nests, West Acre and Welney.

Spring flocks of migrant *tundrae* peaked at 206 Breydon May 18th, 100 Holkham May 24th and 57 Welney May 24th followed by 20 June 22nd, the latter probably returning migrants. Autumn passage saw flocks of 302 Breydon Sept 12th, 400 Brancaster Aug, 140 Titchwell Aug with 190 Sept, 254 Holme Aug and 260 Ousemouth Aug 29th.

### **Kentish Plover**

A rare inland male at Pentney GP April 22nd followed by females at Cley April 24th and Hickling June 2nd to 4th.

# Greater Sandplover

A female or first-summer bird visited Cley Marsh and Blakeney harbour Aug 5th to 8th (TCD PW et al). The third county example.

#### Dotterel

A rather early spring movement in the Bacton/Paston area where 5 April 21st to 23rd, 6 on 24th/25th and 2 on 26th. This arrival was followed by a more typical May passage with a single Blakeney Point 19th, 2 Happisburgh 20th and a single 22nd, 2 Beeston Regis 24th to 28th and 3 Winterton 25th to 27th.

Autumn migrants at Cley Aug 23rd, Sheringham Aug 24th, 15 (4 juveniles) Southery Fen Aug 26th/27th and 5 remaining on 29th. Finally a latish bird at Waxham Sept 26th.

#### Pacific Golden Ployer

Breydon May 28th (PRA). The fourth county example.

### American or Pacific Golden Plover

1991: Titchwell July 28th (SJH et al).

### Golden Plover

Largest winter flocks: 2300 Breydon Jan followed by a remarkable 5100 Dec. Also large gatherings at Walcott 1500 Jan, Cley 1000 March, 2100 Holkham Dec, Titchwell 1850 Dec, 1600 Thornham Oct and 2150 Dec, Lynn Point 1850 Dec, Boyland Common 4000 Nov and Ludham 1500 Oct/Dec.

Large flocks roosting on coastal mud reported from Thornham: 2427 Jan 18th and Snettisham 1400 Oct, 1370 Nov and 1000 Dec.

## **Grey Plover**

The Wash at Snettisham held 990 Jan, 400 March, 600 April, 2430 May, 650 July, 850 Aug, 820 Sept, 550 Oct and 500 Nov/Dec. Other sizeable gatherings: 300 Blakeney Point Aug 31st, 96 Scolt Jan 17th, 135 Brancaster May 14th, 239 Titchwell Aug, 584 Gore Point Dec 13th and 1150 Lynn Point April 17th. A westerly passage of 340 Aug 14th off Sheringham was also observed from Cley.

Spring passage observed inland at Colney GP May 24th; at Pentney GP where 2 May 22nd, 3 on 24th and singles 25th and 28th; and at Welney where 1-2 on 3 dates March-April followed by almost daily sightings May 14th to June 7th with a maximum of 17 May 23rd.

### Lapwing

The Breydon area once again held huge numbers at both ends of the year with counts of 16000 Jan, 14000 Nov and particularly 41000 Dec 12th. These are quite exceptional totals. Large numbers were also at Paston 2000 Nov, Lynn Point 3000 Nov and 8000 Dec with up to 2680 Welney Feb. Westerly movements observed off Sheringham on several dates in Oct/Nov peaking at 4200 Nov 9th.

Total of 304 breeding pairs in coastal grazing marshes Snettisham to Kelling including 201 pairs Holkham. Also 56 breeding pairs at Welney, but very poor success due to spring floods.

#### Knot

High tide concentrations at Snettisham: 38000 Jan, 12500 Feb, 15500 March, 11500 April, 5000 May, 4700 July, 18200 Aug, 22000 Sept, 70000 Oct, 100,000 Nov and 92000 Dec. The Oct/Nov peak was unusually protracted with the complete flock feeding on the Reserve's cockle spat well into Dec (RSPB). On the biggest tides part of the Wash flock flights to roost on the north-west Norfolk coast producing high counts at other localities including Gore Point where 8000 Aug and 50000 Sept/Oct, Ousemouth 20000 Aug 29th, Titchwell 7850 Aug and 4180 Sept.

An unusual influx of 1090 (all adults) Breydon Aug 30th after south-easterly winds. Inland: Welney March 9th, May 18th, 4 May 23rd and May 25th-27th. Also 3 Pentney GP May 24th.

### Sanderling

Peak numbers as usual at Snettisham: 80 Jan, 250 March, 22 May, 350 July, 550 Aug, 200 Oct, 20 Nov and 6 Dec. Other main sites: Holkham 112 May 18th, Titchwell 60 Jan/Feb and Holme 395 May 15th and 397 Aug 1st.

Inland records of singles on spring passage at Colney GP May 18th; Lyng Easthaugh April 13th and May 9th; Pentney GP May 12th (with 3 on 24th) and Welney May 12th, 15th and 18th.

## Semipalmated Sandpiper

Hickling May 8th to 10th (TB JSH DN TN). The fourth county example.

### | Red-necked Stint

A summer-plumaged adult at Cley Aug 2nd/3rd (MAG RM et al). The first county record and only the second for Britain. See page 437.

#### Little Stint

Spring passage commenced May 4th (Titchwell) following which recorded Breydon/Berney maximum 7 May 14th, Hickling 2 May 27th-June 3rd, Cley May 14th-29th maximum 9 on 15th and 25th, Holkham May 14th-28th maximum 9 on 19th, Titchwell May 4th-31st maximum 8 on 19th and Welney May 22nd-30th maximum 4 on 24th.

A number of June records difficult to assign to either spring or autumn passage although those late in the month undoubtedly returning adults. Recorded at Hickling 2nd/3rd and 28th, Cley 6th-20th maximum 8 on 19th, Kelling 5 on 14th, Holkham 2 on 28th/29th and Welney 9th-26th maximum 4 on 21st.

An indifferent autumn passage. Observed at Breydon maximum 5 Aug 9th, Kelling 6 Sept 8th, Salthouse 4 Oct 7th and 13th, Cley maximum 17 Aug 31st, 7 Sept 30th and 8 Oct 1st, Holkham Aug 29th-Sept 13th maximum 3, Titchwell July 8th-Oct 31st maximum 7 Aug, 10 Sept and 15 Oct, Holme 5 Sept 14th, Wissington BF 3 Aug 24th and Welney Aug 31st-Oct 18th maximum 3. Very small numbers also at Cantley BF, 1 Blakeney Point, Lynn Point and King's Lynn BF.

### Temminck's Stint

Strong spring passage between May 8th and 31st involving up to 25 individuals. Records from Breydon 22nd, Berney 23rd with 2 on 24th, Hickling 18th, Hardley Flood a singing bird on 13th, Cley 3 on 12th-14th with 3 new birds on 16th-18th, one until 20th and new singles 24th, 27th and 28th/29th, Holkham 13th, Titchwell 11th with 2 on 20th/21st, 26th and 30th/31st, West Acre 2 on 24th and Welney 8th-10th, 17th/18th with 2 on 19th and a single 24th-26th.

In contrast a single at Cley July 14th/15th was the only one on autumn passage.

# Baird's Sandpiper

An adult at Cantley BF Aug 18th-20th (DJH PJH et al) was the eighth county record.

# Pectoral Sandpiper

Spring examples at Cley May 3rd (MF) and 29th/30th (MAG et al).

Autumn migrants at Hickling 2 juveniles Sept 20th (JH *et al*), Cley Sept 10th-17th (MAG *et al*), Titchwell July 17th-28th (RQS *et al*) and Sept 3rd (JRW) and 9th (RQS *et al*), Pentney GP Oct 18th (DA) and Welney adult July 11th-13th (JBK CK *et al*) and juvenile Sept 28th (JBK CD).

# Curlew Sandpiper

Spring passage observed at Berney where 1-2 May 21st-24th, Breydon 10 May 19th and a single 27th; Cley an early bird April 25th/26th followed by frequent records May 12th-June 6th maximum 7 May 28th; Holkham May 14th; Titchwell 1-3 May 12th-23rd; Snettisham May 11th and Welney 1-2 on 9 dates in May.

Autumn passage showed a dearth of juveniles and a paucity of birds from mid-Sept onwards once the earlier flush of adults had departed. At Breydon where noted from July 21st (increasing to 13 July 29th) a strong passage of 152 adults Aug 30th decreas-

ing to 117 on 31st and also a single juvenile Sept 8th-11th; Cley July 14th-Sept 26th maximum 22 July 31st and 50 Aug 30th; Blakeney harbour 45 adults Aug 31st; Holkham June 30th-Sept 11th maximum 10 July 22nd; Titchwell July 17th-Sept 28th maximum 22 Aug 8th; Holme 12 Sept 13th; Snettisham 20 Aug 3rd and an exceptionally late bird Nov 15th; Lynn Point 2 juveniles Oct 1st with a single remaining till 18th and Welney June 23rd/24th, Aug 5th and 12 adults Aug 30th.

## Purple Sandpiper

Extreme dates: May 2nd (Titchwell) and July 18th (Holme). One at Snettisham on the highly unusual date of June 27th. Small numbers of wintering birds at traditional sites including Yarmouth (3 Feb), Walcott (7 Jan, 6 Feb, 7 March, 3 April, 3 Oct, 4 Nov and 5 Dec), Cromer (3 Jan), Titchwell (5 Feb) and Heacham/Hunstanton (10 Jan to March, 11 April and 3 Nov/Dec). Singles in Brancaster harbour (Jan/Dec) and unusually at Burgh Castle Sept 8th.

A westerly passage of a few noted off Sheringham Sept/Oct.

#### Dunlin

Snettisham counts: 3350 Jan, 2500 Feb, 3500 March, 3000 April, 7000 May, 8200 July, 3960 Aug, 4750 Sept, 6000 Oct, 1200 Nov and 2000 Dec. Other counts 366 Holme Jan 22nd, 6200 Ousemouth April 17th and 341 Titchwell March with 324 Nov.

Inland peaks at Welney: 145 March 16th and 154 April 16th.

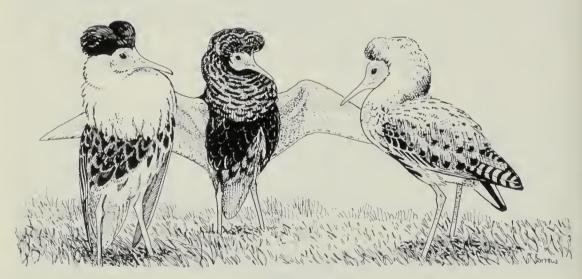
## Broad-billed Sandpiper

One briefly at Rush Hills, Hickling, June 7th (AJP) followed by one at Cley July 1st/2nd MTE MAG *et al*), the latter bird found by a visiting Swedish couple. The county remains the most prolific area in Britain for sightings of this species.

1991: an extremely early bird at Breydon March 8th (PRA).

## **Buff-breasted Sandpiper:**

1979: Hickling Sept 12th to Oct 1st (PRA SEL MJS).



Ruffs (N. Borrow)

### Ruff

Wintering birds at Breydon where up to 6 Jan, 3 Feb, 17 March and 9 Dec; Hardley Flood 35 Feb 15th and 31 March 14th; Cley 15 Jan 20th and 21 Feb 23rd/29th;

Titchwell 38 Jan, 43 Feb, 39 March and 56 Dec and Welney 33 Jan, 12 Feb and 18 March. Also singles in Jan at Cantley BF on 11th, Gillingham 12th and Horsey 26th.

A strong spring movement, with the first main wave in the third week of April. Largest numbers: Berney 75 April 22nd, 88 April 26th, 75 May 1st and 80 May 20th; Hickling 54 April 16th-18th and 45 May 17th; Cley 88 April 20th, 110 May 14th and 40 May 20th; Holkham 98 April 20th and 93 May 15th; Titchwell 28 in April and 27 May, Holme 36 in May and Welney 174 April 21st reducing to 80 next day and 30 May 15th.

Main autumn gatherings at Berney 50 Sept 10th; Breydon 17 Nov 8th; Cantley BF 16 Aug 16th and 33 Sept 12th; Cley 28 Aug 2nd; Holkham 10 Aug 14th; Holkham Lake 14 Aug 28th; Titchwell 46 Aug, 65 Sept, 53 Oct and 61 Nov; Lynn Point 17 Aug 31st; King's Lynn BF 52 Aug 30th and Welney 17 June 27th, 35 July 29th/30th, 120 Aug 29th and 138 Sept 2nd.

## **Jack Snipe**

Reported up to April 18th (Kelling water meadows) and from Sept 19th (Holme) at 24 sites. As usual most records concern just one or two birds, but up to 3 at Cley and Holme in Oct.

## Common Snipe

County total of 141 drummers including 44 in the coastal grazing marshes Snettisham to Kelling although details not received from all potential areas. Main concentration of 81 drummers on the Norfolk section of the Ouse Washes in the Welney area. Here two spring floods delayed the breeding season, the last clutch not hatching until Aug 8th.

An impressive movement of 485 Holme Aug 16th between dawn and mid-day as well as 103 west Sept 22nd and 147 Oct 27th; also a westerly movement of 60 Sheringham Sept 6th.

### Woodcock

Roding birds recorded at 26 sites excluding Thetford Forest where birds widespread during the summer. A concentration of up to 20 breeding females in Holkham Park.

A number of immigrants at coastal sites in Oct/Nov including 5 Holme Oct 30th and 4 Blakeney Point Nov 8th.

### **Black-tailed Godwit**

The opening months of the year saw 1-3 at Breydon (Jan/Feb), Cley (Feb) and Welney (Jan) with up to 20 Titchwell (Jan/Feb) and 7 Brancaster harbour increasing to 20 March 7th.

Spring passage of *islandica* began early with an influx of 150 Welney Feb 6th increasing to 300 Feb 11th and followed by counts of 230 March 21st, 100 April 19th and 70 May 4th. Other main spring counts from Breydon 38 May 24th, Hickling 48 May 16th, Cley 132 April 16th, Holkham 97 June 3rd and Ousemouth 45 April 5th.

Returning migrants particularly numerous at Ousemouth: 89 July 19th with 238 Aug 1st, 351 on 18th and 800 on 29th. Elsewhere counts included Breydon 40 July 23rd, 42 Aug 9th and 44 Nov/Dec; Hickling 27 July 17th; Cley 63 July 25th and 80 Aug 2nd; Holkham 21 July 10th; Titchwell 100 June, 165 July, 69 Aug, 65 Sept, 130 Oct, 123 Nov and 44 Dec and Welney 90 June 15th and 110 July 11th.

Also reported during the year in small numbers at Berney, Cantley BF (Aug. Oct and Nov), Strumpshaw (April/May), Horsey (March), Colney GP (May), Snettisham and Wissington BF (Aug).

Two territorial pairs at Welney, one chick reared to fledging. Displaying birds at one other site.

#### **Bar-tailed Godwit**

Monthly Snettisham counts: 3600 Jan, 2000 Feb, 1000 March, 1200 April, 800 May,

1000 July, 1100 Aug, 500 Sept, 4400 Oct, 2000 Nov and 1500 Dec.

High-tide flocks also at Titchwell: 1410 Sept and 1285 Oct; Gore Point: 2304 Jan 22nd and 2100 Dec 21st and Warham Sands: 420 Aug 23rd.

Inland migrants at Colney GP May 9th, Pentney GP May 12th and Welney March 30th where appeared on 7 dates in May with maximum 7 May 17th and singles July 22nd and 6 Aug 30th.

### Whimbrel

Recorded March 21st (Snettisham) to Oct 4th (Holme). Breydon again produced large numbers in spring with peak counts of 229 April 23rd, 431 April 24th, 200 May 2nd and 110 May 6th. Other spring counts included 37 Waxham May 1st, 109 Cley April 26th and 71 Holkham May 3rd.

'Autumn' passage commenced with 3 Cley June 21st followed by peak counts there of 125 July 20th and 70 July 31st/Aug 1st. Other main counts: 200 Breydon July 29th, 130 Blakeney Point July 25th and 96 there Aug 4th, 45 Holkham Aug 14th with a leucistic bird Aug 3rd-7th and 22 Holkham Park Aug 3rd-8th, 59 Titchwell Aug 18th, 79 Holme Aug 18th and 42 Ousemouth July 19th followed by 46 Aug 29th.

Recorded inland at Pentney, Stow Bridge, West Acre and Welney (maximum 19 Aug 2nd).

### Curlew

Monthly counts at Snettisham; 1030 Jan, 400 March, 80 April, 280 July, 660 Aug, 1000 Sept, 1000 Oct, 1225 Nov and 1550 Dec.

Breydon held 803 Aug 21st and 755 Sept 13th. Summering birds at 13 inland sites, but no proof of breeding.

## Spotted Redshank

Small numbers wintering at Breydon (Dec), Stracey Arms (Feb), Hickling (Jan-March and Nov) and Titchwell (3 Jan, 2 Feb, 2 Nov and 4 Dec).

A light spring passage when recorded at Breydon (maximum 6 April), Cley (maximum 14 April 26th and 9 May 3rd/4th) and Hickling, Holkham, Titchwell, Snettisham and Welney.

Early return of adults from June 7th (Holme where a very early juvenile July 30th) after which largest gatherings as follows: Cley 13 June 26th, 26 July 25th and 22 Aug 2nd with first juveniles from Aug 14th; Snettisham 126 July 18th, 120 Aug 16th, 24 Sept 16th/19th and 10 Oct 13th. Also noted at Breydon (maximum 10), Cantley BF (maximum 3), Holkham fresh-marsh and Lake (maximum 3), Titchwell (maximum 8) and Welney (maximum 5).

#### Redshank

Peak monthly counts at Snettisham: 205 Jan, 170 Feb, 300 March, 500 July, 700 Aug, 450 Sept, 200 Oct, 190 Nov and 100 Dec.

Total of 91 pairs bred in coastal grazing marshes Snettisham to Kelling, together with 42 pairs at Welney.

# Marsh Sandpiper

Two records: Gunton Lake May 20th/21st (AB et al) and Holkham fresh-marsh June 7th-9th (VE et al) brings the county total to fifteen.

1987: The Cley bird was first seen July 19th (NPB)

1990: Pentney May 17th (AB) probably the Lakenheath Washes bird of the previous day.



Spotted Redshanks (N. Arlott)

#### Greenshank

First March 29th (Titchwell) after which a strong spring movement observed at Gunton Park 20 May 20th, at Cley 15 May 14th, at Holkham 25 May 18th and at Welney 16 April 20th, 25 May 19th and still 9 June 6th. Other localities including Breydon. Strumpshaw, Hickling and Cantley BF produced counts of 4 to 11.

Largest autumn concentrations: Breydon 16 July 20th, 12 Aug 3rd, Cantley BF 12 Aug 29th, Cley 43 Aug 29th and 11 Sept 26th, Holkham fresh-marsh 39 Aug 30th, Brancaster harbour 13 Sept 14th (where a late bird Nov 6th), Titchwell 43 Aug 18th, 17 Sept 20th, 15 Oct 1st and a late bird Nov 10th, Snettisham 23 July 18th, 40 Aug 12th and 22 Sept 16th.

Other sites reporting between 3 and 6 birds: Hickling, Holkham Lake, Lynn Point and Welney. Migrants can occur almost anywhere as shown by up to 5 birds feeding in a pool formed by seepage from a large manure heap near Hilborough in mid-Aug.

# Lesser Yellowlegs

A summer-plumaged adult at Cley May 28th/29th (CL MF et al). A most unusual spring occurrence and only the sixth county record.

## Green Sandpiper

Small numbers (1-3) recorded at 14 sites in the winter months was below average. A typically light spring passage (March-May) produced only 1 to 3 from 16 localities. Autumn movement heavier with most impressive counts at Cantley BF where 35 July 29th and 50 Aug 10th; Cley 12 July 24th-27th, 15 Aug 9th/10th and 17th; Holkham 18 Aug 10th; Holme 10 Aug 8th; King's Lynn BF 15 Aug 16th; Wissington BF 17 July 13th/22nd and 22 Aug 12th and Welney 8 July 8th and 10 Aug 3rd. Widespread records of smaller numbers.

## **Wood Sandpiper**

Early spring migrants at Holkham April 21st and Welney April 23rd-26th, main passage not commencing until second week of May when 1-3 at Berney, Surlingham, Hardley Flood, Colney GP, How Hill, Hickling, Kelling, Titchwell, Burnham Overy, Holme, West Acre, Wissington BF and Welney. Larger groups at Strumpshaw (maximum 9), Cley (maximum 7 on 19th) and Holkham (maximum 9 on 13th).

June records of 1-2 Welney 11th-16th and Cantley BF 27th followed by sightings from Berney July 26th/31st; Cantley BF maximum 4 July 26th-Sept 14th; Hickling maximum 19 Aug 9th; Cley Aug 9th with 2 Aug 11th/13th; Holkham 1-2 July 30th-Aug 29th; Titchwell 1-2 July 24th-26th, 2 Aug 9th/10th; Holme 5 Aug 21st; Wissington BF July 5th and Welney 1-2 July 31st-Aug 8th.

## **Common Sandpiper**

Recorded between April 18th (Cley) and Sept 30th (Lynn Point). Spring passage peaked from around mid-May onwards when highest counts were 6 Hardley Flood 13th, 15 Gunton Park 22nd, 12 Cley 14th, 9 Holkham 14th, 10 Titchwell 19th, 9 Holme 24th and 6 Wissington BF 24th.

Autumn passage commenced with a single at Breydon July 2nd where there were 20 July 31st. Other main gatherings: 35 Cantley BF Aug 10th; 12 Hickling Aug 19th; 6 Colney GP Aug 22nd; 8 Waxham Sept 17th in off sea; 6 Cley Aug 9th; 8 Holkham Aug 9th; 7 Holkham Lake Aug 19th; 10 Titchwell Aug 21st, 15 Lynn Point Aug 2nd: 17 Wissington BF Aug 10th and 9 Stanford Water July 5th.

#### **Turnstone**

Monthly counts at Snettisham: 202 Jan, 70 Feb, 190 March, 92 April, 210 July, 440 Aug, 200 Sept, 40 Oct, 240 Nov and 20 Dec.

Over 200 wintered in Brancaster harbour where one bird had been ringed at Teesmouth in May 1977 as an adult. Also notable: 70 Scolt March 22nd, 50 Salthouse April 19th and 63 Cley May 12th.

Inland birds at Welney Feb 28th/29th and March 16th with an above average spring passage between April 21st and June 1st when 1-3 birds on 11 dates; also 3 July 19th. A single at Cantley BF Aug 9th.

# Red-necked Phalarope

An adult female at Titchwell June 19th (RSPB), West Acre June 21st (RD et al) and Hickling June 27th (ADB JRL et al) may refer to just one or two individuals.

In autumn a long-staying juvenile at Cantley BF Aug 2nd to 20th visiting Breydon on 9th (PRA BWJ *et al*) with another at Berney Sept 18th to 23rd (PRA RSPB *et al*), Hickling Aug 31st (NNT), Cley juvenile Aug 30th/31st (CK MAG *et al*) and Titchwell Sept 25th (DMF).

# **Grey Phalarope**

A few appeared after a spell of westerly winds in the first half of Oct: Sheringham on 6th (MAG RM), Cley on 7th (MAG), on 9th flying east (TCD) and 11th-14th (MAG SNV et al) the latter bird visiting Kelling water meadows on 13th (FJL JW); also one at Titchwell Oct 9th (RSPB).

#### Pomarine Skua

Typical early autumn records of adults in July/Aug: Kelling July 1st, Horsey July 7th, Cley Aug 8th, 1-6 at several sites on 14th, Waxham on 16th and 2 Waxham on 30th. About 14 reported on 10 dates in Sept, about 55 reported on 12 dates in Oct, 2 Holkham Bay Nov 3rd, Snettisham Nov 14th and 3 Sheringham Decl2th.

Intensive seawatching daily at Sheringham Aug 1st to Nov 1st recorded total of 42 birds, all adults with maximum 15 Oct 4th.

### Arctic Skua

Extreme dates June 6th to Nov 17th. Largest movements: 180 Sheringham Aug 14th, 107 inland Ousemouth Sept 3rd, 330 Sheringham Sept 4th, 144 Holme Sept 4th, 100 Sheringham Sept 23rd and 160 Holme Oct 4th.

### | Long-tailed Skua

Holme at least one adult and one juvenile in area Aug 31st to Sept 4th and an adult Sept 17th; Blakeney Point juvenile Sept 23rd; Cley juvenile Aug 29th and 2 Sept 4th, an adult Sept 19th and a juvenile Oct 26th; Salthouse juvenile Sept 27th; Sheringham adults Sept 19th and Oct 6th; Paston juvenile Sept 11th; Eccles juvenile Sept 23rd and Yarmouth juvenile Oct 4th.

#### Great Skua

Out-of-season records: Holme and Sheringham Jan 18th and Cley June 19th. Rather scarce in autumn. Best movements: 88 Holme Sept 23rd, 90 Paston Oct 4th and 51 Sheringham Oct 5th.

### Mediterranean Gull

During the first two months of the year overwintering birds at Yarmouth (2 adults and a 1st year present until mid March), Overstrand (adult and 1st year present into March) and Hunstanton (an adult) with other sightings a 2nd year Paston Jan 8th and a 1st year Sheringham Feb 28th. The Sheringham bird was herald of an unprecedented spring influx of 1st year birds March to May when frequent reports from Holme/Titchwell, Cley/Blakeney, Sheringham and Breydon and other records from King's Lynn, Snettisham, Hunstanton, Burnham Norton, Holkham, Wells, Paston, Winterton and Yarmouth including 3 at Winterton and 8 at Breydon May 20th. Older birds much rarer at this time: single 2nd years at Snettisham and Breydon, single adults at Holkham and



First-summer Mediterranean Gulls Breydon (J. Wright)

Caister, although pairs settled in early April at Titchwell (adult and 2nd year) and elsewhere (2 adults) and bred for the first time in the county. Both hatched eggs, but failed to fledge young.

The usual wide scatter of autumn records, smaller numbers than in spring with occasional sightings from most coastal localities July to Nov.

Wintering birds settled again at Yarmouth (2 adults and a 2nd year), Overstrand (adult and 2nd year) and Hunstanton (an adult). Inland records comprised the 1991 Wroxham bird remaining until Jan 28th, a 1st year Norwich waterworks Feb 13th to March 14th and single 1st years at Pentney GP Feb 29th, March 6th and May 10th to 13th.

## **Laughing Gull**

The 1991 first-winter Walcott bird remained until Jan 8th (MF et al).

### Franklin's Gull

A summer-plumaged adult at Titchwell July 21st soon headed west (DA MDA IT). The second county record.

#### Little Gull

Recorded all months. Apart from 22 off Holme March 27th and 30 April 3rd very light spring passage of a handful of adults April/May. Between May and July up to 7 first-years at Welney, 9 Titchwell, 3 Holkham and 3 Cley.

Largest autumn movements recorded during Oct following NE gales. At Snettisham 152 north in 4½ hours on 5th, 44 north and 85 south in ½ hours on 8th, 241 north in 2 hours on 9th and 318 north in 3 hours on 11th. At Holme 600 east Oct 11th, 250 west on 15th and 200 west on 16th. Later in month off Sheringham easterly movement of 60 Oct 21st, 45 on 26th and 50 on 29th.

### Sabine's Gull

An adult Sea Palling Sept 19th (JH) and a juvenile Waxham Oct 18th (PFF).

#### **Black-headed Gull**

Breeding records from Blakeney Point (3000+ pairs), Brancaster harbour (30 pairs), Cley (26 pairs), Scolt Head (200 pairs), Strumpshaw (43 pairs), Titchwell (500-600 pairs), Wells saltmarsh (2300 pairs) and Wissington BF (240 pairs).

# Ring-billed Gull

The 1991 second-winter bird at UEA Norwich remained until April 7th. A first-winter at King's Lynn docks Feb 16th (AB CD), a second-summer at Cley May 1st (DB MAG *et al*), a first-summer later moulting into second-winter at Breydon/Yarmouth July 3rd into 1993 (DJH *et al*) and a first-winter at Walcott Dec 21st (MF).

### Common Gull

A handful of pairs bred: Snettisham (1), Holkham NNR (3) and Blakeney Point (4).

#### Lesser Black-backed Gull

Breeding records: 20 nests Wells saltmarsh and single pairs attempted at Snettisham and Blakeney Point. Largest gatherings: 148 Colney GP April 30th, 150 Pentney GP June 9th and July 6th, 116 Titchwell in Aug and 2000 Hickling Sept 7th.

## **Herring Gull**

Total of 65 nests at Wells saltmarsh and 15 breeding pairs Blakeney Point.

Yellow-legged race(s): A first-winter Hardley Flood Feb 19th (MAG), then fairly regular reports March 27th to Oct 6th from Barton Broad, Breydon, Cley, Hickling, Holme, King's Lynn, Titchwell, Tunstead, Winterton and Yarmouth with following county monthly totals: March 1, April 1, May 3, June 7, July 7, Aug 13, Sept 5 and Oct

3. Largest parties; 3 Cley June 28th and 5 Tunstead Aug 18th. Also noted at Yarmouth Dec 3rd and 10th – the only winter records.

### | Iceland Gull

A first-year west at Sheringham Feb 6th (KBS SCV), an adult at Cley March 7th (CA JRA MF) and second-years - possibly the same bird - at Sheringham March 17th, Mundesley March 24th and Weybourne March 26th (many observers).

### (Glaucous Gull

During Jan 2 first-years Overstrand/Paston/Horsey on 1st, a first-year Snettisham on 3rd, an adult Hunstanton on 5th, an adult and a second-year Docking on 8th (and remaining until 16th), a second-year Hunstanton on 12th and an adult Holkham on 18th.

Also a second-year Welney Feb 16th, a second-year Paston April 16th and a first or sec-

ond-year Breydon April 20th.

An early adult Holme Sept 23rd, first-years at Holme Oct 13th, Sheringham Oct 19th, Yarmouth Oct 18th, Aldeby Nov 2nd and Breydon (2) Nov 8th and an adult Thornham Dec 26th. A first-summer Glaucous/Herring Gull hybrid at Cley April 24th-26th (MAG et al).

#### | Kittiwake

Largest movements reported were of only 400+ off Cley Oct 4th and 400 off Sheringham on 9th.

### Gull-billed Tern

1991: Burnham Norton July 14th (MESR). Last recorded in the county in 1983.

### ! Sandwich Tern

Recorded March 14th (Sheringham) to Nov 8th (Cley). One inland sighting of a bird moving SE over Thorpe Sept 20th. Blakeney Point held 3700 breeding pairs. At Scolt Head 280 nests, but only 25 young flew – the first for 4 years. Adverse weather caused extensive damage to the colony with high tides and flying foam July 2nd-5th followed by a violent thunderstorm and strong northerly winds on the evening of July 20th when all chicks under 10 days old perished; occasional Fox visits to the Scolt colony added to the problems.

### Roseate Tern

Breydon: a first or second-summer individual July 2nd to 6th was joined by an adult on 5th (PRA PJH et al); Cley May 10th (MAG) and Blakeney Point June 27th (DMcN).

#### Common Tern

Recorded between April 10th (Breydon) and Nov 17th (Sheringham). A few strong sea movements observed during Aug from Sheringham where 320 west 21st, 510 east 23rd and 1150 west on 30th - the latter figure a site record. Also a movement of 325 south Winterton Aug 30th.

The county breeding total took a tumble to 854 pairs (944 pairs in 1991). As usual the Breydon colony on platforms performed well with 131 pairs fledging 157 young. Flood tides caused problems at Scolt Head where half of the 71 nests present July 2nd to 5th were lost; Fox predation was the last straw and only 8 young fledged.

### **Arctic Tern**

Spring passage commenced April 15th (Sea Palling, Kelling, Pentney and Welney) with the last sighting of 2 Nov 6th (Cley). Observed at 10 sites (3 inland) on spring migration, the largest parties being 10 Kelling and 24 Welney April 15th followed by 14 Holme May 19th.

First-summer birds at Cley June 25th and Breydon July 3rd-7th with another there

July 19th-28th.

Recorded from 13 sites on autumn passage which largely comprised juveniles. Largest numbers: 20 Paston Aug 8th; 54 Sheringham Aug 14th-Oct 29th with maximum 12 Aug 30th; 10 Cley July 1st with 12 Aug 14th and 30 Aug 26th; 17 Blakeney harbour Sept 30th, 17 Holme Sept 23rd where 18 Oct 16th and 12 Hunstanton Oct 15th where 22 Oct 17th. Inland birds particularly scarce in the county in autumn, thus 3 Wroxham Aug 30th noteworthy.

The breeding season saw a record 22 pairs Blakeney Point with one pair Scolt Head – the latter flooded out.

### Little Tern

Extreme dates April 19th and Oct 4th (both Holme). A county total of 565 pairs had another disappointing season. The Yarmouth colony of 249 pairs improved its productivity to 176 young fledged. Holkham NNR with just 10 chicks fledged from 123 pairs suffered a disastrous season. One fears for the long-term future of this species while such a low recruitment rate continues.

#### Black Tern

Early migrants April 21st (Welney) and 22nd (Pentney GP) were followed by a lengthy movement extending from May 13th to 27th when recorded from 18 sites. Largest groups: 15 Breydon 14th, 75 Cley 18th, 12 Snettisham 18th and 23 Welney 14th followed by 25 on 19th. Two at Breydon June 23rd – the only record for the month.

Recorded at 17 localities on autumn passage commencing July 14th (Titchwell) where an early juvenile had arrived by the 17th. The last were 2 at Lynn Point Oct 4th and 4 at Holme on 17th. Frequently observed during autumn although the main movement was in two distinct waves: Aug 30th and Sept 11th.

Highest counts on Aug 30th: 87 Breydon, 15 Waxham and 15 Sheringham. The passage Sept 11th produced 16 Breydon, 15 Cantley BF, 15 Horsey Gap, 710 east off Sheringham, 350+ Cley, 25 Holkham and 22 Pentney GP. Highest counts on other dates



Black Terns (J. Wright)

were 40 Snettisham Aug 1st, 20 Breydon Aug 9th, 18 Lynn Point Sept 15th, 16 Sheringham and 21 Holme Sept 23rd and 20 Holkham Sept 24th.

#### Guillemot/Razorbill

The heaviest autumn passage on record was observed off Sheringham during Oct with the largest movements as follows: 6100 on 4th, 700 on 5th, 870 on 6th, 900 on 9th, 1130 on 10th and 2500 on 21st.



Black Guillemot with Guillemots (J. Wright)

#### Black Guillemot

Hunstanton Feb 23rd (NER), Sheringham Aug 30th (KBS TW MY-P), Cley Sept 17th (MAG RM), Sheringham Oct 4th-6th, Hunstanton Oct 10th (HR) and Weybourne-Blakeney Point Oct 24th-Nov 21st.

#### Little Auk

Early birds off Holme Oct 3rd and Sheringham on 6th (PJH JBK), then small numbers offshore on 13 dates Oct 15th-Dec 12th, maximum only 6 Sheringham Nov 15th.

At Yarmouth one heading inland over the cemetery among Starlings Nov 8th.

#### Puffin

Most unusual Fens records at Eau Brink Feb 9th and at Welney on 11th. Two Sheringham March 24th (KBS) and Cley June 6th (BV PW). Autumn sightings between Cley and Waxham on 13 dates Aug 22nd-Oct 18th, mainly ones and twos, but at Sheringham 3 Sept 24th, 30 Oct 4th and 5 Oct 6th and Paston 19 Oct 5th and 5 Oct 7th.

### **Collared Dove**

Largest assemblies: 80 Yarmouth Europark (Aug), 80 Sutton (Sept), 170 Aylsham (Oct), 50 Woodbastwick (Dec) and 100 Wereham (Dec).

### **Turtle Dove**

Spring arrival from April 23rd (Weybourne), becoming widespread on following days. Westerly passage at Holme May 4th-13th peaked at 27 on 10th. Last in autumn Oct 26th (Salthouse).

### Ring-necked Parakeet

Ones and twos at various coastal sites in all months except Feb/March and Aug. Similar totals inland at Martham Ferry, Ludham (where present in both winter periods) and Welney.

# **Great Spotted Cuckoo**

An immature Blakeney Point July 7th/8th (PEB et al) surprisingly reappeared on afternoon of the 11th. The previous county record was in 1977.

#### Cuckoo

Spring arrival from April 11th at Holme. An hepatic female at Hickling Aug 13th.

#### Barn Owl

Recorded at 96 localities.

#### Little Owl

Recorded at 55 localities.

## Long-eared Owl

Spring migrants at Holme May 14th and 27th.

Breeding confirmed at 10 sites in the county, 4 more than in 1991. No winter roost exceeded 4 birds.

Autumn migrants from Oct 4th when 2 at Eccles and singles Blakeney Point and Holme, Arrival coincided with Short-eared Owl.

#### **Short-eared Owl**

At the traditional Breydon/Halvergate wintering area 12 in Jan, but only 1-2 remained until March reflected in 7 road casualties on Acle New Road between Jan 2nd and Feb 12th. Spring maximum 4 Winterton April 8th. A single hunting marshes at Thorpe St. Andrew April 12th. A single pair bred in NW Norfolk and another pair summered elsewhere in the county.

Impressive autumn arrival in early Oct commencing on 4th when birds in from the sea at Sheringham (6), Blakeney Point (6), Holkham, Burnham Overy (3), Holme (2) and Snettisham (2). Subsequent concentrations 5 Breydon Oct, 4 Warham Nov, 6 Snettisham Nov and 4 Wolferton Dec.

# Nightjar

First noted in Brecks May 3rd, three weeks earlier than previous year. Coastal migrants at Holkham May 16th and 31st. The BTO/RSPB survey revealed a county total of a minimum of 223 churring males, an increase of almost 30% since the 1981 survey. Thetford Forest (Norfolk part) held 177 males, the balance being on other Breckland Heaths and to the NW of the county. The increase appears directly related to the increased amount of clearfell and young forestry plantation available. The latter apparently holding the greatest attraction with over 55% of the national population now nesting in young plantations. Careful management of forestry resources undoubtedly holds the key to the long-term success of this mystical nocturnal species (R. Hoblyn).

#### Swift

First Holme April 19th and Waxham on 21st. Impressive westerly movement May 13th when 4000+ passing Sheringham and 908 passing Holme, where 650 east May 29th.

Late bird Sheringham Oct 13th followed by an exceptional series of Nov birds at Holme on 25th and Overstrand (2) and East Runton on 26th.

### **Alpine Swift**

Kelling Quags, Cley and Holkham April 24th (MAG RGM MESR et al) and possibly the same Cromer on 25th (MPL).

## Kingfisher

A recent succession of mild winters has assisted this species in maintaining good levels in the county. Records received from over 60 localities, but breeding confirmed at only 5. Surely an under-estimate?



Bee-eater (A. S. Disley)

### Bee-eater

Blakeney May 31st (DGB AB) and East Harling June 17th (TD et al). As usual neither stayed any length of time.

# Hoopoe

Beeston Common April 25th to May 4th and Blakeney Point June 2nd to 6th; the only records.

### Wryneck

Spring: Winterton May 9th and Cley on 10th with a late bird at Ashwicken June 18th. *Autumn*: Very scarce: Winterton Aug 22nd to 25th and Sept 24th to 28th; Blakeney Point Aug 22nd to 29th and Sept 18th; Cromer Sept 10th and Holkham Meals Oct 4th.

### **Short-toed Lark**

Blakeney Point May 4th (AMS).

#### Woodlark

Spring migrants Horsey Feb 23rd; Muckleburgh Hill Feb 26th (followed by 6 March 7th decreasing to 2 next day with a single to the 10th); Winterton March 14th/15th and West Runton on 29th.

Birds had returned to Brecks from Feb 15th where continued increase in the breeding population. Forest Enterprise survey recorded 69 singing males in Norfolk (145 including Suffolk) of which 61 were in Thetford Forest with the remainder on heathland. As with Nightjar, the impressive increase has been directly related to the amount of clear areas (clearfell and young plantations up to 6 years of age). The current felling of the original stock planted in the 1920s and 1930s ensures a short-term surfeit of available territory. The long-term programme of felling well into the next century confirms there is now more than sufficient habitat available.

As usual few autumn coastal migrants recorded, but singles Cley Aug 8th and Oct 19th; also a colour-ringed bird East Hills, Wells, Oct 13th/14th which appeared at Burnham Overy Dunes on 14th was different to one at Holkham on 23rd. In Brecks impressive autumn numbers concentrated at Cockhat Corner near Mouse Hall in Stanford Battle Area where 44 Aug 14th, 18 Oct 5th, 12 Oct 9th and 6 Oct 16th. Latest in Brecks Oct 24th.

Colour ringing continues with processed pulli now totalling 338 since 1986. But wintering grounds remain a mystery.

#### **Shore Lark**

Although far from recapturing the large flocks of the early 1970s, 1992 was the best in recent memory. At the beginning of the year 9 remained in Holkham Bay, occasionally venturing to Burnham Overy dunes, decreasing to 8 April 9th, 7 April 10th, 5 April 12th, with the last 2 April 17th. Elsewhere in spring 1-4 between Feb 3rd and May 8th at Horsey, Waxham, East/West Runton, Blakeney Point and Holme; also 7 Paston/Bacton April 21st/22nd.

In autumn arrival commenced Oct 1st when one at Titchwell with 1-2 there Oct 2nd-18th, 5 from the 19th-22nd, 15 from 23rd-29th, 18 on 30th, 24 on 31st, 27 Nov 28th, peaking at 32 Dec 5th/6th with up to 28 to the years end. Elsewhere 1-5 from Oct 5th onwards at Breydon, Sheringham, Weybourne, Salthouse, Cley (also 9 Dec 19th), Blakeney Point (also 15 Oct 22nd), Holkham (also 9 Dec 24th and 10 on 26th), Brancaster and Holme. Additionally 20 at Snettisham Nov 8th.

### Sand Martin

First Cley March 7th with 6 Surlingham on 10th followed by a steady trickle of wide-spread migrants. A breeding survey of cliffs between Sheringham and Weybourne produced a total of 178 occupied burrows.

Autumn roosting at Cantley BF where 600 Aug 13th, 1000+ Aug 18th and 2000 Sept 14th. Large passage at Paston where 4500 east July 19th. Leucistic individual Cley July 25th and Kelling Quags July 30th.

#### Swallow

Spring arrival from April 5th at Holme. Impressive movement May 14th when passing south at Winterton and Horsey at 600/800 per hour throughout the day. Thousands also noted moving west over Cley June 4th.

Autumn roosting: 2000+ Cantley BF Aug 16th, 800 there Aug 28th and 500 Holme Broadwater Aug 29th with 300 still there Sept 19th. Late records: Holkham Oct 22nd, Hunstanton Oct 27th, Snettisham (2) Nov 14th and Holkham Dec 3rd.

### **Red-rumped Swallow**

Continuing the recent series of records a single west over Sheringham/Weybourne Oct 7th (KBS SCV).

### **House Martin**

Two very early migrants at King's Lynn March 21st. Main spring arrival commenced April 17th. Afternoon southerly movement at Horsey at 100 per hour May 14th.

Large Sept movement at Sheringham included 2300 Sept 6th, 12000 on 10th and 5500 on 11th. This movement also noted at Beeston Regis where 1800 Sept 15th and at

Further 1992 highlights:

Top: Ruppell's Warbler, Holme, September (R. Chittenden)

Centre: Cattle Egrets, Welney, May (C.R. Knights) Bottom: Little Egret, Breydon, December (N. Clayton)







Mediterranean Gulls – top left: Norwich Waterworks, March 1992 (N. Clayton); top right Overstrand 1989/90 (R. Tidman).

Bottom: Nesting for the first time in Norfolk 1992 (J. Reed)





The globe-spanners: Greater Sandplover, Blakeney harbour, August 1985 (J. Reed) Red-necked Stint, Cley, August 1992 (Painting by M. Elliott, courtesy B. Bishop)



l-made ad Suint (lay 2nd Anguri 195



Waxham where 3000 Sept 10th and 1400 Sept 23rd. Late birds at West Runton Nov 29th and Beeston Regis Dec 4th.

### Richard's Pipit

Total of 32+ coastal autumn migrants in two phases: Sept 18th to Oct 2nd and Oct 13th to Nov 8th. During these periods recorded at Burnham Norton, Burnham Overy dunes, Holme (total of 6) Horsey, Kelling Quags, Salthouse, Snettisham, West Runton and Weybourne. At Sheringham maximum of 4 Sept 19th and an autumn total of 9 birds.

A late example at Cley Dec 31st lingered into 1993.

# **Tawny Pipit**

A good year. In Spring at Weybourne April 26th, Blakeney Point 26th/27th and Holkham on 27th. Autumn total of 4: Blakeney Point Sept 18th and 26th, Salthouse Sept 26th/27th and Wells East Hills Sept 29th.



Olive-backed Pipit (C. Lansdell)

### Olive-backed Pipit

An excellent showing for this elusive Siberian wanderer. The county share of a national arrival was four: Holkham Meals Oct 4th-9th (VE MESR) with another Oct 15th (JBK et al), Stiffkey Oct 7th-12th (JBK RM) and Yarmouth cemetery Oct 13th (PRA PCN).

### Tree Pipit

Earliest arrival Holme March 28th where 16 May 4th and 15 on 13th. Noticeable movement Sept 28th/29th when present in Yarmouth cemetery (2), Hemsby, Winterton, Waxham, Happisburgh (3) and Walsey Hills. Late birds west at Sheringham Oct 2nd and 8th.

### ' Meadow Pipit

April movements included 1125 Holme on 5th, 620 on 18th and 1000 on 21st. Notable southerly passage Sept 28th/29th when 100+ over Yarmouth cemetery, 80+ Hemsby, 200+ Waxham, 60+ Sea Palling and 220 Happisburgh.

# Red-throated Pipit

A remarkable spring influx of 11+ during May: Breydon May 23rd (PRA); Happisburgh

### Transatlantic vagrants:

Top left: Black and White Warbler, How Hill, 1985 (P. Morris)

1Top right: Red-breasted Nuthatch, Holkham Meals. October 1989 to May 1990

(D.M. Cottridge)

Centre: Ring-billed Gull, Yarmouth, July 1992 onwards (E. Phillips)

Bottom: Ring-billed Gull, University Broad, Norwich 1991/92 (N. Clayton)

at least 3 from 14th to 19th including one in song on 15th (GMC PJH JRW *et al*); Weybourne 26th (TW); Cley 14th/15th (APB SJMG); Blakeney Point 14th, another on 25th/26th and 2 on 27th/28th (GMC SCJ); and Welney 21st (JBK).

Autumn: Weybourne in from sea Oct 3rd (KBS)

Note: The bird at Blakeney Point Sept 29th/30th 1991 was first identified by RMRJ.

### **Rock Pipit**

Scandinavian *littoralis* as follows: Lynn Point 26 Feb 23rd with 17 there March 8th; also 1-2 Feb/March at Breydon, Winterton, Waxham, Cley and Holkham Bay.

An early autumn Rock Pipit at Sheringham Sept 5th, but only sizeable autumn movements 40 west at Holme Oct 18th, 30 on 27th, and 25 on 31st. Inland Welney Oct 2nd.

### Water Pipit

Highest numbers as usual in first-winter period at Cley where 30 Jan 22nd, then 33 Feb 10th/25th, 14 March 2nd, 12 March 28th, 10 April 3rd and last 2 April 12th. Up to 8 Jan to April at Strumpshaw and 9 Wissington BF Feb 19th. Also 1-3 Cantley BF, Horsey, Hickling, Holkham, Burnham Norton, Titchwell, Lynn Point, Pentney GP and Welney.

During second-winter period 24 Cley Dec 31st – the only sizeable number. Elsewhere up to 4 Wissington BF and singles Breydon, Hickling, Horsey Mere, Wiveton, Burnham Norton and Titchwell.

### Yellow Wagtail

Early female at Welney March 16th. Main passage from April 16th, peaking end of April/early May when 70 Cley April 24th, 130 there April 26th, 300 Holme same day, 76 west Holme May 4th and 50 there on 5th.

Breeding detail from Holkham where 21 pairs nested and Welney where 31 pairs bred including 6 pairs in wheatfield.

Autumn roosts included 40+ Cantley BF Aug/Sept, 800+ Burgh Castle Aug 21st and 150 Ludham Aug 30th.

# Syke's Wagtail

Mutiple arrival of examples showing characters of Syke's during Yellow Wagtail peak passage at end of April when singles at Sheringham and Kelling 25th, Cley 26th and Burnham Norton on 28th. Another Welney May 14th.

At Holkham NNR 1-3 Syke's type males have been recorded annually since 1989 with single males occasionally over-summering. However all such records almost certainly relate to hybrids – probably locally bred – rather than rare wanderers from the steppes of central Asia and have little value as records of vagrants.

### Blue-headed Wagtail

Spring passage April 21st to May 19th with 1-4 at numerous coastal sites, peaking May 14th when 14+ Cley, 2+ Happisburgh and a single Beeston Regis.

A male was apparently holding territory at Heigham Holmes May 4th.

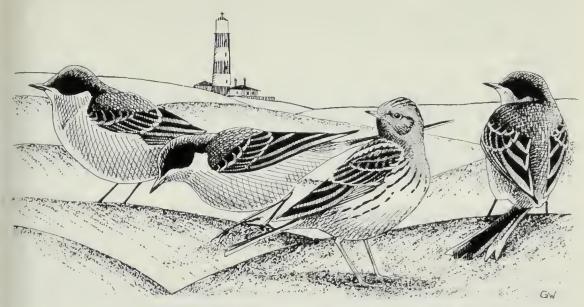
# **Grey-headed Wagtail**

In spring singles at Cley April 21st, Waxham April 30th and Happisburgh May 4th preceded a remarkable influx commencing May 14th when recorded at Horsey, Waxham, Happisburgh (4), West Runton (7), Cley (10) and Holkham. Exceptional numbers followed at Happisburgh where perhaps 25 to 30 May 15th, 15 on 16th/17th and 10+ on 18th. In addition 1-5 at numerous sites to end of May, then singles Blakeney Point June 7th and Wells East Hills on 10th.

### **Black-headed Wagtail**

A male at Cley May 14th exhibited features indicative of *feldegg* (MAG CB). However, the BOU remarks that the Fenno-Scandian Grey-headed race has a rare black-headed

variant closely resembling the Black-headed race of SE Europe (See *British Birds* 78: 176-183 and 515).

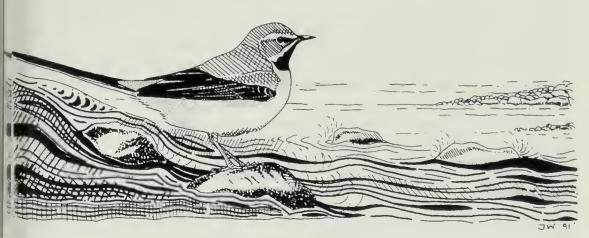


Grey-headed Wagtails and Red-throated Pipit Happisburgh (G. Wright)

### Grey Wagtail

Bred at Bintree, Buckenham, Corpusty, Ebridge, Great Ryburgh, Horstead, Lynford GP, Lyng, Marlingford, Narborough, Norwich (Duke Street), Santon Downham, Thetford (Melford Bridge) and West Acre (2 pairs). Summered at 4 other sites where no proof of breeding.

Usual sprinkling of autumn passage migrants, but only recorded wintering at Cley sewage farm and King's Lynn town centre.



Grey Wagtail (J. Wright)

### | Pied Wagtail

Notable westerly movements at Sheringham during March including 135 on 18th, 110 on 19th and 90 on 20th.

Autumn roosting sites: Cantley BF 40+ July 23rd, 80+ Aug 10th, 250+ Aug 18th, 180 Aug 28th and 450 Sept 14th; Strumpshaw 100 Nov 7th; Whitlingham 258 Aug 21st

and 262 Sept 7th and Surlingham Church Marsh 120 Nov.

### White Wagtail

Only spring concentrations: 7 at Horsey and 10 at Waxham March 30th, 7 at Cley April 18th and 14 at Holkham April 26th.

### Waxwing

A disappointing showing by recent standards. Up to 19 Snettisham through Jan. Elsewhere 1-6 to mid-Jan Catfield, Dersingham, Norwich, Ranworth, Rollesby, Sutton and Thetford. During Feb 3-4 at various localities in Norwich with occasional sightings in March ending with 4 at Eaton April 15th-23rd.

During second-winter period 3 Titchwell Nov 29th and singles in Norwich Dec 7th and 19th and at Ludham Dec 29th were the only records.

#### Wren

At Lessingham 6 roosting in an old Magpie's nest Nov.

#### Robin

Only autumn concentration 80 Holme Oct 5th.

### **Thrush Nightingale**

Salthouse Sept 26th (RCA MJS et al); the first in autumn and the fifth county record.

### **Nightingale**

Spring arrival from April 23rd at Holme. Autumn exodus as usual almost undetected apart from one at Wells Oct 10th/11th.

#### Bluethroat

Single spring record of a male of the red-spotted form found dead at Hunstanton May 26th. On the unlikely date of July 1st a red-spotted male discovered at Holme where it remained until Aug 13th. During its stay the bird could be found skulking in sea buckthorn where it underwent a complete moult. One autumn record; Snettisham Oct 4th/5th.

#### **Black Redstart**

A single at Heacham/Hunstanton in first-winter period. Spring migrants widespread with ones/twos from March 20th to June 6th at numerous sites. Inland at Welney May 14th – the first record there for a decade. One showing characters of the race *atterimus* (from Iberia/Morocco) Burnham Overy Dunes June 6th (SB JDG JEG PJM).

Breeding season records from Yarmouth (where 2 pairs bred, at least one successfully and another male held territory), King's Lynn docks (2 males singing in June).

In autumn migrants initially scarce. Earliest at Winterton, Eccles and Blakeney Point Oct 3rd with another at Burnham Overy next day. No further reports until Oct 27th: Yarmouth. Then Hunstanton Nov 1st, Wells on 8th when 3 in Yarmouth cemetery where singles Nov 9th, 11th and 17th. Nearby 2 at Yarmouth racecourse Nov 11th with singles there on 13th/14th. At this time 2 at Walcott and singles at Paston, Wells and Holme. Finally 3 Brancaster GC Nov 27th, one remaining to Dec 17th. Additional Dec records presumably relating to over-wintering birds at Snettisham/Heacham/Hunstanton where at least 2 present from 5th and one on 20th.

#### Redstart

Spring records from April 12th at Weybournc. Good breeding season in Stanford Battle Area where 25 to 30 pairs bred. Elsewhere males singing during May at East Wretham, Sheringham Park, Swanton Novers and Weybourne.

Autumn return from Aug 8th Blakeney Point peaking Sept 17th-19th when maximum counts 12 Mundesley, 30 Blakeney Point and 17 Holme. Latest Oct 12th Holkham Meals.

#### Whinchat

Spring passage April 21st to May 18th with maximum 12 Holkham May 13th. Pair bred Horsey Gap with 5 males on territory in Stanford Battle Area at end of May.

Autumn passage Aug 8th to late Sept with peak Sept 17th-19th when maximum counts 22 Sheringham, 50 Blakeney Point and 28 Holme. Late birds at Waxham Oct 26th/27th and Holme Nov 8th.

### Stonechat

Winter records from Cantley (2), Cley (2) and Titchwell where one frequented a reedbed until March 3rd when 3 present. Little evidence of spring passage apart from 3 Holkham and 4 Holme March 4th and 3 Titchwell on 28th.

Breeding pairs at Winterton, Horsey Gap, Waxham with an additional pair collecting nesting material at Weybourne where present April 7th to May 9th but no evidence of breeding.

Autumn passage Oct 9th to late Nov with ones/twos and once 4 at mainly coastal sites. End of year records in Fcns at Welney Nov 5th, in Brecks at Grimes Graves (2) on 21st, at Holme (2) Dec 20th and Colney GP on 28th into 1993.

### Siberian Stonechat

Unique spring arrival when males of races *mauralstejnegeri* at Burnham Norton May 6th (VE MESR), Holme June 7th-9th (GFH PJH AMS) and Cromer June 8th (MPL TW).

Also 4 autumn birds: Paston Oct 3rd (MF), Blakeney Point on 4th (GED), Salthouse Heath on 7th to 9th and Salthouse/Kelling Quags on 13th (AW).

### Wheatear

First 2 returned to Brecks March 6th when a single at Colby. Main spring arrival April 24th to 28th with maximum counts of 30 Bacton, 65 Sheringham, 70 Salthouse, 30 Cley, 50 Blakeney Point, 65 Holkham NNR and 70 Holme. Only record of Greenland birds 8 Winterton May 2nd although 60 Blakeney Point May 4th may relate to this race.

Only sizeable autumn counts Sept 18th/19th when 20 Mundesley and 35 Blakeney Point. Very late birds Blakeney Freshes Oct 24th and Snettisham Nov 1st.

### **Ring Ouzel**

An early bird at Yarmouth March 17th. A good spring arrival from April 9th, peaking late April when 8 Waxham/Horsey, 8 Weybourne, 6 Cley, 6 Thornham, 18 Holme GC and 15 Holme Duncs; latest June 16th.

Light autumn passage of ones, twos and threes from Sept 28th to Nov 4th.

#### Blackbird

Marked influx mid-Nov when thousands along coast; commenced on 8th when 115 Blakeney Point followed by 2700 Sheringham next day. Peak arrival on 15th including 100+ Yarmouth cemetery and 200+ Yarmouth Bure Park, 100+ Horsey/Waxham, 500+ Sheringham, 200+ Scolt Head, 1000 Holkham and 1270 Holme.

#### Fieldfare

Last in spring Winterton May 30th with a late Brecks bird June 2nd. First to return: Blakeney Point Aug 19th. Only sizeable flocks: 500 Shelfanger Jan 11th. 2000 Shouldham Thorpe on 12th, 1000 Holme on 25th and 1000 East Harling March 27th.

### Song Thrush

Marked arrival off sea Sept 28th included 50+ Yarmouth, 30+ Hemsby, 250 Waxham, 140 Sea Palling and 240 Sheringham.

#### Redwing

Large-scale spring exodus March 9th and 16th-20th with many flocks moving NE dur-

ing day and many heard at night. First returning birds Blakeney Point Sept 18th. Main arrival from Oct 22nd when 500 Sheringham and 200 Blakeney Point.

#### Mistle Thrush

Post-breeding flocks of 75 Blicking Park, 50 Burnham Overy dunes, 80 Holkham Park and 40 Sparham.

#### Cetti's Warbler

Yare Valley stronghold held 19 singing males between Surlingham and Cantley. Elsewhere in Broads single singing males at Barton, Catfield Fen, Cockshoot Dam, Heigham Sounds, Hickling, How Hill, Ranworth, Sharp Street and Wroxham.

North coast: Titchwell singing Sept 19th to Oct 2nd and same, or another, Oct 26th.

### Grasshopper Warbler

Earliest Cley April 9th. A skulking migrant Blakeney Point Oct 4th.



Grasshopper Warbler (M. L. Cornish)

### Savi's Warbler

Singing males: North: Cley May 21st/22nd (at night only) and Holkham Meals May 21st to June 8th. Broads: Catfield, Hickling and Upton (2).

#### Sedge Warbler

Earliest Hickling April 9th. At least 70+ breeding pairs at Cley and 51 males singing at Welney late May.

#### Marsh Warbler

Singing males at Weybourne May 21st (MPT), Strumpshaw June 9th-14th (RSPB), Salthouse June 9th (CL *et al*), Holme June 10th (WJB *et al*) and Cley June 11th (MAG *et al*). Only 10 previous county records.

#### Reed Warbler

Earliest Cley April 22nd where subsequently 77+ breeding pairs. At Welney 56 singing males late May. Latest Holme Oct 10th.

#### **Icterine Warbler**

An unprecedented number of late spring migrants: Blakeney Point May 14th, 3 May

27th/28th, 2 May 30th and one June 7th/8th; Waxham and Holkham May 28th; Winterton and Hickling May 30th and Titchwell June 6th/7th and 11th.

During autumn Cley Aug 8th, Titchwell Aug 11th, Blakeney Point Aug 20th, Sept 18th and 28th, Wells (East Hills) Sept 21st and Sheringham Sept 26th/27th.

#### Sardinian Warbler

Weybourne: a female trapped at dusk May 14th (MTP) and released at nearby Muckleburgh Hill at dawn next day remained until the evening. Only the fourth county record and remarkably the third in this area which had hosted males in 1980 and 1991.

### | Ruppell's Warbler

Holme: a female/immature Aug 31st to Sept 4th (GFH RGM *et al*). The first county and first mainland record. See page 436.

#### Barred Warbler

A typical scattering of autumn migrants; Blakeney Point Aug 19th and Sept 5th, Wells (East Hills) Sept 4th, Holkham Meals Sept 19th/20th, Winterton Sept 23rd-26th and Holme (trapped) Oct 30th.

#### Lesser Whitethroat

Holme: Oct 7th/8th showing characteristics of eastern race *blythii* (GFH *et al*). Latest Holkham Meals Oct 29th.

### **Whitethroat**

An unusual winter record in a Scratby garden Feb 19th-28th (DM *et al*). Caught, ringed and photographed. Latest Holme Oct 13th.

# Garden Warbler

Late migrants at Sheringham Oct 27th, Holme on 30th and Norwich Nov 28th.

### **F** Blackcap

In first Winter period (Jan/Feb) records from Coston, Diss (3), Eaton, Filby, Holkham Hall, Holme, Ringstead and Thorpe St. Andrew.

During Dec many records, often in gardens and remaining well into 1993: Barnham Broom, Beeston Regis, Blakeney, Brancaster Staithe (2), Coltishall (3), Coston, Cromer, Flordon (3), Frettenham, Garboldisham (5), Holkham Meals (4), Holme (4), Ludham, Martham, North Walsham (3), Norwich (Eaton) (2), Olney Street, Pull's Ferry, Queens Road (2), Riverside and Thorpe St. Andrew (4), Reepham, Salhouse (2), Sheringham (2), Thornham, Titchwell, West Beckham and West Runton (2).

### (Greenish Warbler

Males, both occasionally in song, Blakeney Point May 30th (GED AMS et al) and Waxham on 31st (TRB TCN et al). The first county spring records.

Also a typical early autumn migrant Blakeney Point Sept 5th-7th (MIE AMS et al).

#### PPallas's Warbler

Holkham Meals 2 Oct 10th to 12th (SR et al) one remaining until 14th (VE).

#### Yellow-browed Warbler

Autumn coastal migrants as follows: Yarmouth Oct 7th-12th and Oct 23rd; Caister Oct 9th; Hemsby Sept 27th; Winterton Oct 25th; Happisburgh Oct 10th/11th; Cromer Sept 29th and Oct 17th/18th; Sheringham Oct 13th-19th; Cley Sept 22nd and Oct 12th/13th; Stiffkey Oct 12th, Wells (East Hills) Sept 28th/29th and Oct 4th; Holkham Meals Sept 23rd, 3 Sept 28th, 4 Sept 29th, 2 Oct 3rd, 3 Oct 4th, singles Oct 6th and 10th, 3 Oct 11th, 2 Oct 12th-16th with a new arrival on 15th, one Oct 17th/18th, 2 Oct 20th and singles Oct 21st and 25th; Holme Sept 29th, Oct 3rd and Oct 8th.

Inland: Singles at Docking Oct 13th (SGB VE) and North Walsham Hospital Oct 19th (GW).

#### Radde's Warbler

1991 additions: Holkham Meals Oct 11th (SCM MWR) and the bird at this locality Oct 27th (see 1991 NBR p. 321) was first identified Oct 26th (MESR), staying until the 28th.

Correction: The Stiffkey record Oct 10th 1991 has been rejected by British Birds Rarities Committee.

#### Wood Warbler

Coastal migrants: Titchwell May 5th, Paston May 13th, Yarmouth May 14th/15th, Holme May 25th and 27th-28th and Holkham Meals June 5th/6th.

One singing briefly How Hill May 6th. Elsewhere singing males at Beeston Common, Kelling (2), Lyng, Sandringham, Sandringham Park, West Acre and West Runton, but no evidence of breeding.

Autumn migrants at Holkham Meals where singles Aug 18th/19th, Aug 28th, Sept 28th/29th and Oct 4th/5th and Holme Sept 28th.

#### Chiffchaff

In early part of year at Winterton Jan 5th and 10th, Walcott Jan 7th, Sheringham Jan 9th and 30th, Cockshoot Broad Jan 15th, Cley Jan 28th and Feb 23rd, North Walsham 6 Feb 7th including one *tristis* and Holt Feb 18th.

Autumn *tristis* type birds at Holkham Meals Oct 10th-13th and Nov 11th, Yarmouth Oct 14th and Sheringham Nov 15th/16th. Dec records from Beeston Regis, Breydon, Cantley BF, Colney GP, Holkham Meals (up to 4), Holme, Surlingham (2), Titchwell, Wiveton and Yarmouth.

#### Willow Warbler

In common with many other localities in southern England very scarce at Sheringham during early autumn: only 3 migrants July 18th to Aug 15th when normally considerable passage. Very late migrants Holkham Meals Nov 11th and Yarmouth Nov 11th-15th.

#### Goldcrest

A major influx commenced in the afternoon of Oct 3rd with 'thousands' at Holkham Meals and 400 at Holme next day; many remaining (or further arrivals?) for several days.

#### **Firecrest**

Following a singing male near East Harling Feb 5th and one at Holkham Meals Feb 8th, small spring passage noted on North/East coasts March 17th to May 29th with total of 18 migrants – all singles apart from 2 Holkham Meals April 8th/9th.

At least 18 autumn migrants Sept 26th to Nov 15th including one ringed inland at Lopham Middle Fen and maximum of 3 at Yarmouth Oct 6th. During Dec singles Stanford on 25th and Felbrigg 28th to 31st.

# **Spotted Flycatcher**

Earliest Holme May 7th, but generally late arrival and several observers noted absence of breeding pairs at regular sites. Last recorded Caister and Yarmouth Oct 10th.

# Red-breasted Flycatcher

Usual scatter of autumn migrants: Blakeney Point Sept 18th; Holkham Meals 3 Oct 3rd-7th and singly Oct 11th; Yarmouth cemetery Oct 4th and Happisburgh Oct 10th/11th (taken by a Sparrowhawk on latter date).

#### Pied Flycatcher

Following singles Lopham Middle Fen April 21st and Scolt Head on 29th, May occurrences as follows: Coston 4th, Weleney 11th, Cley 13th, 2 Holme 14th, Yarmouth cemetery 15th and 28th with 2 on 30th and one on 31st, Blakeney Point and Kelling (males singing) 16th, Holkham Meals 19th, 3 Holme 28th one remaining until 30th and Wells (East Hills) also 30th.

Autumn passage Aug 8th-Oct 10th with numerous records of up to 5 birds apart from 35 Sheringham Sept 17th with a noticeable fall on 18th when 15 Yarmouth cemetery, 30 Sheringham (mainly new arrivals), 40 Blakeney Point, 33 Holkham Meals and 35 Holme.

### **Bearded Tit**

The RSPB organised an enquiry during 1992 to assess the number of pairs of breeding Bearded Tits. Norfolk details are as follows: *Broads*: Blackfleet one pair, Cantley BF 10-15, Heigham Sounds 8+, Hickling & Whiteslea 21+, Horsey 3, Martham 8 and Strumpshaw 6-7.

North coast: Burnham Norton 3-4, Burnham Overy 4, Cley 9-11, Salthouse 2 and Titchwell 18-20.

Breeding was confirmed at 44 British sites, but only 12 sites held 10 or more pairs. Top sites were Stodmarsh/Westbere in Kent, Hickling/Heigham Sounds, Leighton Moss and Blacktoft Sands. Norfolk had most pairs and breeding was confirmed in a further 8 English counties.

Most places had a rather warm, sunny, late spring and early summer with just a few showery spells. As a consequence, breeding Bearded Tits did well. Fledged broods of 4-5 were commonly reported at the end of May and substantial flocks of juveniles had formed at many sites by late June. Most pairs appeared to rear 2 broods successfully and many were attempting a third in July. At least 3000 birds have been present altogether in 1 British reedbeds by the end of the season. In late summer birds were caught and ringed and given site specific colour rings at seven sites including Cley.

It is interesting to note that in 1966 only 9% of known pairs bred outside Norfolk and Suffolk. But this figure had increased to 40% by 1974 and now stands at 59%. This implies serious decreases in East Anglia, particularly in the original Broads stronghold. However, the species' wider national distribution now leaves it far less vulnerable than formerly to threats from local climate and sea flooding. (RSPB).

### Long-tailed Tit

Largest numbers: Flocks of 50 Whitlingham Aug 2nd, Sheringham Oct 13th and Felbrigg Great Wood Dec 19th; also 42 Beeston Regis Heath Dec 13th. Blakeney Point 7 Oct 18th.

### Willow Tit

All records for 1993 are requested in view of drastic decline in several areas during past few years. Recorded in 1992 at 25 localities.

#### (Golden Oriole

Spring migrants Holme May 10th, Cley May 12th, Strumpshaw May 20th, Titchwell June 2nd and Ridlington on 3rd/4th.

Eight breeding pairs in the county with additional birds present at a further 4 sites. At Welney 2 July 26th, 3 next day and another Aug 17th. At Holme Aug 13th.

### Red-backed Shrike

Following one Salthouse Heath May 15th, total of 19 migrants May 26th-June 26th recorded at Blakeney Point, Burnham Overy Dunes, Grimston Heath, Holme, Horsey,

Kelling Quags, Massingham Heath, Welney, Weybourne and Winterton.

Autumn: Ludham Aug 26th-30th, Hunstanton Sept 18th, Blakeney Point Sept 18th and Oct 12th/13th, Winterton Sept 18th-28th, Sheringham Sept 19th and Blakeney fresh-marshes Sept 29th and Oct 22nd-25th.

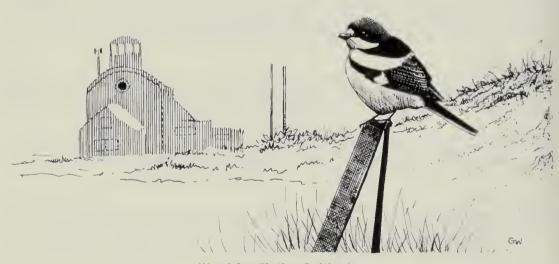


Red-Backed Shrike (P. Jones)

### **Great Grey Shrike**

In first-winter period Reepham Jan 6th/7th and 24th, Hickling Jan 13th, Stanford March 27th and Bridgham Heath March 24th-April 5th.

In autumn Holme Sept 28th-30th. Oct records as follows: Burnham Overy dunes and Cley 4th, Holkham Meals 5th, Blakeney fresh-marshes 8th/9th, Waxham 8th-11th, Winterton and Snettisham 13th, Horsey 17th and Salthouse Heath 24th/25th. Subsequently Salthouse/Kelling Quags Nov 1st, Santon Downham (the former Redbacked Shrike enclosure) Nov 27th, Northrepps Dec 9th and West Acre Dec 20th onwards.



Woodchat Shrike (G. Wright)

#### Woodchat Shrike

Blakeney Point: a well watched female May 15th-17th (many observers).

#### **Magpie**

At Roydon Common roost 100 in Jan and 150 in Dec. Elsewhere feeding flock of 50 at Saddlebow March 14th and 57 flying to roost New Costessey Oct 30th.

### (Carrion Crow

Roydon Common roost: 150 Dec 3rd.

#### Hooded Crow

Ones and twos (and once 3: Cley April 22nd) at coastal/Broads localities (except singles in Fens at Denver Sluice and Ten-mile Bank) up to May 2nd and from Oct 11th.

### • Starling

Largest westerly passage along North coast Oct 27th when 21,000 passing Sheringham and 33,000 at Holme.

### 1Tree Sparrow

A massive dccline and only a single small breeding colony reported: 4 pairs at Welney. All breeding observations of this once widespread bird are needed. Largest winter flocks: 40 Sea Palling and at Docking and 50 at Fring.

### **H**Brambling

From early Jan most impressive numbers in uncut linseed at Wereham attaining a peak of 2250 Feb 2nd. Elsewhere during Feb; 300 Cockley Cley, 180 Santon Warren Farm and 200 Stoke Ferry. Still 380 Lynford Church April 6th and latest Hickling May 18th.

Present in autumn from Sept 16th with 100+ in Yarmouth cemetery Oct 14th. During 'Nov/Dec widespread in Norwich including 100 Old Palace Road, 150 Earlham Park, 80 Earlham Road and 110 at UEA. At year-end over 2000 at Thetford.

### Serin

(Cley May 4th (MTE ETM).

Additional 1991: Sheringham May 11th (SCV).

### Goldfinch

Interesting westerly movement at Gore Point during early May: 200 3rd, 278 4th and 147 on 10th. Largest flocks: up to 350 Wereham on uncut linseed Jan/Feb and 250 West Runton Sept 19th.

#### Siskin

During first-winter period largest groups: 50 Wroxham Broad, 140 Ranworth, 80 Thetford Warren, 200 Narborough and 50 West Acre. Breeding records from Brecks and Holkham Meals.

Nov flocks in Brecks included 50 Stanford, 80 West Acre, 100 Lynford and 120 Thetford. At year-end 60 Gunton Park and 100 Blickling.

#### Linnet

Largest flocks: Gooderstone 300 Feb 15th; Gore Point 750 Apr 18th; 750 Apr 21st and 400 Sept 26th.

#### Twite

Extreme dates April 10th and Sept 29th. Largest numbers: Lynn Point (80 March), Holme (77 Feb and 100 Nov), Titchwell (80 Jan-March and 200 Oct onwards), Brancaster harbour (150 Feb) and Holkham Bay (250 Jan/Feb and 280 Nov onwards). Inland 33 along Bure at Mautby Jan 4th.

#### Mealy Redpoll

The year opened with 7 at Titchwell Jan 11th and 9 Blakeney Point next day followed by 28 West Runton on 27th and 1-2 East Harling on 29th/30th. Up to 30 Bodham Feb

9th-22nd and up to 20 at West Runton March 9th-April 2nd. Latest Sheringham April 11th.

### **Arctic Redpoll**

Gunton Park Feb 17th-19th (AB).

1991: Sandringham Jan 17th (MESR). 1976: Holkham Meals April 1st (JBK).

#### Crossbill

In contrast to the previous two invasion years, no irruption recorded. Observed at many Brecks localities (where breeding proved at 5 sites) and largest parties as follows: 25 Santon Downham March 3rd, 22 Lynford July 15th and 20 Mundford Oct 24th.

In North Norfolk at Holkham Meals up to 8 (and once 20) each month until June and again Oct/Nov; one pair bred. A number of sightings at Sheringham including 14 Jan 19th; also 12 Holme Oct 19th.

#### Scarlet Rosefinch

A record spring: West Runton May 30th (APB MY-P), Salthouse June 3rd (TCD PJH SH), Blakeney Point 2 June 5th/6th (TA AMS MY-P), Holkham Meals June 8th (MESR) and Holme May 25th/26th (MGC), another May 30th (NL *et al*) and 2 June 6th-8th (WB PRC NP).

#### Hawfinch

Bred at Costessey, Hilborough and Mundford. Maximum numbers at traditional sites: Costessey 5 Jan, Holkham Park 5 March/April and Lynford 7 Jan. No information from TF 70 previously regular site.

Elsewhere recorded at Burnham Overy, Cockley Cley, Ditchingham, East Wretham, Holt, Norwich (Earlham Road cemetery), Santon Downham, Shotesham and Thetford Nunnery.



Lark Sparrow (I. Lewington)

# Lark Sparrow

1991: Waxham May 15th-17th (BWJ et al).

# **Lapland Bunting**

During both winter periods small numbers at many coastal localities. Largest groups: Breydon/Berney 30 Jan, 24 Nov and 21 Dec; Sheringham 20 Nov; Wells 18 Dec and Holme 16 Nov.

Latest in spring Cley (singing) April 24th-26th. First returning birds Burnham Overy Sept 17th.

### Snow Bunting

Last in spring Winterton April 28th. Largest Nov/Dec flocks: Breydon 40, Blakeney Point 100, Stiffkey Freshes 50, Holkham Bay 200, Titchwell 130, Scolt 90, Holme 100 and Snettisham 70. During the last three years the NW Norfolk Ringing Group has ringed a total of some 350 Snow Buntings, two races are known to occur in the county: the darker Icelandic race *insulae* and the very pale Scandinavian *nivalis*. During the first winter programme the ratio of birds caught was 50:50 which was a surprise as most flocks in Britain are considered 80-95% Icelandic. However, since then 80-85% of birds caught at Hunstanton and Titchwell have been Icelandic in origin. (Norfolk Bird Club/P. Atkinson).

#### Yellowhammer

Highest flocks: Hickling 150 Jan and Syderstone 250 Dec.

### (Ortolan Bunting

Yarmouth May 10th-13th (PRA KRD JO *et al*); Sheringham 2 Sept 17th (KBS) and another on 18th (DHS KBS) and Blakeney Point Sept 18th (TCD).

### Yellow-breasted Bunting

Holme Sept 20th/21st (GFH et al). Fourth county record and the first since 1913.

#### (Corn Bunting

Singing birds in breeding season at Brancaster, Boughton Fen, Breydon, Choseley, Downham Market, Feltwell, Fincham, Halvergate Marshes, Happisburgh, Hemsby, North Wootton, Paston, Pentney, Sheringham, Somerton, Titchwell, Watlington, Welney to Ten-mile Bank (10+), Wereham, West Acre, West Runton, Wretton and Winterton.

Notable winter flocks: Denver Sluice 58 Feb 19th, Docking/Sedgeford 120 Jan 11th, Horsey to W. Somerton 30+ Feb 17th, Magdalen 48 Dec 28th, Stoke Ferry 37 Feb 11th, Ten-mile Bank 40 Feb 26th, 130 Nov 28th and 105 Dec 5th and Wissington BF 50 roosting March 17th.



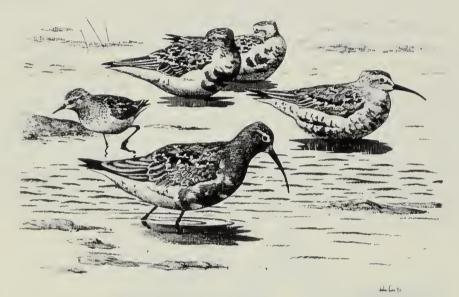
Hobby and Golden Orioles (N. Arlott)

The following, not mentioned in the Classified Notes, were recorded in 1992 (breeding species in italics): Greylag Goose, Canada Goose, Kestrel, Red-legged Partridge, Pheasant, Moorhen, Coot, Great Black-backed Gull, Stock Dove, Woodpigeon, Tawny Owl, Green Woodpecker, Great Spotted Woodpecker, Lesser Spotted Woodpecker, Skylark, Dunnock, Marsh Tit, Coal Tit, Blue Tit, Great Tit, Nuthatch, Treecreeper, Jay, Jackdaw, Rook, House Sparrow, Chaffinch, Greenfinch, Bullfinch and Reed Bunting.

# Check-list of the Birds of Norfolk

Compiled/researched by P. R. Allard, D. A. Dorling, M. Fiszer, A. Hale, J. B. Kemp & M. J. Seago

The last review of the list of the County's avifauna was published in the 1985 *Norfolk Bird Report*. It then contained 387 full species excluding two category D species (as defined below): White Pelican and Red-headed Bunting. At the 31st December 1992 the present list totals 396 full species, an increase of 9 although since the 1985 update five species have been deleted. These are Harlequin Duck (Cley 5 February 19th 1947), Lady Amherst's Pheasant (several sightings since 1973), Short-billed Dowitcher (Cley/Salthouse 5th October-3rd November 1957), Great Black-headed Gull (Cromer 2nd/9th March 1932) and Blyth's Reed Warbler (Dudgeon Light Vessel 20th/21st October 1912).



Red-necked Stint with Curlew Sandpipers Cley 1992 (J. Cox)

Species on the National List are decided by the Records Committee of the British Ornithologists' Union and are grouped into the four categories defined below; those occurring in Category D do not form part of the main list.

- Category A: Species which have been recorded in an apparently wild state in Britain or Ireland at least once since 1st January 1958.
- Category B: Species which were recorded in an apparently wild state in Britain or Ireland at least once up to 31st December 1957, but have not been recorded subsequently.
- Category C: Species which, although originally introduced by man, have now established a regular feral breeding stock which apparently maintains itself without recourse to further introduction.
- Category D: Species which would otherwise appear in Categories A or B except that:

  (D1) there is reasonable doubt that they have ever occurred in a wild state, or
  - (D2) they have certainly arrived with a combination of ship and human assistance, including provision of food and shelter, or

(D3) they have only ever been found dead on the tide line; also

(D4) species that would otherwise appear in Category C except that their feral populations may or may not be self-supporting.

In the list that follows the Norfolk records under categories A, B and C are in the main list whilst those that fall into D are included in a supplementary list at the end. Also included in this section are off-shore observations which do not form part of the main list. The three Albatross sp. sightings are accepted to Norfolk's records and shown in the main list, but as they were not specifically identified, are not included in the numerical total.

The County total reached 300 species in 1892 when Great Shearwater was added. The magical milestone of 400 full species may well be achieved in 1993 and if the 1993 records of Oriental Pratincole at Gimingham, Desert Warbler on Blakeney Point and Pacific Swift at Cley are accepted by the appropriate records committees.

There are a number of other potential additions undergoing review including Falcated Duck (Welney 9th/27th December 1986 and 20th August/8th October 1987, Cley 7th/15th May 1988 and 11th/28th May 1989); Northern Mocking Bird (Blakeney Point 20th/28th August 1971); Soft-plumaged Petrel (Cley 26th March 1992) and Swinhoe's/Dark-rumped Petrel (Cley 25th September 1990).

In the following list a status summary is given under each species and in the case of vagrants an indication of the probable area of origin together with the number (in brackets) of accepted individual records. Where this is five or less, the year and locality are also given. The term "passage migrant" implies appearances in both spring and autumn; but where one passage is stronger than the other this is indicated.

As in the 1992 Classified Notes the order follows the sixth edition of the Checklist of Birds of Britain and Ireland published by BOU in 1992. English names which are most familiar have been retained.

Red-throated Diver

Gavia stellata

Passage migrant and winter visitor in increasing numbers; rare in summer.

Black-throated Diver Gavia arctica

Winter visitor and passage migrant usually in small numbers but exceptional autumn movement in 1989.

Great Northern Diver Gavia immer

Winter visitor and passage migrant in small numbers, exceptional in summer.

White-billed Diver Gavia adamsii

Vagrant from Arctic Russia eastwards (3): Blakeney Point 1985 and 1986, Cley 1986. **Pied-billed Grebe** *Podilymbus podiceps* 

Vagrant from North America (1): Welney Washes 1968.

Little Grebe Tachybaptus ruficollis

Resident breeder, moving to Broads and sheltered coastal waters in winter, and passage migrant.

Great Crested Grebe Podiceps cristatus

Breeds on most suitable waters. Majority move in autumn to coastal waters; the Wash and occasionally Breydon holding the largest concentrations.

Red-necked Grebe

Podiceps grisegena

Passage migrant particularly in autumn and a winter visitor especially following severe conditions.

Slavonian Grebe Podiceps auritus

Winter visitor and passage migrant particularly in autumn with Holkham Bay usually

attracting the largest numbers.

Black-necked Grebe

Podiceps nigricollis

Passage migrant and winter visitor; scarcest of the regular grebes. Summer plumaged examples most years.

Albatross Sp.

Diomedea sp.

Unidentified vagrant albatrosses from the southern oceans (4): Cley 1977, Happisburgh 1986 and Cley and Cromer/Sheringham/Salthouse 1987.

Fulmar

Fulmaris glacialis

Breeding birds at colonies almost throughout the year. Also impressive coasting and storm movements. Darker coloured blue phase examples almost annual in very small numbers.

Black-capped Petrel

Pterodroma liasistata

Vagrant from the West Indies (1): South Acre (caught) 1850.

Cory's Shearwater

Calonectris diomedea

Vagrant from the Mediterranean/southern North Atlantic; occurs almost annually in autumn.

**Great Shearwater** 

Puffinus gravis

Autumn vagrant from the South Atlantic (13).

Sooty Shearwater

Puffinus griseus

Autumn passage migrant, occasionally in large numbers during northerly gales; rare in spring.

Manx Shearwater

Puffinus puffinus

Passage migrant; the largest numbers are observed during autumn storms, when examples grounded far inland suggest overland passage to the North Sca.

Mediterranean Shearwater

Puffinus yelkouar

Annual in very small numbers, mainly during early autumn.

Little Shearwater

Puffinus assimilis

Spring vagrant from North Atlantic Islands (3): Corpses at Earsham 1858 and on tideline at Blakeney Point 1929 & 1960.

Storm Petrel

Hydrobates pelagicus

An almost annual late autumn visitor in very small numbers, often during stormy weather.

Leach's Storm-Petrel

Oceanodroma leucorhoa

An autumn gale blown visitor to coastal waters; rarely in spring. An exceptional passage occurred in September 1989.

Gannet

Sula bassana

A passage migrant; most abundant during autumn storms.

Cormorant

Phalacrocorax carbo

Passage migrant and winter visitor in increasing numbers; also non-breeders throughout the summer. Nesting partially successful 1988 to 1990. The continental race *sinensis* (ringed in Holland) identified in spring.

Shag

Plialacrocorax aristotelis

A visitor to tidal waters in small numbers, usually during autumn and winter. "Wrecked" birds appear inland periodically with greatest influx in 1988.

Bittern

Botaurus stellaris

County breeding population (which peaked 1954) reduced to a dangerously low level in Broads. Situation less critical along North Coast. Continues to be a winter visitor in small numbers.

Little Bittern

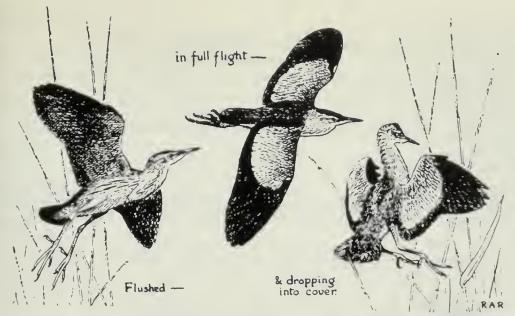
Ixobrychus minutus

Vagrant from the Continent (44).

Night Heron

Nycticorax nycticorax

Vagrant from the Continent. A recently established free-flying colony at Great Witchingham Wildlife Park causes confusion.



Little Bittern Cley 1952 (R.A. Richardson)

Squaeco Heron

Ardeola ralloides

Vagrant from southern Europe (9). None recorded since 1966.

Cattle Egret

Bubulcus ibis

Vagrant from southern Europe (15). The total includes 5 at Welney and Downham Market in 1992.

Little Egret

Egretta garzetta

Vagrant added to the county list in 1952. Now almost annual in appearance with birds increasingly remaining in one area for long periods.



Little Egret Cley 1952 (R. A. Richardson)

**Great White Egret** 

Egretta alba

Vagrant from the Continent (6), added to the county list – Hickling 1979.

**Grey Heron** 

Ardea cinerea

A resident and autumn immigrant from Scandinavia. Marked decline in numbers occupying Broadland heronries.

Purple Heron

Ardea purpurea

Almost annual spring and autumn vagrant from the Continent in very small numbers.

Black Stork

Ciconia nigra

Vagrant from Europe (17).

White Stork

Ciconia ciconia

Vagrant from the Continent appearing most years. An influx in 1967 resulted in 2 remaining at Halvergate until the year-end when one was killed; the survivor lingered until May 1968.



Glossy Ibis Hickling 1945 (N. Arlott)

**Glossy Ibis** 

Plegadis falcinellus

Vagrant from south-east Europe. Formerly more frequent; only 9 examples during the past four decades.

Spoonbill

Platalea leucorodia

Non-breeding summer visitor and passage migrant from Netherlands. A winter rarity.

Mute Swan

Cygnus olor

Resident. The Ouse Washes contain the most important wintering concentration.

Bewick's Swan

Cygnus columbianus

Passage migrant and winter visitor from Yamal Peninsular and the tundras bordering the Kara Sea. Internationally important numbers on the Ouse Washes and Breydon/Berney marshes.

Whooper Swan

Cygnus cygnus

Increasing winter visitor from Iceland especially to Welney Washes and Hickling/Horsey area in internationally important numbers. Has attempted breeding.

Bean Goose

Anser fabalis

Winter visitor from central Sweden to the Yare Valley – the only regular wintering locality in England of race *fabalis*. Small numbers of *rossicus* elsewhere in cold weather.

Pink-footed Goose

Anser brachyrhynchus

Winter visitor from Iceland and East Greenland in increasing numbers using well established coastal roosts. Distribution varies through the winter.

White-fronted Goose

Anser albifrons

Winter visitor and passage migrant from the Siberian tundra, but in declining numbers to traditional areas. Birds of the Greenland race *flavirostris* have been identified.

Lesser White-fronted Goose

Anser erythropus

Vagrant from northern Scandinavia where decreasing. Recorded almost regularly 1949 to 1971. Subsequent occurrences probably all of feral origin.

**Greylag Goose** 

Anser anser

Long established feral population is expanding rapidly and complicating the identity of any genuine wild birds.

\* Snow Goose

Anser caerulescens

Escape/vagrant (1). Regular feral breeder. One in 1985/6 winter with Pink-feet considered genuinely wild.

Canada Goose

Branta canadensis

An abundant introduced resident.

Barnacle Goose

Branta leucopsis

Autumn passage migrant from Spitzbergen and hard weather visitor from western Siberia usually in small numbers. Also a feral breeder.

**Brent Goose** 

Branta bernicla

Dark-bellied race *bernicula*, which breeds in fluctuating numbers in northern Siberia, is passage migrant and winter visitor, present nowadays each month of the year. The Pale-bellied race *hrota* from Spitzbergen appears annually in small numbers and the Black Brant *nigricans* from North America/East Siberia has been almost annual since 1982.

Red-breasted Goose

Branta ruficollis

Vagrant from Siberia (4); Halvergate 1962, Stiffkey/Holkham/Holme 1983, Cley/Wiveton/Blakeney 1986 and Cley/Salthouse/Langham 1987/88.

**Egyptian Goose** 

Alopochen aegyptiacus

Well established feral population.

Ruddy Shelduck

Tadorna ferruginea

Escape. Perhaps formerly a genuine vagrant.

Shelduck

Tadorna tadorna

Widespread breeder, passage migrant and winter visitor. Many make a moult migration to north west Germany, but increasing numbers moult on the Wash.

Mandarin

Aix galericulata

Feral wanderer. Has bred.

Wigeon

Anas penelope

Passage migrant and winter visitor. Internationally important concentrations on the Ouse Washes, north coast marshes and the Yare Valley. Has bred.

American Wigeon

Anas americana

Vagrant from North America (12)

Gadwall

Anas strepera

Resident, passage migrant and winter visitor.

Teal

Anas crecca

Passage migrant and winter visitor, breeding in very small numbers. There have been twenty occurrences of the Green-winged race *carolinensis* from North America since it was first recorded in 1964.

Mallard

Anas platvrhvnchos

Widespread resident, passage migrant and winter visitor.

Pintail Anas acuta

Passage migrant and winter visitor.

Garganey Anas querquedula

Breeding summer visitor and passage migrant in small numbers. Exceptional in winter.

Anas discors

Blue-winged Teal
Vagrant from North America (12), added to County list 1971.

Shoveler Anas clypeata

Passage migrant, summer and winter visitor.

Red-crested Pochard Netta rufina

Escape with the possibility of genuine vagrants following a westward spread across Europe.

Pochard Aythya ferina

Summer visitor breeding in small numbers, also passage migrant and winter visitor. Largest wintering group on Ouse Washes.

Ring-necked Duck Aythya collaris

Vagrant from North America since 1962 (8). Birds may remain at the same site for many weeks even returning in successive winters.

Ferruginous Duck

Aythya nyroca

Vagrant. Some observations relate to wanderers from collections.

Tufted Duck Aythya fuligula

Migratory breeder, passage migrant and winter visitor.

Scaup Aythya marila

Winter visitor to coast, most abundant during severe winters; exceptional inland. Occasional in summer.

Eider Somateria mollissima

Non-breeders present in variable numbers throughout the year with most impressive gatherings in winter and early spring.

King Eider Somateria spectabilis

Vagrant from the high Arctic (4): Hunstanton 1888 and 1890 (2 birds) and Scolt Head 1986.

Steller's Eider Polysticta stelleri

Vagrant from the Arctic coast of Siberia (1): Caister 1830.

Long-tailed Duck Clangula hyemalis

Winter visitor especially between Hunstanton and Brancaster. Almost annual inland in very small numbers.

Common Scoter Melanitta nigra

Most abundant in winter, but numbers and localities fluctuate. Non-breeders over-summer. Inland spring records almost annual.

Surf Scoter Melanitta perspicillata

Vagrant from North America (9): Scolt Head 3 in 1925 and Hemsby 3 in 1927; singles since.

Velvet Scoter

Melanitta fusca

Winter visitor with numbers fluctuating markedly. The main concentrations are currently in Holkham Bay or the Wash.

Bufflehead Bucephala albeola

Vagrant from North America (2): Yarmouth about 1830 and Hunstanton 1932.

Goldeneye Bucephala clangula

Passage migrant and winter visitor.

Smew Mergus albellus

Winter visitor appearing most regularly in severe winters.

**Red-breasted Merganser** 

Mergus serrator

Passage migrant and winter visitor. Largest wintering numbers in the Wash. During cold spells many penetrate the Great Ouse miles inland.

Goosander

Mergus merganser

Winter visitor, most numerous in Arctic-style winters.

Ruddy Duck

Oxyura jamaicensis

Increasing feral wanderer since 1977. First bred in 1988 at Stanford.

Honey Buzzard

Pernis apivorus

Passage migrant and rare summer visitor from tropical Africa.

Black Kite

Milvus migrans

Vagrant added to the County list in 1966 (17).

Red Kite

Milvus milvus

Vagrant. Wing-tagged birds form part of re-introduction projects in Scotland and England started in 1989.



White-tailed Eagle Hickling 1990. Up to 7 Magpies took it in turns to indulge in tail-pulling (N. Arlott)

White-tailed Eagle

Haliaeetus albicilla

Vagrant; 5 occurrences in the last three decades.

Marsh Harrier

Circus aeruginosus

Has recolonised Broadland after an almost complete absence as a breeder between 1960 and 1971, also breeds in coastal reedbeds and recently in cercals elsewhere in the County. Many move south in winter when those remaining roost communally. Also a passage migrant.

Hen Harrier

Circus cvaneus

Passage migrant and winter visitor forming communal roosts. Former breeder now exceptional in summer.

Montagu's Harrier

Circus pygargus

Passage migrant and summer visitor breeding in cereal crops. Formerly bred in Broadland. Goshawk Accipiter gentilis

Rare breeder. Also a wandering vagrant with sightings perhaps relating to falconers' escapes as often as to migrants.

Sparrowhawk

Accipiter nisus

Breeding population fully recovered from pesticide-related decline of the early 1960s. Also passage migrant and winter visitor.

Buzzard

Buteo buteo

Passage migrant and winter visitor. Former breeder. Status probably distorted following local releases from Birds of Prey centres.

Rough-legged Buzzard

Buteo lagopus

Passage migrant and winter visitor from the tundra usually in small numbers with periodic large-scale influxes.

Golden Eagle

Aquila chrysaetos

Vagrant (1): dead, Stiffkey 1868.

Osprey

Pandion haliaetus

Passage migrant.

Kestrel

Falco tinnunculus

Resident and autumn passage migrant; at times an impressive build-up along the Wash sea walls.

Red-footed Falcon

Falco vespertinus

Vagrant, more often in spring, wintering in southern Africa. Exceptional influx in 1992. Falco columbarius Merlin

Passage migrant and winter visitor. Occupies communal roosts. Exceptional in summer. Hobby

Falco subbuteo

Scarce migratory breeder and passage migrant.

Gyr Falcon

Falco rusticolus

Vagrant from the Arctic (3): Beeston 1848 and Blakeney Point/Cley 1953 and 1954.

Peregrine

Falco peregrinus

Passage migrant and winter visitor. Formerly bred on Hunstanton cliffs.

Red-legged Partridge

Alectoris rufa

Introduced resident.

**Grev Partridge** 

Perdix perdix

Decreasing resident, numbers having been greatly affected by modern farming methods.

Coturnix coturnix

Summer visitor in very variable numbers; sporadic breeder.

Pheasant

Phasianus colchicus

Introduced resident.

Golden Pheasant

Chrysolophus pictus

Introduced resident to Breckland (where declining) and Sandringham area.

Water Rail

Rallus aquaticus

Summer resident decreasing as a nester, passage migrant and winter visitor.

**Spotted Crake** 

Porzana porzana

Passage migrant and winter visitor. Formerly a summer visitor.

Little Crake

Porzana parva

Vagrant from Eastern Europe. Only three records this century: Brinton 1959/60, Cley 1969 and Selbrigg 1970.

Baillon's Crake

Porzana pusilla

Crex crex

Vagrant and former breeder; last recorded nest at Sutton Broad 1889.

Corncrake

Vagrant and former breeder; last nesting locality Wramplingham 1965.

Moorhen

Gallinula chloropus

Widespread and abundant resident. Immigrants in autumn. Allen's Gallinule

Porphyrula alleni

Vagrant from North Africa (1): an immature alighted on a fishing boat off Hopton 1902. (Only British record)

Coot

Fulica atra

Resident and winter visitor.

Crane

Grus grus

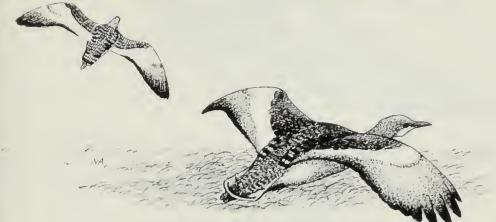
Former vagrant. A small colony has been resident in Broadland since 1979.

Little Bustard Tetrax tetrax

Vagrant from southern Europe. The most recent occurrances were only 12 days apart: Scole and North Wootton 1968.

Great Bustard Otis tarda

Vagrant from southern/eastern Europe. Most recent records: South Creake 1963, Horsey and Bacton (2) 1979 and New Buckenham (2) 1987. Former Breckland resident.



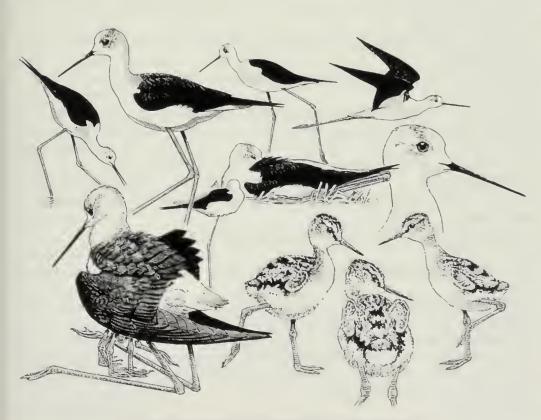
Great Bustards New Buckenham 1987 (N. Arlott)

Oystercatcher Haemaptopus ostralegus

Restricted as a breeder to the coast until 1940 when spread inland began. Passage migrant and winter visitor with largest gatherings on the Wash (majority coming from Norway).

Black-winged Stilt Himantopus himantopus

Vagrant mostly in late spring/summer (37). Bred at Holme in 1987.



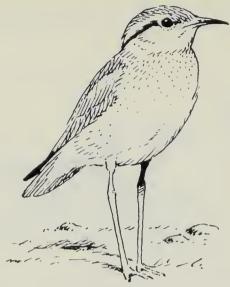
Black-winged Stilts Holme 1987 (R. Millington)

Avocet Recurvirostra avosetta

Summer visitor breeding since 1977. Scarce but increasing in winter.

Stone-curlew Burhinus oedicnemus

Breeding summer visitor now almost restricted to Brecks.



Cream-coloured Courser Blakeney and Ormesby 1969 (R. A. Richardson)

Cream-coloured Courser

Cursorius curso

Vagrant from North Africa (4): Morston 1847, Westacre 1855 or 1856, Thornham 1934 and Blakeney/Ormesby 1969.

Collared Pratincole

Glareola pratincola

Vagrant from southern Europe (4): Breydon 2 in 1827, Blakeney 1840 and Feltwell 1868.

**Black-winged Pratincole** 

Glareola nordmanni

Vagrant from eastern Europe (2): Cley 1966 and 1974.

Little Ringed Plover

Charadrius dubius

Migratory breeder since 1960, and passage migrant first recorded 1943.

Ringed Plover

Charadrius hiaticula

Summer visitor breeding at the coast with a declining element in the Brecks also passage migrant (including the Arctic race *tundrae*) and winter visitor.

Kentish Plover

Charadrius alexandrinus

Scarce but annual passage migrant. Exceptional in winter. Attempted breeding in 1983.

**Greater Sand Plover** 

Charadrius leschenaultii

Vagrant from southern Russia (3): Breydon 1981, Cley/Blakeney 1985 and 1992.

Caspian Plover

Charadrius asiaticus

Vagrant from southern Asia (2): Great Yarmouth 1890.

Dotterel

Charadrius morinellus

Scarce but annual passage migrant. Largest group 47. Singles have wintered on two occasions.

American Golden Plover

Pluvialis dominica

Vagrant from Arctic North America (1): Breydon 1976.

Pacific Golden Plover

Pluvialis fulva

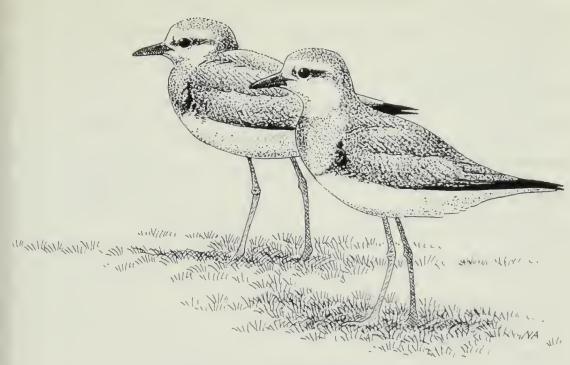
Vagrant from Siberia (4): Holme/Thornham 1989, Cley 1990 and 1991 and Breydon 1992. **Golden Plover**Pluvialis apricaria

Passage migrant and winter visitor.

Grey Plover

Pluvialis squatarola

Passage migrant and winter visitor. Increasing.



Caspian Plovers Yarmouth 1890 (N. Arlou)

Sociable Plover

Vagrant from south-east Russia (3): Welney 1977, Titchwell/Holme 1988 and Welney

Lapwing Vanellus vanellus

Declining breeder, passage migrant and increasing winter visitor.

Knot Calidris canutus

Passage migrant, winter visitor and non-breeding summer visitor.

Sanderling Calidris alba

Abundant passage migrant and winter visitor in much lower numbers.

Semipalmated Sandpiper

Vagrant from North America (4): Cley 1953, Wisbech SF 1966, Cley 1989 and Hickling 1992.

Calidris pusilla

Red-necked Stint Calidris ruficollis

Vagrant from Siberia (1): Cley 1992.

1990.

Little Stint Calidris minuta

Passage migrant, scarce in spring. Fluctuating numbers in autumn; rare in winter.

Temminck's Stint Calidris temminckii

Passage migrant usually singly but up to 8 together; more frequent in spring.

White-rumped Sandpiper Calidris fuscicollis

Vagrant from North America (37), first recorded in 1948.

Baird's Sandpiper Calidris bairdii

Vagrant from North America (8), first recorded in 1963.

Pectoral Sandpiper Calidris melanotos

Vagrant from North America/Siberia. Almost annual in autumn in very small numbers; rare in spring and summer.

Sharp-tailed Sandpiper Calidris acuminata

Vagrant from north-eastern Siberia (4): 1848, 1865, 1868 and 1892.

**Curlew Sandpiper** 

Calidris ferruginea

Passage migrant in fluctuating numbers in autumn, scarce in spring.

Purple Sandpiper

Calidris maritima

Passage migrant and winter visitor. An exceptional 63 at Heacham/Hunstanton in 1987.

Dunlin Passage migrant and abundant winter visitor. Non-breeders in summer.

**Broad-billed Sandpiper** 

Limicola falcinellus

Calidris alpina

Vagrant from North Eurasia (41), most regular at Breydon and Cley.

Stilt Sandpiper

Micropalama himantopus

Vagrant from North America (2): Wisbech SF 1963 and 1965.

**Buff-breasted Sandpiper** 

Tryngites subruficollis

Vagrant from North America (24), usually in autumn together with 4 spring records.

Ruff

Philomachus pugnax

Spring passage often well marked with impressive leks. Also autumn passage migrant and (increasing) winter visitor (in fluctuating numbers). Has bred.

Jack Snipe

Lymnocryptes minimus

Passage migrant and winter visitor, declining.

Gallinago gallinago

Decreasing as a breeder. Passage migrant and winter visitor.

**Great Snipe** 

Gallinago media

Vagrant from north-east Europe (11 since 1958). Decreasing, formerly almost annual in autumn.

**Long-billed Dowitcher** 

Limnodromus scolopaceus

Vagrant from North America and north-east Siberia (5): Horsey 1845, Wisbech SF 1963, Weybourne/Cley 1969, Titchwell 1989 and Lynn Point 1990. Also 7 Dowitcher records 1836-1983 not specifically accepted.

Woodcock

Scolopax rusticola

Most abundant as a breeder in Brecks. Immigrants from Continent in autumn.

Black-tailed Godwit

Limosa limosa

Abundant passage migrant and increasing winter visitor. Breeding since 1952 on Welney Washes in decreasing numbers.

**Bar-tailed Godwit** 

Limosa lapponica

Passage migrant and winter visitor, most abundant on the Wash. Also non-breeders in summer.

Little Whimbrel

Numenius minutus

Vagrant from central/north-east Siberia (1): Blakeney/Cley/Salthouse 1985.

Whimbrel

Numenius phaeopus

Passage migrant.

Curlew

Numenius arquata

Searce breeder. Abundant passage migrant and winter visitor.

**Spotted Redshank** 

Tringa erythropus

Passage migrant in increasing numbers, small numbers over-winter.

Redshank

Tringa totanns

Declining breeder as habitats become searcer. Passage migrant and winter visitor. Suffers heavy losses in severe weather.

Marsh Sandpiper

Tringa stagnatilis

Vagrant from south-east Europe (15), first recorded in 1979.

Greenshank

Tringa nebularia

Passage migrant, singles occasionally over-winter.

**Greater Yellowlegs** 

Tringa melanolenca

Vagrant from North America (1): Breydon 1975.

Lesser Yellowlegs

Triuga flavipes

· Vagrant from North America (6). Recorded between 1966 and 1992.

Solitary Sandpiper

Triuga solitaria

Vagrant from North America (2): Hickling 1942 and Salthouse 1947.

Green Sandpiper

Tringa ochropus

Passage migrant, abundant in autumn but scarce in spring, and winter visitor.

Wood Sandpiper

Tringa glareola

Passage migrant in fluctuating numbers.

Terek Sandpiper

Xenus cinereus

Vagrant from north-east Europe/Siberia (8), recorded since 1975.

Common Sandpiper

Actitis hypoleucos

Passage migrant. Has bred on five occasions. Rare in winter.

Spotted Sandpiper

Actitis macularia

Vagrant from North America (6).

Turnstone

Arenavia interpres

Passage migrant and winter visitor, rare inland.

Wilson's Phalarope

Phalaropus tricolor

Vagrant from North America (13), first recorded in 1967.

Red-necked Phalarope

Phalaropus lobatus

Scarce passage migrant.

**Grey Phalarope** 

Phalaropus fulicarius

Gale-driven autumn migrant in very small numbers. Rare in winter, exceptional in spring.

Pomarine Skua

Stecorarius pomarinus

Passage migrant, largest movements associated with autumn gales and exceptional at other times of the year.

Arctic Skua

Stecorarius parasiticus

Passage migrant, often abundant in autumn, very searce at other seasons.

Long-tailed Skua

Stecorarius longicaudus

Scarce autumn passage migrant.

Great Skua

Stecorarius skua

Passage migrant with heaviest movements during autumn gales, seldom close inshore at other seasons.

Mediterranean Gull

Larus melanocephalus

Regular all-year visitor in increasing numbers often remaining for weeks and returning to winter in the same area in successive years. Bred in 1992.

**Laughing Gull** 

Larus atricilla

Vagrant from North America (1): Walcott 1991/92.

Franklin's Gull

Larus pipixcan

Vagrant from North America (2): Breydon 1991 and Titchwell 1992.

Little Gull

Larus minutus

Non-breeding summer visitor, attempted nesting at Hickling 1978. Also passage migrant and winter visitor with most impressive totals when birds swept close inshore following storms.

Sabine's Gull

Larus sabini

Almost annual but scarce autumn vagrant from high Arctic.

Bonapart's Gull

Larus philadelphia

Vagrant from North America (2): Bacton 1967 and Cley 1970.

Black-headed Gull

Larus ridibundus

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

Slender-billed Gull

Larus genei

Vagrant from southern Europe (2): Blakeney and Cley 1987.



Storm-driven Sabine's Gulls Dickleburgh Moor 1987 (N. Borrow)

#### Ring-billed Gull Larus delawarensis

Vagrant from North America (6): first recorded in 1991.

Common Gull Larus canus

Passage migrant and winter visitor with non-breeders remaining all summer. Spasmodic breeder since 1965.

#### Lesser Black-backed Gull

Larus fuscus

Passage migrant (including north Scandinavian *fuscus*), migratory breeder nesting colonially and increasingly observed in winter.

Herring Gull

Larus argentatus

Rapidly increasing breeder, also late summer passage migrant when yellow-legged *michahellis* put in appearances and winter visitor when northern race *argentatus* distinguished.

Iceland Gull Larus glaucoides

Annual but very scarce winter visitor and passage migrant.

Glaucous Gull

Larus hyperboreus

Winter visitor in fluctuating numbers, rare in summer.

Great Black-backed Gull

Larus marinus

Passage migrant, winter visitor and non-breeder during the summer.

Ross's Gull

Rhodostethia rosea

Vagrant from north-east Siberia (1): Cley/Blakeney/Titchwell 1984.

Kittiwake

Rissa tridactyla

Passage migrant especially noticeable following gales. Has bred, occasional non-breeding concentrations in summer.

Ivory Gull Pagophila eburnea

Vagrant from the high Arctic (1): Brancaster/Burnham Overy/Holkham 1978.

Gull-billed Tern

Gelochelidon nilotica

Vagrant (46), recorded between 1849 and 1991.

Caspian Tern

Sterna caspia

Vagrant from the Baltic (40), recorded between 1825 and 1991.

**Lesser Crested Tern** 

Sterna bengalensis

Vagrant from North-east Africa (1). Probably the same individual 1983 and 1988.

Sandwich Tern

Sterna sandvicensis

Migratory breeder, restricted to two colonies since Scroby Sands became unsuitable, and



The most recent Waxwing invasion was towards the end of 1991 when a total of 300 was reported (*C.R. Knights*) Red-breasted Goose was added to the county list in 1962; this example stayed in the Cley area almost three months from December 1987 (*D. Kjaer*)





From the archives: Black-throated Thrush Coltishall February to April 1976 (D.A. Dorling), Roller, Hilborough, July 1976 (T. Andrewartha), Dartford Warbler, Blakeney Point, May 1986 (S. Young) and Pallas's Warbler, Blakeney Point, October 1989 (B. W. Jarvis)





More archive highlights: The Black-winged Stilts which bred at Holme 1987 (D.M. Cottridge)
Parrot Crossbill, Holkham Meals where breeding took place 1984 and 1985 (R. Tidman)







These southern overshoots provided red-letter days: Rose-coloured Starling, Cley, May 1979 (*R. Tidman*), Cattle Egret, Salthouse, May 1983 (*D.W. Burns*), Red-rumped Swallow, Cley Church April 1987 (*T. Loseby*) and Lesser Grey Shrike, Potter Heigham, September 1991 (*B.W. Jarvis*)





passage migrant.

Roseate Tern Sterna dougallii

Rare passage migrant, last bred 1948.

Common Tern Sterna hirundo

Migratory breeder at coastal and inland sites and passage migrant.

Arctic Tern Sterna paradisaea

A few pairs nest, mainly a passage migrant.

Sooty Tern Sterna fuscata

Vagrant from the tropics (2): Blakeney 1935 and Blakeney Point/Scolt Head 1966.

Little Tern Sterna albifrons

Migratory breeder, the Yarmouth colony being the largest in the Country. Has bred inland at Hickling Broad.

Whiskered Tern Chlidonias hybridus

Vagrant from southern Europe (17), recorded between 1847 and 1989.

Black Tern Chlidonias niger

Annual passage migrant with frequent large-scale spring movements during May. Formerly nested abundantly in Broads and Fens. Attempted nesting on Welney Washes in 1969 with a single success in 1975.



White-winged Black Terns Morston 1950 (N. Arlott)

White-winged Black Tern

Chlidonias leucopterus

Vagrant from south-east Europe (83), recorded between 1853 and 1988.

Cuillomot Uria aalge

Passage migrant and winter visitor. Occasional "wrecks" (together with next species) following oil discharges and severe gales.

Passage migrant and winter visitor.

Alca torda

rassage inigiant and winter

**Black Guillemot** 

Razorbill

Cepphus grylle

Rare passage migrant and winter visitor.

Little Auk

Alle alle

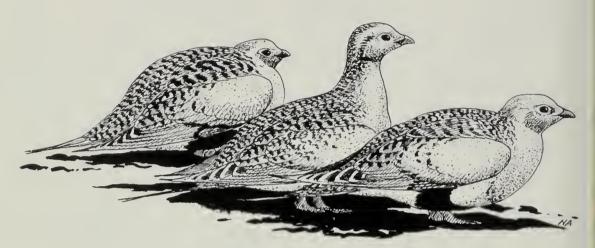
Autumn passage migrant and winter visitor. From time to time large numbers inshore during storm conditions when exhausted birds on tideline and others swept far inland.

Puffin Fratercula arctica

Passage migrant and winter visitor in small numbers, particularly after gales.

Pallas's Sandgrouse Syrrhaptes paradoxus

Former irruptive vagrant from Russia and central Asia arriving in Norfolk on seven occasions between 1859 and 1908. Greatest invasion 1888 when over 1100 appeared and 186 "obtained".



Pallas's Sandgrouse last recorded 1908 (N. Arlott)

**Rock Dove** Columba livia

Vagrant (1), Ludham 1925, during north-easterly gale and blizzard.

Stock Dove Columba oenas

Resident, passage migrant and winter visitor. Much more common in the west of the County.

Woodpigeon

Columba palumbus Resident, passage migrant and winter visitor.

**Collared Dove** Streptopelia decaocto Resident coloniser, now abundant. After spreading rapidly across Europe, first bred in Britain at Cromer in 1955.

**Turtle Dove** Streptopelia turtur

Migratory breeder and passage migrant, decreasing.

**Rufous Turtle Dove** Streptopelia orientalis

Vagrant from Asia (1): Castle Rising 1946.

Ring-necked Parakeet Psittacula krameri Introduced.

**Great Spotted Cuckoo** Clamator glandarius

Vagrant from southern Europe (5): Yarmouth/Caister 1896, Hickling 1941, Winterton 1958, Cley/Salthouse 1977 and Blakeney Point 1992.

Cuckoo Cuculus canorus

Migratory breeder and passage migrant, declining.

Barn Owl Tyto alba Resident. Continental race gutata occurs as a vagrant.

Otus scops

Vagrant from southern Europe (8), recorded between 1861 and 1954.

Snowy Owl

Nyctea scandiaca

Vagrant from Arctic (14), appearing only twice since 1922: Gunton 1938 and Blakeney Point/Stiffkey/Burnham Overy 1991.

Little Owl

Athene noctua

Introduced, becoming scarce.

Tawny Owl

Strix aluco

Resident. Long-eared Owl

Asio otus

Scarce and local resident; also a passage migrant and winter visitor often roosting communally.

Short-eared Owl

Asia flammeus

Increasingly scarce breeder, also passage migrant and winter visitor rarely forming large daytime roosts.

Tengmalm's Owl

Aegolius funereus

Vagrant (4); Beechamwell 1849, Burlingham 1857, Cromer Lighthouse 1881 and Thornham 1901.

Nightiar

Caprimulgus europaeus

Migratory breeder, Breekland remains the stronghold.

Apus apus

Migratory breeder and passage migrant.

Alpine Swift

Apus melba

Vagrant from southern Europe (33), recorded from 1831 to 1992.

Kingfisher

Alcedo atthis

Resident, numbers fluctuating in response to severity of winters.



Roller West Caister 1970 using a pony as a mobile look-out (N. Arlott)

Bee-eater

Merops apiaster

Vagrant from southern Europe (46+).

Coracias garrulus

Vagrant from southern/eastern Europe (30).

Hoopoe

Upupa epops

Annual vagrant in very small numbers.

Wrvneck

Jynx torquilla

Former migrant breeder, last nest recorded in 1955. Now a scarce but annual passage migrant. Largest totals of drift migrants in autumn following north-easterly winds.

Green Woodpecker

Picus viridis

Resident.

**Great Spotted Woodpecker** 

Dendrocopos major

Resident. Birds of the Northern race *major* occasional in autumn.

Lesser Spotted Woodpecker

Dendrocopos minor

Local resident.

White-winged Lark

Melanocorypha leucoptera

Vagrant from southern Russia/central Asia (1): King's Lynn 1981. Short-toed Lark

Calandrella brachydactyla

Vagrant from southern Europe (16), recorded from 1889 to 1992.

Woodlark

Lullula arborea

Migratory breeder to Breckland. Very recently increasing.

Skylark

Alauda arvensis

Widespread but declining as a breeding bird. Immigrants appear during the autumn followed by "severe weather" movements.

Shore Lark

Eremophila alpestris

Passage migrant and winter visitor, nowadays usually in very small numbers. Exceptional in summer.

Sand Martin

Riparia riparia

Rapidly decreasing migratory breeder and passage migrant. Mass autumn roosts were a former feature.

Swallow

Hirundo rustica

Migratory breeder and passage migrant. In autumn large pre-migration flocks roost communally.

Red-rumped Swallow

Hirundo daurica

Vagrant from southern Europe (17), first recorded 1952.

**House Martin** 

Delichon urbica

Migratory breeder and passage migrant. The Hunstanton cliff-nesting site now abandoned.

Richard's Pipit

Anthus novaeseelandiae

Almost annual autumn vagrant from western Siberia. Rare in winter and spring.

**Tawny Pipit** 

Anthus campestris

Almost annual vagrant in spring and autumn. First recorded 1897.

**Olive-backed Pipit** 

Anthus hodgsoni

Vagrant from Siberia (11), recorded between 1975 and 1992.

Tree Pipit

Anthus trivialis

Migratory breeder and passage migrant.

Meadow Pipit

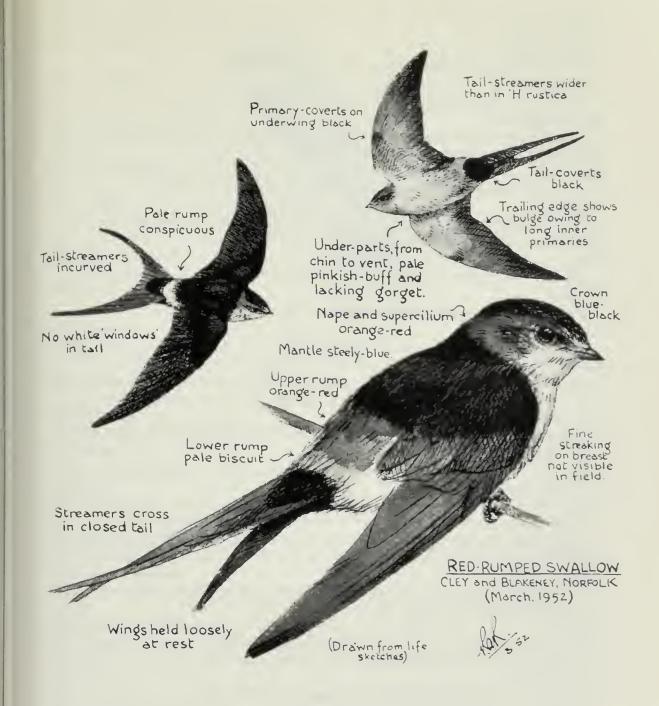
Anthus pratensis

Migratory breeder and passage migrant with smaller numbers in winter.

**Red-throated Pipit** 

Anthus cervinus

Vagrant from Northern Europe (33+), recorded between 1954 and 1992. There was a remarkable spring arrival in 1992.



Red-rumped Swallow Cley/Blakeney 1952 (R.A. Richardson)

Rock Pipit

Anthus petrosus

Winter visitor. The Scandinavian race *littoralis* regularly recognised in spring.

Anthus spinoletta

Winter visitor. Beet factory settling ponds, Hickling Broad and Cley Marsh are most favoured localities.

Yellow Wagtail

Motacilla flava

Migratory breeder and passage migrant forming impressive autumn roosts. In addition to
the British race flavissima, the following races breeding further east or north have appeared:
Blue-headed flava (has bred), Grey-headed thunbergi, Ashy-headed cinereocapilla and

undoubted hybrids, probably locally bred, showing characteristics of Syke's beema from south-east Russia.

Citrine Wagtail Motacilla citreola

Vagrant from western Russia/Siberia (1): Blakeney 1986.

Grey Wagtail Motacilla cinerea

Breeder in very small numbers, also passage migrant, less common in winter.

Pied Wagtail Motacilla alba

Resident and passage migrant. Large autumn/winter roosts. The White Wagtail *alba* is a springtime passage migrant in small numbers.

Waxwing Bombycilla garrulus

Irruptive winter visitor. During invasion years hundreds may arrive.

Dipper Cinclus cinclus

The Scandinavian race *cinclus* is less than annual winter visitor. Examples of the British/Central European races occur rarely.

Wren Troglodytes troglodytes

Resident and autumn passage migrant. Numbers severely affected by severe winters.

**Dunnock** Prunella modularis

Resident and autumn passage migrant.

Alpine Accentor Prunella collaris

Vagrant from southern Europe (2): Gorleston 1894 and Sheringham 1978.

Robin Erithacus rubecula

Resident. Passage may involve large numbers in autumn but most immigrants move further south.

Thrush Nightingale Luscinia luscinia

Vagrant from Europe/central Siberia (5): Holme 1977, Holkham Meals 1987, Blakeney Point 1988, Cley 1989 and Salthouse 1992.

Nightingale Luscinia megarhynchos

Migratory breeder, rarely noted on passage.

Bluethroat Luscinia svecica

The red-spotted race *svecica* a former scarce autumn drift migrant has changed status and now appears in very small numbers in spring. During 1992 a male of this form underwent a complete moult at Holme. Four springtime occurrences of the white-spotted race *cyanecula*.

Black Redstart Phoenicurus ochruros

Very local migratory breeder. Also a passage migrant in small numbers and occasional in winter. One showing the characteristics of the race *atterimus* in 1992.

Redstart Phoenicurus phoenicurus

Migratory breeder, especially to Breckland, and a passage migrant. An example of the south-west Asian race *samanisicus* at Heacham 1975.

Whinchat Saxicola rubetra

Very scarce breeder, best known as an autumn passage migrant.

Stonechat Saxicola torquata

Confined to the coast as a decreasing breeder. More widespread in winter. Examples of the Siberian races *maura/stejnegeri* have been identified.

Isabelline Wheatear Oenanthe isabellina

Vagrant from south-east Europe (1): Winterton 1977.

Wheatear Oenanthe

Migratory breeder. Continental and Greenland races appear on passage.

Pied Wheatear Oenanthe pleschanka

Vagrant from south-east Europe (6): Recorded between 1978 and 1990.

Black-eared Wheatear Oenanthe hispanica

Vagrant from southern Europe (3): Salthouse 1965 and Cley and then Holme 1975.



Black-eared Wheatear Salthouse 1965 (R.A. Richardson)

Desert Wheatear Oenauthe deserti

Vagrant from North Africa (2): Blakeney Point 1907 and Cley 1978.

Rock Thrush Monticola saxatilis

Vagrant from southern Europe (2): Salthouse Heath 1969 and Horsey 1989.

White's Thrush Zoothera dauma

Vagrant from Siberia (1): Hickling 1871.

Siberian Thrush Zootheva sibivica

Vagrant from Siberia (1): Yarmouth 1977.

Ring Ouzel Turdus torquatus

Passage migrant in fluctuating numbers, exceptional in winter.

Blackbird Turdus merula

Resident. Large numbers of immigrants arrive in autumn, some continuing south to winter in France and Spain.

Black-throated Thrush Turdus ruficollis

Vagrant from central Asia (2): Holkham 1975 and Coltishall 1976 (both *atrogulavis*). **Fieldfare**Turdus pilaris

Often abundant passage migrant and winter visitor; has summered.

Song Thrush Turdus philomelos

Resident and passage migrant; decreasing.

Redwing Turdus iliacus

Passage migrant and less common winter visitor, exceptional in summer.

Mistle Thrush Turdus viscivorus

Resident and partial migrant.

Cetti's Warbler Cettia cetti

Added to the county list in 1973 when one recovered in Norwich. Successfully colonised the Broads from 1974.

Fan-tailed Warbler Cisticola juncidis

Vagrant (1): Cley and later Holme 1976.

Pallas's Grasshopper Warbler Locustella certhiola

Vagrant from western Siberia and central Asia (1): Cley 1976.

Grasshopper Warbler Locustella naevia

Migratory breeder and scarce passage migrant.

Locustella fluviatilis River Warbler

Vagrant from eastern Europe (2): Roydon Common 1981 and Boughton Fen 1989.

Savi's Warbler Locustella luscinioides

After an absence of well over a century a very small number of singing males has appeared since 1967, becoming an annual event from 1973.

Aquatic Warbler Acrocephalus paludicola

Autumn vagrant (33), recorded from 1896 to 1985.

Sedge Warbler Acrocephalus schoenobaenus

Migratory breeder and passage migrant.

Marsh Warbler Acrocephalus palustris Vagrant (15). First identified 1923, but no further records until 1983.

Reed Warbler Acrocephalis scirpaceus

Migratory breeder and passage migrant.

**Great Reed Warbler** Acrocephalis arundinaceus Vagrant (9). Following a 1912 record no further observations until 1969.

**Booted Warbler** Hippolais caligata

Vagrant from Russia and western Asia (1): Titchwell 1982.

Icterine Warbler Hippolais icterina An almost annual autumn passage migrant in small numbers. Occasional in spring.

**Melodious Warbler** Hippolais polyglotta

Vagrant from southern Europe (2). Two trapped at Cley 1957.

Dartford Warbler Sylvia undata Vagrant (4 records this century): Wells 1905, Sheringham 1928, Blakeney Point 1986 and

Waxham/Cromer 1990.

Subalpine Warbler Sylvia cantillans

Vagrant from the Mediterranean (9), first recorded in 1951.

Sardinian Warbler Sylvia melanocephala

Vagrant from the Mediterranean (4): Waxham 1973, Weybourne 1980, 1991 and 1992. Ruppell's Warbler Sylvia ruppelli

Vagrant from the Mediterranean (1): Holme 1992.

Barred Warbler Sylvia nisoria

Scarce autumn passage migrant, once in spring.

Lesser Whitethroat Sylvia curruca

Migratory breeder and passage migrant. Birds of the Siberian race blythi occasional in autumn.

Whitethroat Sylvia communis

Migratory breeder and passage migrant, exceptional in winter.

Garden Warbler Sylvia borin

Migratory breeder and passage migrant.

Blackcap Sylvia atricapilla Migratory breeder and passage migrant; a few over-winter unless conditions become

Greenish Warbler Phylloscopus trochiloides

Vagrant from north-east Europe (36), first recorded in 1951.

Arctic Warbler Phylloscopus borealis

Vagrant from northern Europe (10), first recorded 1922.

Pallas's Warbler Phylloscopus proregulus Vagrant from Siberia, first recorded 1896. Almost annual since 1980.

Yellow-browed Warbler Phylloscopus inornatus Autumn passage migrant from northern Siberia, exceptional in winter. Hume's Yellow-

browed Warbler identified 1974, 1989 and 1991.

Radde's Warbler

Phylloscopus schwarzi

Vagrant from central Asia (20), first recorded 1961.

Dusky Warbler

Phylloscopus fuscatus

Vagrant from eentral Asia (20), first recorded 1968.

Bonelli's Warbler

Phylloscopus bonelli

Vagrant from eentral and southern Europe (8), first recorded 1970.

Wood Warbler

Phylloscopus sibilatrix

Loeal migratory breeder. Very scaree passage migrant.

Chiffchaff

Phylloscopus collybita

Migratory breeder and passage migrant; a few winter. Northern raees from Seandinavia/west Russia (abietinus) and northern Siberia (tristis) in late autumn.

Willow Warbler

Phylloscopus trochilus

Migratory breeder, most abundant of the warblers, and passage migrant. Northern race *acredula*, breeding from Seandinavia to Siberia, in spring and autumn.

Goldcrest

Regulus regulus

Resident breeder and passage migrant. Often abundant on autumn passage.

**Firecrest** 

Regulus ignicapillus

Spring and autumn passage migrant, occasional in winter. Bred in Norwich 1984 and West Norfolk 1990.

Spotted Flycatcher

Muscicapa striata

Migratory breeder and passage migrant.

**Red-breasted Flycatcher** 

Ficedula parva

Autumn vagrant in very small numbers, less regularly in spring.



Collared Flycatcher Holme 1969 (R.A. Richardson)

Collared Flycatcher

Ficedula albicollis

Vagrant from eentral and south-east Europe (1): Holme 1969.

Pied Flycatcher

Ficedula hypoleuca

Passage migrant, searce in spring, abundant at times in autumn. Bred in Felbrigg Park 1978.

**Bearded Tit** 

Panurus biarmicus

Resident and partial migrant. Periodic influxes from the Low Countries.

Long-tailed Tit

Aegithalos caudatus

Resident breeder. The Scandinavian white-headed caudatus very oceasional in autumn.

Marsh Tit

Parus palustris

Resident.

Willow Tit Parus montanus

Resident, apparently in decline.

Coal Tit Parus ater

Resident and occasional passage migrant.

Blue Tit Parus caeruleus

Resident.

Great Tit Parus major

Resident and occasional passage migrant.

Red-breasted Nuthatch Sitta canadensis

Vagrant from North America (1): Holkham Meals 1989/90.

Nuthatch Sitta europaea

Resident.

Wallcreeper Tichodronia muraria

A single ancient occurrence: Stratton Strawless 1792.

Treecreeper Certhia familiaris

Widespread resident in suitable areas.

Penduline Tit Remiz pendulinus

Vagrant (3): Hickling 1987, Cley 1990 and Titchwell 1991. Potential breeder.

Golden Oriole Oriolus

Migratory breeder in very small numbers, and passage migrant.

Isabelline Shrike

Lanius isabellinus

Vagrant from central Asia (4): Walcott 1961, Holkham Meals 1975, Wells Town 1987 and Horsey Gap 1988.

Red-backed Shrike

Lanius collurio

Former migratory breeder. Now a passage migrant in small numbers.

Lesser Grey Shrike

Lanius minor

Vagrant (17), mostly during late spring.

Great Grey Shrike

Lanius excubitor

Passage migrant and winter visitor in small but variable numbers. Exceptional in summer.

Woodchat Shrike Lanius senator

Vagrant (36). Irregular spring and exceptional autumn wanderer.

Jay Garrulus glandarius

Resident. Exceptional invasion from Continent in 1983.

Magpie Pica pica

Resident. Increasing and forming winter roosts.

Nutcracker Nucifraga caryocatactes

Vagrant from Siberia. Major irruption in autumn 1968.

Jackdaw Corvus monedula

Resident, passage migrant and winter visitor.

Rook Corvus frugilegus

Resident, passage migrant and winter visitor.

Carrion Crow Corvus corone

Resident, flocking in winter. The Hooded Crow, *cornix*, has become a very scarce passage migrant and winter visitor.

Raven Corvus corax

Formerly bred. Now a vagrant/escape.

Starling Sturnus vulgaris

Abundant all year, large numbers assemble after the breeding season and roost communally. Thousands of immigrants from northern and eastern Europe winter here.



Nutcracker 1968 (R.A. Richardson)

**Rose-coloured Starling** 

Sturnus roseus

Vagrant from eastern Europe (26).

House Sparrow Resident.

Passer domesticus

Tree Sparrow

Passer montanus

Resident, decreasing rapidly.

Rock Sparrow

Petronia petronia

Vagrant from southern Europe (1): Cley 1981.

Fringilla coelebs

Resident. Fluctuating numbers of Continental birds arrive in autumn, forming large winter flocks.

Brambling

Fringilla montifringilla

Passage migrant and winter visitor in highly variable numbers.

Serin Vagrant (39). Serinus serinus

Citril Finch Serinus citrinella

Vagrant from European mountain forests (1): netted Yarmouth Denes 1904. (Only British record).

Greenfinch Carduelis chloris

Resident and passage migrant. Small but increasing numbers of Continental birds winter.

Carduelis carduelis

Resident, passage migrant and summer visitor (Many Norfolk breeders winter in France and Iberia).

Siskin Carduelis spinus

Passage migrant and winter visitor in uncertain numbers. Frequent instances of nesting especially following large scale irruptions.

Carduelis cannabina Linnet

Breeding summer visitor and passage migrant with small numbers wintering.

Twite Carduelis flavirostris

Winter visitor.

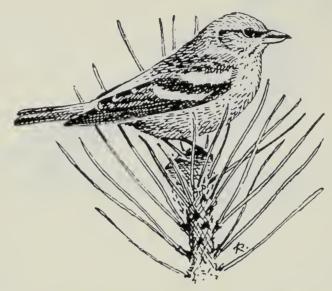
Redpoll Carduelis flammea

Resident, passage migrant and summer visitor (wintering especially in Belgium). The Continental Mealy redpoll *flammea* is a winter visitor in greatly varying numbers. The Greenland race *rostrata* also recorded.

Arctic Redpoll

Carduelis hornemanni

Vagrant in winter. Unprecedented arrivals in autumn 1990.



Two-barred Crossbill Holkham 1966 (R.A. Richardson)

**Two-barred Crossbill** 

Loxia leucoptera

Vagrant from the Siberian taiga (7). Over-wintering occurred 1990/91.

Croschill

Loxia curvirostra

Breeding resident in fluctuating numbers with Thetford Forest as *the* stronghold. Immigrants arrive in most seasons during late summer and autumn. Major irruptions at irregular intervals.

Parrot Crossbill

Loxia pytyopsittacus

Vagrant from Northern Europe. Bred 1984 and 1985. Exceptional influx during autumn of 1990.

Scarlet Rosefinch

Carpodacus erythrinus

Formerly a vagrant (26). Increasing number of records from 1973 and a potential Norfolk coloniser.

Bullfinch

Pyrrhula pyrrhula

Resident, decreasing. The Scandinavian race *pyrrhula* was trapped at Yarmouth 1893 and Holme 1968.

Hawfinch

Coccothraustes coccothraustes

Very local resident. Highly elusive and creatic occupant of both nesting sites and winter roosts.

Black-and-white Warbler

Mniotilta varia

Vagrant from North America (1): How Hill 1985.

Lark Sparrow

Chondestes grammacus

Vagrant from North America (1): Waxham 1991.

White-throated Sparrow

Zonotrichia albicollis

Vagrant from North America (1): Herringfleet 1968.

**Lapland Bunting** 

Calcarius lapponicus

Regular, but usually scarce, passage migrant and winter visitor.

Snow Bunting

Plectrophenax nivalis

· Winter visitor, declining in numbers, exceptional in summer.

Yellowhammer

Resident, declining.

Emberiza citrinella

Chrysolophus amherstiae

Cirl Bunting

Emberiza cirlus

Vagrant (16). None recorded since a male at Halvergate Marshes in 1969.

Ortolan Bunting Emberiza hortulana

Scarce passage visitor. Mainly in autumn but increasing in spring.

Yellow-browed Bunting

Vagrant from Siberia north-east of Lake Baikal (1): Holkham Meals 1975.

Emberiza chrysophrys

Rustic Bunting

Versunt form and F. (C. F.)

Emberiza rustica

Vagrant from northern Europe (6). First recorded 1958.

Little Bunting

Autumn vagrant from northern Scandinavia eastwards (17), First recorded 1908.

**Yellow-breasted Bunting**Vagrant from north-east Europe (4): Cley 1905, Wells 1907, Cley 1913 and Holme 1992.

Reed Bunting Emberiza schoeniclus

Resident and passage migrant.

Black-headed Bunting
Vagrant/escape from south-east Europe (1): Cley 1979.

Corn Bunting
Local and declining resident, flocking in winter.

Miliaria calandra

# Category D and off-shore records

White Pelican Pelecanus onocrotalus

Escape/vagrant including 3 at Breydon 1971.

Greater Flamingo Phoenicopterus ruber

Escape/vagrant including Breydon 1990.

Wood Duck
Escape.

Aix sponsa

Lady Amherst's Pheasant Escape/introduction.

Pacific Swift Apus pacificus

Vagrant (1); captured on an offshore gas platform 28 miles off Happisburgh 1981. Sent ashore and released in Suffolk.

Blyth's Reed Warbler

Vagrant from north-east Europe; one obtained on Dudgeon light-vessel 18 miles north of

Sheringham 1912.

Dark-Eyed Junco lyemalis

Vagrant from North America: Leman Gas Field 35 miles off Happisburgh, released at Holme 1980.

Red-headed Bunting

Vagrant/escape from south-east Russia eastwards. Several records since the first at Cley in

1960.

Indigo Bunting

Passerina cyanea

Vagrant/escape from North America: Holkham Meals 1988.

## CONTRIBUTORS TO THE BIRD REPORT

DR. T. KERRY

S. ABBOTT R. C. ABEL D. ABDULLA T. ABERDEIN P. R. ALLARD R. ANDREWS APPLETON D. P. APPLETON J. R. APPLETON J. ARBON P. W. ATKINSON MRS. E. J. AUSTIN M. J. AUSTIN R. BAKER S. G. BAKER T. G. BALL K. BAMFORD J. P. BAMFORD A. BANWELL D. G. BARBER T. R. BARKER N. P. BARLOW M. J. BARRETT R. E. BATTY P. E. BEARD A. P. BENSON S. BETTS M. BLACKBURN B. BLAND A. I. BLOOMFIELD P. F. BONHAM A. D. BOOTE T. E. BOULTON N. BOWMAN B. BOYD K. J. BRETT D. & J. BRIDGES A. F. BROWN J. BROWN D. BRYANT A. L. BULL J. L. BURTON J. F. BUTCHER C. J. BUTTERWORTH J. BUXTON C. BYERS S. CALE C. CAMPBELL H CARMICHAEL P. CARR S. P. CARTER P. CAWLEY A. G. CHANNER R. CHITTENDEN J. S. CLARK P. R. CLARKE J. D. COLE G. CRESSWELL D. CRISP E. CROSS J. CRUDASS M. DAVENPORT T. C. DAVIES MRS. J. DEAN I. DICKIE P. DOLTON C. DONNER D. A. DORLING W. C. DOUGHTY O. G. DOUGLAS N. A. DRIVER

W. R. DRIVER S. P. DUDLEY G. E. DUNMORE K. R. DYE G. M. S. EASY J. C. EATON M. T. ECCLESHALL M. T. ELLIOTT L. G. R. EVANS V. EVE P. F. FAIRMAN D. FARROW F. FARROW D. M. FERGUSON R. A. FILBY P. FISHER M. FISZER R. FOWLING R. A. FOYSTER R. J. FRANCIS D. J. FULLER MRS.J. E. GAFFNEY J. GALLON S. J. M. GANTLETT J. & J. GEESON D. W. GIBBONS M. A. GOLLEY M. GRANTHAM R. GRIBBLE A. HALE M. C. HALL J. S. HAMPSHIRE **B HARDING** P. HARGREAVES A. F. HARRIS P. V. HAYMAN P. J. HEATH B. HEDLEY G. F. HIBBERD R. HILL A. L. HIRONS G. A. HIRONS M. A. HIRONS R. HOBLYN J. HODGEKINSON M. J. HOLLIS R. HOLLIS D. J. HOLMAN P. HOLNESS R. HOOPER S. J. HUGHES R. A. IMAGE A. G. IRWIN R. M. R. JAMES B. W. JARVIS A. JAYNE B. W. JONES E. W. P. JONES MRS. M. JOWETT S. C. JOYNER E. JUDD G. JUDD S. JUDD P. KEARNEY D. F. KELLY G. I. KELLY T. F. KELLY

C. KEMP

J. B. KEMP

B. D. KERR

D. O. KERR

I. F. KEYMER D. KIDDELL C. KIGHTLEY C. KIRBY P. D. KIRBY C. A. E. KIRTLAND C. R. KNIGHTS MRS. R. J. KNIGHTS C. KNOTT P. LACK F. J. LAMBERT C. LAMSDELL C. LANSDELL J. R. LANSDELL N. LAWTON M. E. LAXEN DR. R. M. LEANEY M. P. LEE DR. J. LINES S. E. LINSELL S. M. LISTER N. LITTLEWOOD P. R. LOCKWOOD J. C. LOWEN J. D. MAGEE R. C. MANSFIELD J. H. MARCHANT J. MARTIN S. C. MAWBY D. MAYES DR. P. McANULTY K. McDOUGALL R. C. McINTYRE S. C. McINTYRE D. McNEILL I. E. H. METCALFE D. R. MIDDLETON M. R. MIDDLETON MR.& MRS.J. S. MIGHELL P. & V. N. MILES P. MILFORD R. G. MILLINGTON A. & R. MONTEATH MRS.D. MUSSELL E. T. MYERS P. NEWPORT M. NEWTON D. G. NICHOLSON T. C. NICHOLSON T. NICKOLSON T. NIGHTINGALE P. C. NOAKES MR.& MRS.G. M. NOBBS J. OATES W. E. ODDIE D. L. OVENDEN G. R. OXBOROUGH J. G. PARKER M. PARSLOW-OTSU D. PARSONS D. PAULL DR. J. C. PEASE T. M. PECK DR. M. PETCH F. E. PITTS R. PLOWMAN

H. RAMSAY M. S. READ J. REED J. REID A. P. REYNOLDS M. A. REYNOLDS MR.& MRS.D. I. RICHMOND DR. R. RIDDINGTON S. RIX A. ROBERTS M. W. ROGERS R. ROLFE M. E. S. ROONEY F. RUSSELL M. D. RUSSELL A. & B. RUMSEY D. H. SADLER K. G. SAUL MR.& MRS.M. J. SAUNT C. SAYER M. J. SEAGO T. H. SEATON SELF K. B. SHEPHERD N. SILLS R. Q. SKEEN C. SMALL I. N. SMITH MISS J. SMITH S. SMITH R. SOUTHWOOD R. SPOWAGE R. STARLING S. M. STARLING M. STEWARD N. R. STOCKS A. M. STODDART G. TAYLOR J. TAYLOR DR. M. P. TAYLOR M. THOMAS W. THROWER R. B. TOZER G. TYLER H. VAUGHAN S. N. VAZ MISS B. VEVERS A. E. VINE S. C. VOTIER R. WADDINGHAM C. W. WADE R. J. WALKER J. WALLIS MISS P. F. WALTON R. WALTON WARD J. WASSE J. WELSBY J. WHITE J. R. WHITELEGG A. WILKINSON J. R. WILLIAMSON J. WILSON P. H. G. WOLSTENHOLME M. J. WOOD P. WOODWARD G. WRIGHT T. WRIGHT MR.& MRS.R. C. WYATT M. YOUNG-POWELL

M. RAINS

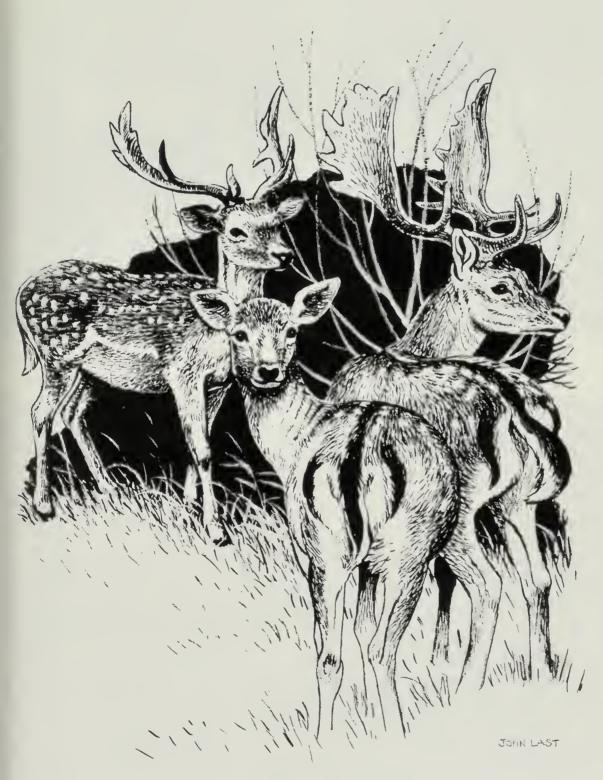
A. J. PRATER

M. D. PRESTON

M. J. PRESTON

J. L. RAINCOCK

# NORFOLK MAMMAL REPORT 1992



(J.M. Last)

# **Editorial**

The Editor is pleased to present the 37th annual Norfolk Mammal Report.

We congratulate our colleague, the editor of the Bird Report, on his splendid achievement in steering the annual commentary on the birds of Norfolk through 40 years. Our county drew bird watchers even before the study became so popular. During the four decades those visitors swelled to a small army and many of them added their sightings to the mounting piles of paper. Never daunted, Michael marshalled his own cohorts and produced a comprehensive and accurate annual account of our birds we can quote with pride. We are proud our own report runs in joint harness, under the same cover title.

This year the Mammal Report welcomes the return of previous authors of feature articles. Dr. Martin Perrow and Adrian Jowitt were joint authors last year of the feature *Water Shrews at Hickling*. The discovery of more water shrews than we had previously realised were with us came as an added bonus to the numbers of harvest mice at Hickling found as a result of the organised studies conducted on the reserve. Harvest mice on field edges and in corn stacks have been described in previous reports, but we had no idea such a concentration existed in the Hickling reedbeds. The rise and fall in populations of these tiny animals has been little understood. Always popular in illustrations, few of us had the great good fortune to see them in the wild. The article by Martin Perrow and Adrian Jowitt is most welcomed.

Our other main feature is *Badgers in Norfolk* by Tony Vine. This is the third time Tony has put pen to paper to record in these pages the results of his ceaseless surveys on these animals. Again, they are so frequently featured in book illustrations and on greetings cards yet they never cease being the centre of frequently quite bitter controversy. Here in Norfolk we are proud to provide home for a small population. A great deal of effort goes into attempts to secure their welfare and their future. Not everyone shares this concern as the article points out. However, it appears that enough has been done by badgers and their human friends to bring about a slow rise in population.

Here we must be careful. Even if a tiny population in a given area was able to double itself the resulting total would still be very small. The encouraging message that comes through is that so many landowners are genuinely sympathetic and go out of their way to protect their special guests. Our greatest fear is that human kind of a less generous spirit and nature take too much interest.

We must pay tribute to Tony Vine for his monitoring of the badgers for so many years. These articles have appeared at ten-yearly intervals so obviously the work began well before the first was published. Such dedication is the backbone of research. Much of the work is lonely and frustrating. A great deal of time has to be spent in establishing credentials and mutually trusting relationships with landowners and others with local knowledge and interests. All this outside his own work time and he covers other counties as well as our own!

A welcome also to Eddie Boosey who this year takes responsibility for the classified notes. Eddie has been a major contributor to the report for many years. His observations have come as the result of his conservation work as well as private excursions to study natural history in general. Those observations have always come in amusing but scrupulously accurate form. Last year he contributed a rather less formal article to the Report on *Serendipitous Sightings*. That was written to encourage the reader with little confidence in his own powers of observation.

Thanks go to the three contributors listed above and to all listed at the end of the report. It may be we have failed to include all those who have sent in material. Is there something about falling between two stools? If this is so we do apologise in advance.





Top left: Ross's Gull, Titchwell, May 1984 (D.W. Burns) Top right: Slender-billed Gull, Cley, May 1987 (P. Wheeler) Bottom: Brent Geese, Holkham (A. Bloomfield)





Great Crested Grebes nest throughout the Broads district and there are few inland waters of any size not colonised. Yet at one time the birds were in danger of extinction in the county (C.R. Knights) Garganey, rarest of breeding ducks; 2 broads were reported at Welney Washes (R. Tidman)





Forty-six pairs of Stone Curlews bred in the Norfolk Brecks, well over half on arable land (R. Powley)

The most recent large-scale Crossbill irruptions took place during 1990 and 1991 (C.R. Knights)





Following the establishment of a Red Squirrel reserve in Thetford Forest, it is hoped future Reports will contain encouraging news (R. Powley)

Sixty-five Badger setts are occupied in Norfolk at the present time (M.B. Withers)





We do try to make sure the list is accurate, but omissions are made from time to time. This too has to be the only formal acknowledgement but we are sure everyone realises we do appreciate every scrap of information sent in. Each item has always been filed away but now we have the up-to-date facility of compatible computerised databases to store the material.

Thanks too to the artists and photographers whose works enhance our pages. Their contributions are of the usual high standard.

Contributions to the next annual Mammal Report should be sent by the end of January 1994 to the Editor at 124 Fakenham Road, Taverham, Norwich, NR8 6QH. Later contributions are still welcomed but it does help if the material is to hand early in the year. We are happy to answer queries. They can also be directed to Norwich Castle Museum, Natural History Department where John Goldsmith still assists with all matters to do with vertebrates. John is also co-ordinator of the Norfolk Bat Group and is pleased to advise on these declining species.

# The aptly named harvest mouse?

Dr. Martin Perrow & Adrian Jowitt ECON, School of Biological Sciences, UEA



The harvest mouse (*Micromys minutus*) is familiar to most people as the 'cute ginger mouse' with a prehensile tail that appears on all manner of gift items as well as on TV programmes. These popular images perpetuate the illusion of its abundance and its association with fields of corn. In truth, harvest mouse is one of Britain's least studied small mammals and its current status in any habitat, let alone modern cereals, is largely unknown.

ECON at UEA has been pursuing three lines of research that aim to increase our understanding of Britain's smallest rodent. Firstly, what is the status of harvest mouse in the habitats available in agricultural land? Totalling around 11 million hectares, this represents quite a slice of habitat

which may or may not be exploited. Secondly, research in Czechoslovakia in particular has shown that the species is strongly associated with wetland habitats such as reedbeds. Is this the case in Britain? Finally, many wetland habitat are managed, what is the effect of such practices on the harvest mouse? This latter line of research has now become a long-term monitoring programme, which has started to reveal many interesting aspects of the population dynamics of the species. Norfolk, has been an ideal place to conduct this research, with its strong farming tradition as well as the opportunity to sample the extensive wetlands that constitute Broadland.

Part of the reason for the lack of research on harvest mouse stems from it being notoriously difficult to catch, particularly in the summer months when it spends the bulk of its time in the stalk zone of grasses, well above the standard live-traps. Consequently, much of the basic data on the distribution and relative abundance of the species has used counts of its characteristic spherical breeding nests. This was inadequate for our purposes as it can be difficult to relate actual abundance to counts of nests, particularly as it is much more difficult to find nests in some habitats than it is in others.

To determine the status and basic habitat preferences of harvest mouse in agricultural land we needed to sample several habitats simultaneously. As the density of animals was also likely to be low we also needed to cover large areas of habitat. Consequently, we used hair sampling tubes. These plastic tubes (28mm diameter and 10cm long) have sticky tape on the inside of their roofs and when a small mammal enters the tube, encouraged by the small seeds retained in a matrix of peanut butter, it conveniently leaves behind a few hairs on the tape which can be identified to species under a microscope. By attaching tubes to bamboo canes, both ground and aerial habitats could be sampled. In all, over 5,800 tubes, covering nearly 23ha were used, in a variety of 'grassland' habitats in agricultural land in East Anglia. Results from this and a comparable study in reed-beds, where tube success was correlated with live trapping results, reveal that harvest mouse is a rare animal indeed in a modern cereal field, occurring at densi-

ties of less than 0.5 per ha, compared to over 100 per ha in prime habitat. Why are modern cereals so poor?

We think much of this is to do with the short time that modern winter-sown cereals are in the ground. Female mice start to breed in earnest late in the summer when the crops are about to be harvested or in the case of barley may have already gone. The potential of producing a large amount of young (5 in each of perhaps 3 litters in a season) is simply not realised, maintaining its low abundance in the mammal community. This may be exacerbated by spraying reducing the abundance of invertebrates, which are an important summer food, and most importantly the lack of suitable luxuriant hedgerows to head for when the crop is cut. This idea of refuge areas supporting reservoirs of animals over the winter months appears to be particularly important. Work in different types of drainage ditches has revealed, not surprisingly, that more species and larger numbers of small mammal are supported by unmanaged hedgerows than, say, simple grass ditches.

Under more traditional regimes, winter refuges for harvest mice were provided by unthreshed ricks and the grain they contained. Modern bales, without such resources, are inhospitable places. In addition, straw transported to root crops to be used as a protective agent over the winter months may contain harvest mice but these usually do not survive long enough to disperse into other habitats. This creates the possibility that populations of mice still in cereals in some locations are being fragmented even further by the practice of transporting straw.

Although populations in cereals are generally low it is possible to find harvest mice, albeit at low density (perhaps 5/ha or so) in marginal habitats and more permanent tall grassland within agricultural land. Unfortunately, these habitats have declined dramatically with an increase in cereal production and the greater usage of crops such as rape. Conserving and even increasing populations of harvest mouse on agricultural land may depend on the current schemes to manage it in a more traditional fashion (eg ESA, Countryside Stewardship), adopt a different system of farming (eg conversion to organics) or to take land out of production altogether (eg set-aside). These options are likely to be most rewarding in river valleys, partly these often contain the last remnants of grassland and overgrown hedgerows and also because they can form corridors between the isolated patches of good habitat. If these could be developed then perhaps not only harvest mouse but other small mammals particularly field vole and shrews and their predators (especially owls) are also likely to benefit. However, it must be stressed that without more much needed research these ideas are merely speculation.

The situation in the wetlands of Norfolk is much more promising, as revealed by a mega survey of 30 sites in the valleys of the 5 Broadland rivers (Bure, Ant. Thurne, Yare, and Waveney). This survey of several different habitats (beds of reed (*Phragmites australis*) and saw-sedge (*Cladium mariscus*)), litter fen (a mixture of reed, other grasses and herbs) and alder carr, utilised a live-trap developed by our colleague Mike Jordan, that could be used off the ground. This proved to be essential as over 90% of harvest mouse captures are made in the stalk zone, often in excess of one metre up, depending on the height of the vegetation (this mirrored the result of our hair tube survey). We now know that harvest mouse is widely distributed across Broadland, being present at all but one of the sites. However, there is considerable variation in the number of animals between river valleys, habitats, and even patches within a habitat.

In general, reed and sedge are better habitats for the species than fen litter and alder carr and the former habitats at Hickling NNR within the Thurne valley are particularly good with densities to over 60/ha. Patchiness within a reed-bed has been illustrated at our long-term study site at Hundred Acre Marsh on the same reserve. Here, on one occasion, the number of individuals utilising the 30x40m blocks that make up the site, varied

between 6 and 29!

From this site, we also know that the winter management of reed by cutting or burning can have a profound influence on the populations of small mammals and harvest mice in particular. Firstly, subsequent survival may be adversely affected, although this is probably a result of displacement and exposure to competitors and/or predators rather than direct mortality from the treatment. Secondly, the recolonisation of the treated areas by harvest mouse was then very slow, partly as a result of the low numbers of animals in the surrounding areas over the summer. However, what is remarkable is that even into the winter of the year of treatment, harvest mouse numbers were significantly higher in the unmanaged refuge areas. Only during the spring of the following year were mice utilising all three treatments equally, even where some areas within each of these treatments were flooded and the mice had to exist off the ground entirely.

There are lessons to be learnt from this in drier habitats too. Management such as cutting or grazing, preserving the dominance of grasses, the basic habitat of harvest mouse, must be a good thing. However, such management is often conducted with little regard for small mammals. For harvest mouse this may not be viewed as being important especially as the species is capable of rapid population growth. Unfortunately, equally rapid population declines are also typical. For example, in one particular year in our long-term study site at Hickling, 150 individuals that were present in November, became less than 60 in January and just 6 by March. Small size (mean weight = 6g, ranging from 4g or so for juveniles to around 11g for adult males and pregnant females) confers a susceptibility to cold and/or wet weather and to just about any predator that walks, runs or flies. Therefore, if dramatic detrimental management is conducted when the population is at its lowest ebb, local extinction may be a possibility. This becomes more likely where the nearest suitable habitat, a source of potential re-colonists, is some distance away.

In Norfolk, we are clearly very fortunate in having good populations of harvest mice in our wetlands. However, management of habitat must take the species into account. Furthermore, if harvest mouse is to remain a widespread member of the mammal community in agricultural habitats then not only is sensitive management of the remaining remnants essential but we must ensure that alternative land uses are appropriate. Harvest mouse is a remarkable animal, its ability to hang on at all in many habitats is testimony not only to its huge potential for population growth but also to its surprising ability to move quite long distances (range length as revealed by trapping can often be 70m or so and one intrepid individual managed to move well over a 100m in one night!). All we need to do is to give it a helping hand and future research will endeavour to discover exactly how this should be done.

Acknowlegements We are indebted to TERF and the Mammal Conservation Trust for funding the research. Many landowners have given us permission to invade their property including Lord Walpole, Sir Evans-Lombe, Chris Skinner, Chris Knights, Norfolk Naturalists Trust, English Nature, RSPB and the How Hill Trust. Special mention must go to Francis Russell, Rick Southwood, Mike Blackburn and Rob Andrews in particular, who helped us gain access to many of the wetland sites. Finally, thanks to Dave Showler and Rob Lucking who analysed the hair tube samples and the many people who have helped us in the field.

# Norfolk Badgers 1982-1992

A. E. Vine



This is the third report on the status of Badgers in Norfolk, the first appearing in 1970 and the second in the 1980 Report. As before, I have been obliged in the majority of cases not to name localities, which tends to lead to a repetitive style of description. Nevertheless I hope the presentation will be sufficient both to follow through from the previous accounts and to give a fair indication of the status of the Badger without causing disturbance either to them or to the landowners who have shown a keen sense of responsibility in earing for the well being of their wildlife.

Fenland: Although it was believed that the Badger was lost to this area following the 1970 gassing, the 1978 Hay Green record raised hopes of a surviving sett. This was subsequently discovered along one of the old seabanks, where it has prospered due to encouragement by the farmers of the adjacent land. A road casualty was found at Tilney St. Lawrence in 1992, possibly indicating that there may be more than one sett. There was also another sett for some years by the Middle Level Main Drain further south than that described in the 1970 Report. It is still remarkable how they manage to survive in this intensively farmed agricultural district. A sett, only recently reported, at Downham Market for a number of years around 1978, ceased to be used because of nearby vandwellers.

The other Fenland site reported in 1980 to have been used from the late 1960s probably ceased to be active before 1990. However about this time another sett started a mile away, which has been closely guarded by the farmer.

Greensand Belt: This also includes the adjacent chalk country, commencing in the north with Ringstead, where neither of the two original main sites appear to have been used for a few years. However a new pit site has been used in the 1992/93 winter. On one estate the keeper has not shown much encouragement to Badgers by using strychnine-laced eggs to kill crows. As a result about 10 years ago 2 dead badgers were report-

The vignettes are reproduced from *Eileen Soper's Badgers* courtesy Robinson Publishing, .7 Kensington Church Court, London W8 4SP.

ed to have been buried-up and a sett filled in. There is another sett not far from this which appears to be surviving.

The Ringstead animals also colonised a sandy site in the opposite direction, where they are welcomed. They have also used a woodland site, but may have been disturbed by replanting. Unfortunately one animal became a casualty on a minor road.

The 1971 greensand sett – at Castle Rising – which was empty by 1977 appears to have remained so ever since. At Bawsey sand extraction extended to the only surviving sett from earlier years, but it has not been used for perhaps the last 15 years. However an animal was seen in the area about 7 or 8 years ago.

The main sett in Forestry Commission land where the 1971/72 reintroductions were made has become less active, probably mainly because the trees have grown up and Badgers prefer to be near the edges of woods. None of the other sites in the block are now permanently used, although some may have occasional visitors. However a new sett just outside Forestry land has been regularly used for approximately 10 years. They had 3 cubs in 1992 but sadly 4 animals have been killed on the A10 and A134 in 1992/93; quite a number have suffered the same fate in the last 30 years.

The 1979 sett in a ditch-side has continued in full use up to the present. In 1991 another small sett was made at the end of a gravel pit about ½ mile away, but this was taken over by a Fox in 1992.

A nearby area which was reoccupied in 1978 and where one sett out of a group of 5 continued in use until about 1981, was finally lost when the whole block was converted to arable. Adjacent to this the other block of Forestry Commission land lost its original sett, but a new one was discovered in 1992.

Two and a half miles away the 1978 sett which was dug open and then covered over again has continued in regular use, even though several of its holes always appear in the adjacent arable. Several holes have been made from time to time in a nearby gravel pit and also certain woodland, but none has developed any further.

The area of original 1970 introductions lacked Badgers for some years after the 1973 gassing, but several have since been reintroduced and there are certainly two (both new) and probably other regularly used setts. One of these is, unusually, well into mature woodland and the other unfortunately rather close to a minor road with the consequent risk of road casualties.

Not too far from here, the 1980 sett "in the edge of a wood with an adjacent ditch" has not been used for a number of years. A mile to the north there are 3 sites in an area of mature woodland, scrub and marsh; they may not all be occupied at the same time but are certainly regularly visited.

Turning to the east of the 1970 introduction area, a new sett was in a sand pit atop a chalk hill started by about 1985 after two abortive attempts in nearby woodland. At least 2 road casualties are known on the A1065 in this area. On the next estate to the east a chalk pit was used in about 1989, but the gassing of rabbits in the same pit did not help the badgers as they have not used it since. One or two other temporary sites have also been used in this same area. This leads into ...

Central Norfolk: This continues to hold the main concentration of setts in the county. Leading from the previously described region, an artificial foxearth has been used at various times for a considerable number of years and they have now made a permanent sett nearby in the same extensive woodland area. An offshoot which has become established in a hedgerow causes some problems for the farmer by digging out in the adjacent field, although less so at present as the field is down to grass.

The next sett, in a pit out in the fields, has continued in excellent use since at least 1950. It is planned to exclude it from excavation when the area eventually is dug for sand and gravel, though a small sett (unused) in conifer woodland has gone, together

with the trees. A long-established small sett near a stream continues to be used. A new sett in the same parish is in a typical Cambridgeshire situation at a field baulk down to a stream. There are 8 or 9 setts in the next parish, two being in parkland and the rest in woodland, including one in an artificial foxearth first used in 1955 (see 1970 Report). Next to this 2 out of 3 setts on one farm are in pitholes and the other in a hedgebank. Another parish has the active railway cutting sett, plus a used and a disused gravel pit site and also a wood used once. The next parish has a sett in two separate mounds of spoil dug from a pond and another site was used elsewhere a few years back. Nearby yet another parish has a sett in woodland bordering an ornamental lake and another in a bank between fields and marshy woodland. Two miles west of here the former Forestry Commission sett has been disused for so long that I could not identify the site in the now mature conifers. Back to the east, the most important group in Norfolk can now only claim 6 occupied setts and about 4 not in use; in part some of this drop is due to amalgamation so that previous separate setts have now merged into one. For example holes were spread for a quarter mile along a bank and were originally divided into 2 or 3 separate setts, but now only one part is active and the rest are only visited. The change to all arable instead of the previous large acreage of grass for sheep (described in 1980) appears to have led only to slightly lower numbers. Nevertheless the owners involved arc still very sympathetically disposed towards the Badgers and their programme of woodland management, involving felling, coppicing etc., has been carefully planned to avoid any disturbance to the still very active setts. I could not relocate the sett (1980) in a small wood, but the site appears to have been in the entrance to a wartime bunker which was previously masked by undergrowth when the trees were first planted. However there have been other transient hedgerow setts elsewhere on the farm, including 1992.

Elsewhere in the parish are 4 other setts – one in parkland, one (new) in a pit, one under rhododendrons and one (new since my last report) in a long sandy bank. There has also been another new pit site in the next parish. Further towards Fakenham a group of 3 new pit sites also indicates a northward extension in the last 5 or 6 years. Two other sites are known on the estate with the long sandy bank.

Towards Norwich from the main block there are certainly 6 well-used sets – one to the south (new since 1980) at a field/marsh boundary and the others roughly a mile apart in former Forestry Commission land in gorse, on a steep bank (new), a gravel pit (new) and a sandy wood (new). The other small sett in a wood between Dereham and Norwich is one of the few to be disused. The extensive woodland nature reserve to the north also had a sett in an undulating area at some time in the 1980s, but it was not very active when I visited it in 1991.

The Holt – Cromer Ridge and Inland: Several tantalising reports from Hempstead including an adult and cubs crossing road and others seen, but no sett has so far been located. This also applies to nearby Little Barningham, where there was previously a sett.

They still appear to be missing from the Holt-Sheringham area, although there have been occasional records from the Northrepps area a few years back. However one of the most interesting developments has been the establishment, probably during the last 10 years, of 3 setts in one area a few miles inland. Two of these are in young pine woods a mile apart and the other,  $2\frac{1}{2}$  miles away, in a very narrow ditch in ordinary arable fields. There was also another sett on an old railway track  $1\frac{1}{2}$  miles away, but this is not now used, Badgers are also reported in an extensive wooded area nearby.

Brecks: In the earlier part of the 1980 decade there was a small sett in some open woodland and another reported on a nature reserve 1½ miles away. There may be a connection with one reported to have been captured inside a pen in a wildlife park and

released in this vicinity out of harm's way. Tracks were reported inside the Stanford Training Area at that time.

	Situation of Setts	
Analysis of setts in 1992	65 Active	24 Inactive
Woodland: Deciduous Mixed Coniferous Rhododendron/Birch Carr Rough/Bracken/Gorse	$\begin{bmatrix} 12 \\ 7 \\ 5 \\ 2 \\ 2 \\ 6 \end{bmatrix} - 34$	7
Parkland	3	_
Slope of some form: Hedge Ditch Bank Mound Railway	2 5 3 1 3	-   1   2   4   -   1
Pits: Gravel Pit Sand Pit (in field) Chalk Pit	$\begin{bmatrix} 2\\11\\1 \end{bmatrix}  \begin{bmatrix} 14\\\overline{65} \end{bmatrix}$	$\begin{bmatrix} 1 \\ - \\ 3 \end{bmatrix}$ $\begin{bmatrix} 4 \\ \hline 24 \end{bmatrix}$

The main habitat change has been the decline in usage of conifer woods as they have matured. In 1971 30 setts were recorded at 10 sites in conifer woods (and a grand total including those already disused of 46). Sand pits out in fields are now quite an important favoured site. Only 16 setts were on mainly flat ground – 4 in deciduous, 4 in mixed and 3 in coniferous woods, 2 in rhododendrons, 2 in parkland and 1 in a hedge.

**Discussion:** There are still areas of Norfolk which I have not revisited or looked at as thoroughly as I would have liked for this revision. However considerable effort has been put into key areas, particularly in the west and centre and a lot of time, much of it leading to negative results, has been spent in several areas further north-east. I think the west and centre have been covered fairly thoroughly, much of it being supported by similar results from a number of other knowledgeable people especially those involved with the hunt, but I would be the first to admit that there could still be other setts that I have missed. However I believe the overall picture for the county gives a fair indication of the current situation.

There are 65 occupied setts in the county at the present time, double the number found in 1980. This is a very pleasing situation and says much for the more tolerant attitude shown by landowners and their keepers. In fact further reintroductions show how keenly the interest continues in having Badgers on one's estate. All the landowners who have been privileged to have new setts in the last ten years have been delighted at their arrival. (The presence of Otters and Barn Owls is also regarded with similar interest.)

Badger distribution continues with the majority of setts being in the centre of the

county, where they have substantially consolidated their position. The pleasing extension northwards towards Fakenham has been supported by a similar extension westwards to link through to the setts on the greensand and eastwards where they are spaced out in the Norwich direction. In the north-west the introductions have resulted in their establishment on two neighbouring estates, though one of these is somewhat tenuous. The other surprise was the existence of at least 3 setts in the north-east of the county, perhaps colonised from the former Holt-Cromer group.

In the Fens in the west at least one sett has survived west of King's Lynn, with others that seem to have come and gone, and another in a different location on the south-west Fenland edge.

Elsewhere more work is needed broadly between Norwich and Sheringham, between Norwich and Acle, then south-east towards Beccles, Norwich-Attleborough and a part of the Breck. In all of these areas there are reports at various times, some of which I have worked on without success. In general I do not think the broad picture will be too different from that already known, but there may still be more to discover.



Of losses, other than in areas just described, there have been few. As conifer woods have matured they have become less suitable for Badgers at (a) the large wood to the east of the main central area, (b) the small wood near the most important central group, (c) the original extensive Forestry Commission (F.C.) sett to the west of this same group, (d) the chief greensand F.C. group and in two other similar areas in the west. Badgers also appear to have remained absent from F.C. woodland on the Sheringham ridge and at the original 1950s F.C. area in the centre of the county, but here as at certain other sites in the west there may have been keepering pressures.

Mature conifer woods are not always deserted as a sett still continues in use in one large former F.C. plantation to the east of the central group and another good sett in one of the greensand F.C. woods is new – despite the F.C. thinning machine having taken out every other row of trees in the block within the last 3 or 4 years. There may be a slight tendency for woods owned and managed by private landowners to be more

favoured than those shot over by a syndicate.

This survey would not have been possible without the kind assistance of a very large number of landowners, all of whom I would like to have named but many have expressly asked that their identity and location should not be divulged. This is partly because of the publicity given nationally to Badger-digging and similar practices, but which fortunately is virtually unknown in East Anglia. It is also because the landowners fear that their setts may become visited by naturalists too frequently both for the good of the Badgers and for their own privacy.



I must also specifically mention the West Norfolk Hunt, whose members have been, as always, extremely helpful. Quite a large proportion of the setts, particularly those in the centre of the county, are on Hunt supporter's land and at least 3 artificial foxearths have been taken over more or less permanently by Badgers. Provided earth-stopping is carried out in the approved manner and the holes are reopened after the hunt, this causes no harm to the Badgers and in fact saves them from disturbance at the time of the hunt. This is not the place to become involved with politics, but the behaviour of a group opposed to hunting at a sett near Fakenham neither helped their cause nor the Badgers.

The best person to protect a Badger sett is the landowner himself. It is due to his encouragement that Badgers have become established on his land in the first place and he is able to guide his keeper or tenant in the same direction. I know of one estate in a neighbouring county where the keeper regards the Badger, together with certain raptors, as more important than the Pheasant, provided he has a sufficient stock of game to show at the appointed day. Nowadays there are many estates where keepers are similarly very helpful to wildlife including Badgers. These are the people who protect Badgers every day. Nowadays there is no need for the formation of any protection societies in East Anglia and the satisfying increase in Norfolk in the last decade or so, which can also be shown for Cambs, and perhaps Suffolk as well, confirms this very satisfactory situation.

# **Classified Notes**

By reason of the order of animal classification, the hedgehog, Erinaceus europeaus, leads the way in this report, and also leads in the list of animals found dead on roads. This year one specimen was found dead in M. Brewster's garden pond, and K. Ferroussat found a hedgehog trapped in the lowest of a stack of 24 crab-pots, but this was found in time and survived. The hedgehog also got very much closer to the top of the list when it comes to early recordings. Several were reported in February, and many more in early March. Presumably this has been caused by a very mild winter, but one wonders exactly what effect mild winters are having. Were early records the result of adults coming out of hibernation early, or were they survivors of late 1991 broods, which had not reached the right weight for hibernation but had survived because of the mild winter? R. Hadman reports a small hedgehog seen actively feeding in mid November.



(J. M. Last)

Where recorders commented on numbers, there are some slight inconsistencies. Hedgehogs have been described as "scarce" and "very scarce", but Ian Keymer reports that four hedgehogs dead on roads in the Stanford Training Area is very unusual, and road casualties are an indicator of abundance. In general the hedgehog seems to be doing well, with very many reports from all over the county.

It would be interesting to have a more detailed picture of the status of the mole, *Talpa europaea*. The evidence of molehills is very easy to see and most of the 226 records from all parts of the county concern molehills. This does not, however provide information on actual numbers of moles. "Moles hate their own species!" said Kenneth Mellanby when writing about their territorial behaviour. Another study indicated that the molehills in an area of 400 square metres are likely to have been made by a single mole. In other areas where the soil is poorer and food less easily available, even more molehills will be seen over a wider area. Best evidence is the relatively high number of moles actually seen, there being 18 of these. They certainly seem to be doing well in Snettisham, where F. Reynolds reports mole activity in his lawn "for the first time in 20 years".

The relatively few records of the **common shrew**, *Sorex araneus*, are mainly concerning dead specimens, but most were killed by cats, though they are also reported, by

Malcolm Metcalf, throughout the year in owl pellets in the Belton area. One specimen that was certainly not dead was seen by Paul Cobb on a track at Ringstead Downs. This ran round and round in a circle, then headed straight towards Paul's vehicle, forcing him to stop. On his way out, half an hour later, the shrew repeated the performance.

Surprisingly more live specimens of the **pygmy shrew**, *Sorex minitus*, were seen than dead ones, although these were also represented in the catches of owls and cats. Several were seen while the recorders were mowing, and M. Brewster saw one behaving very strangely, "going round and round on the road, almost bouncing". Perhaps most interesting observations concerned a dead one. M. & G. M. Nobbs set a "breakback" trap in their loft and on Christmas Day found to their great surprise a dead pygmy shrew in it: a most unusual habitat for this species.

Cats and owls unfortunately for recording purposes do not find it easy to catch the water shrew, *Neomys fodiens*, so there are again only four records for 1992, two being from the same Broadland site. Presumably the Hickling Broad community is still doing well. There are doubtless many unrecorded water shrews in other parts of the county and it would be valuable to have a more accurate picture.

A review of Norfolk bats covering 1992/93 will feature in the 1993 Mammal Report. There is no doubt about the continuing success of the rabbit, *Oryctolagus cuniculis*. Unfortunately, the very important group being studied in the grounds of the University of East Anglia is no more. There were 14 reports of myxomatosis from different parts of the county. A number of black rabbits were seen by different recorders, particularly interesting being Ray Gribble's note that "there are several black melanistic rabbits around the sewage works at Whitlingham".

Much more should be known about status of the **brown hare**, *Lepus capensis*, next year as a national survey has been conducted by Professor Stephen Harris of Bristol University. In the meantime, the Norfolk survey has produced large numbers of records from all parts of the county. Although 13 specimens were road casualties the records seem to indicate a very healthy, live, population. Malcolm Metcalf reports an increase in the Belton area and F. Reynolds states that in the Snettisham area brown hares are "generally more plentiful" and that "last year's reduction in numbers seems to have been recovered". *Very* impressive numbers have been reported: Jean Gaffney saw 14 hares together in a field, Edward Cross reports 24 hares in an 80-acre field, and Mike Blackburn saw 35 specimens in a field in Cantley.

Sadly no records of the **red squirrel**, *Sciurus vulgaris*, have been received this year. An important experiment is, however, now being conducted in Thetford Forest. Based on recent research into the requirements of red and grey squirrels, a red squirrel reserve has been set up, so it is hoped that future Mammal Reports will have more encouraging news.

The grey squirrel, Sciurus carolinensis, has of course been seen all over the county, being reported as "common and widespread", "seen on every visit", "ubiqitous", "increasingly common ... even near the beach", and certainly not in need of any assistance. Unusual situations included the loft of a house. Judy Morant spent an interesting time watching a family of grey squirrels, first seeing the mother carrying her young into an owl nesting box, then watching their development and behaviour. As Alec Bull said grey squirrels are "ill thought of, but not without interest". Of particular interest was one he watched on Christmas Eve, which was "10-12 feet from the ground, on a branch of a leafless tree, standing on its hind legs while, like a waiter carrying a tray, it had a great pile of leaves balanced on its hands, a pile which he/she could hardly see over." But how did it climb the tree with this load occupying its hands?"

Only five recorders included the **bank vole** Clethrionomys glareolus, in their records, two of these referring to dead specimens, bank voles being "regularly caught by cats" in



a Corpusty garden, and "often found" in owl pellets in Belton. The bank vole is common and widespread in Britain, and its population level much more stable than that of the field vole. One would expect it to be more often reported. In the summer it becomes more nocturnal, so the paucity of records might be related to the seasonal activity of recorders.

More than ten times as many recorders reported the **short-tailed field vole**, *Microtus agrestis*, as reported the bank vole. Almost all records came from the TG area of the National Grid, and most of the specimens were "supplied by cats", as one recorder euphemistically phrased it. What does this say about the distribution of cats in Norfolk? It is certainly surprising that so few reports should have come from other areas, but field vole populations are notoriously unstable, swinging between "explosions" and "crashes" so a year's records do not give cause for concern.

What is of concern is the small number of records of the water vole, Arvicola terrestris, particularly in a county with so much water. We have suffered several years of drought, and this will, no doubt, have concentrated the pollutants in the remaining water, but Anglian Water began talking optimistically about water-levels in May, so perhaps the situation of the water vole will look better next year.

The **long-tailed field-**, or **wood-**, **mouse**, *Apodemus sylvaticus*, was recorded on the east, west, and north coasts of Norfolk and in areas in between. Many of the specimens were again "supplied by cats". A much stranger fate overtook one seen by F. Reynolds, in Snettisham, which was chased across some grass by mallard, one of which caught the mouse and swallowed it, alive. Perhaps he should encourage a mallard into his kitchen where he has also seen wood mice and has seen the damage they have caused, wood mice which have completely ignored poisoned grain and "breakback" traps baited with a

wide variety of baits. The one which Colin Dack found in his kitchen "next to the toaster", received much kinder treatment. It was simply evicted.

Confirmed reports of the **yellow-necked field-mouse**, *Apodemus flavicollis*, were only received from three of its previously known sites.

"The only real increase in our records is for harvest-mice, now that we know what their nests look like," said Pam Taylor in the letter accompanying the records collected by her and George Taylor. One wonders how often this could be the case? The summer nest of the **harvest-mouse**, *Micromys minutus*, is one way of recording this species, but it is first necessary to know what the nests look like. Although there were many more records compared with 1991, the species is probably very under-recorded.

Much more under-recorded is the **house-mouse**, *Mus musculus*, which was reported at a mere 8 localities. Perhaps it is mistakenly thought that records of something so ordinary would not be of interest.

The same is probably true of the **brown rat**, *Rattus norvegicus*. Only a few records *have* been received, accompanied by comments such as "very numerous" and "vast numbers bred this summer". Even the recorder failed in attempts to keep rats from his hen-house and his apple store. The Public Health authorities have reported a great increase in the numbers of brown rats as a result of several extremely mild winters.



(J.M. Last)

The fact that brown rats, and rabbits, are doing so well should make all Norfolk's arable farmers rather pleased that the **fox**, *Vulpes vulpes*, also seems to be doing very well. 100 records were received from over the county, showing that Norfolk has a very healthy population of this predator. One record refers to 27 dead foxes on a gibbet. As a sign of things to come two recorders reported a pair of foxes killed on the new Norwich Southern Bypass in October.

The **badger**, *Meles meles*, is the subject of the article by A. E. Vine, suffice to say that only three observers included badgers in their 1992 records. Two reported that a sett in north-east Norfolk is still occupied, and the compiler of this report saw at least 12 badgers at three different setts in mid Norfolk, as well as seeing much evidence that a fourth sett is also occupied.

The otter, Lutra lutra, although providing a few more records than the badger, presents a much sorrier picture. It is now well known, thanks to Ian Keymer and others, that

otters have been seriously affected for many years by organic pesticides and other poisons which have found their way into rivers and lakes. It is also known that otter numbers have been further reduced by changes in agricultural practices and overmanagement of rivers. These serious problems have been made even worse by the combination of lack of rainfall and over-extraction of water, so it is hardly surprising that only 5 individual otters were recorded in the wild in Norfolk in 1992. The latest in Philip Wayre's releases of otters was a pair in the Stanford Training Area so hopefully more cubs will soon be born in Norfolk.

In the case of the **stoat**, *Mustela erminae*, an increase in numbers appears to be a more likely story, the reports including comments such as "seen in small numbers all year", and "very frequent". Edward Cross had two stoats killed in his garden by his dog, something which he had never known before, "and it could be a reflection of an increase in numbers locally". Keith Zealand also had stoats in his garden, where they actually bred. He watched a stoat "chasing its tail and somersaulting wildly" near the chickenrun, but he wasn't present when the stoats killed two of his chickens. A stoat in the garden was also reported from Corpusty. Only two reports of stoats in ermine were received both during February; one at Hardley Flood, and the other in Flitcham, the latter having a patch of brown on its face. The stoat seen by George Taylor at Hickling was more likely to have had a *red* face, being in the embarrassing position, for a top predator, of being attacked by two young kestrels.

The weasel, Mustela nivalis, is the subject of two interesting reports from Alec Bull. One was observed in the Battle Area catching a common lizard and taking it into cover. presumably to eat it. A family of weasels at Wheat Fen kept running to and fro across the path in full view of visitors, and gradually got closer and closer to a male pheasant, which ended up jumping around "like a startled chicken", before it all became too much and the pheasant "flew off in disarray". Many other reports have been received from many parts of the county.

What would appear to *not* be doing very well, judging by the records received, is the **North American mink**, *Mustela vison*. Only one report was received of 2 near Dickleburgh in September, but one wonders if this situation really prevails.

Almost twice as many reports of the grey seal, *Halichoerus grypus*, were received compared with last year. Sightings extended from Blakeney to Yarmouth, in numbers from one to 5, but only one pup has been reported as born.

The **common seal**, *Phoca vitulina*, was reported from Breydon Water to The Wash.

At a recent conference of The Mammal Society, one delegate advocated the reintroduction of the **timber wolf**, *Canis lupus*, to certain parts of Great Britain as a means of controlling deer populations. Norfolk was not one of the areas mentioned, but it would seem from the records received that this might be a good thing. Deer can now be found all over the county and having no predators their numbers keep increasing.

The Chinese muntjac, Muntiacus reevesi, is a case in point. It is within quite recent memory that this deer was a rarity in Norfolk, but it has spread throughout the county. Professor Stephen Harris of the University of Bristol has instigated a detailed national survey, in which Frances and Ian Simper, who are carrying out their own detailed survey into the deer of West Norfolk, are taking part. (Details of all local muntjac sightings will be sent to Stephen.) Despite a rapid spread and growth in numbers, expansion is not taking place evenly. They have in places become numerous. But why are some apparently ideal habitats not utilised to the full? The Simpers have noted that while muntjac are numerous in the Great Hockham area of Thetford Forest, they are quite scarce in a very similar wooded area at Narford/Bradmoor. Perhaps Stephen Harris's study will provide answers.

The Simpers' study is also responsible for half the observations of fallow deer,

Dama dama, almost all the records coming from West Norfolk. Mention was made last year of Horsford/Felthorpe Woods "where fallow once roamed and from which no records have been received for some time." This year John Snape, who has also consulted the head forester for the district, refers to fallow deer at Horsford Woods as having "stable populations". He refers to many reports of fallow deer being killed on the Cromer and Holt roads; perhaps there are other unrecorded groups in these areas.

The **red deer**, *Cervus elaphus*, is much more widely spread than the fallow, figuring in each of the three separate studies of deer being carried out in Norfolk. R. Bickle has sent in his usual excellent report of red deer in Hickling area, including one sighting of 45 in a herd; a culling programme has inevitably begun. Elsewhere the maximum at any one time was 7, but there were many multiple sightings, implying that the population is quite safe.

In the case of **roe deer**, Capreolus capreolus, we can be sure they are safe. The number of records is beginning to approach those of grey squirrels and rabbit, and mention is made of damage caused by the roe. But there are strange gaps in the records. The compiler of this report has often seen red deer and signs of muntjac in Foxley Wood, but has never seen roe or any sign of roe, and nobody else has reported roe in Foxley Wood despite its large number of visitors. Even more mysterious is the report that no roe deer were seen, by one regular observer, in the Battle Area in 1992.

Perhaps most surprisingly of all the information received this year is the number of records of **Chinese water-deer**, *Hydropotes inermis*. This deer is so small, usually shorter than the reed and other vegetation amongst which it lives, so the fact that so many have been seen indicates a healthy population. Some records refer only to tracks and droppings; a few to specimens, two of them dead in water; and some of the deer displayed themselves crossing roads, swimming dykes, or feeding in arable fields. There is also the fact that a group has been studying Chinese water-deer from a hide at Crome's Broad. Even so, the number of records is impressive.

Much less impressive, but much more satisfying, is the number of records of the **common porpoise**, *Phocoena phocoena*, none of which unlike last year was dead. Porpoises were seen six months of the year, from Holme to Waxham, 22 specimens being reported in all.

Finally, the only **whale** was reported by Ken Michie, a pilot of Bristow's Helicopters. He saw the whale, more than 60 feet long and dead, drifting some 30 miles north-east of Yarmouth.

# CONTRIBUTORS TO THE MAMMAL REPORT

P. R. ALLARD
A, ANDERSON
D. G. ANDERSON
D. P. APPLETON
J. APPLETON
M. J. BARRE
P. E. BEARD
D. BECKLEY
S. BETTS
R. BICKLE
M. BLACKBURN
E. F. BOOSEY
S. BOOSEY
N. BOWMAN
K. BRETT
J. BREWSTER
M. A. BREWSTER
A. BULL
C. CAMPBELL
D. J. CANNINGS

P. J. CAWLEY
P. COBB
E. CROSS
C. DACK
D. J. DAVIS
D. A. DORLING
W. EARP
M. ENGLEDOW
P. F. FAIRMAN
F. FARROW
K. M. FERROUSSAT
C. FRENCH
J. E. GAFFNEY
B. GALE
J. GOLDSMITH
R. GRIBBLE
R. HADMAN
C. HAINES
I. HAMPSHIRE
A F HARRIS
A. I. HARRIS

T. HAYNES
P. J. HEATH
D. F. KELLY
G. I. KELLY
I. F. KEYMER
J. KEYMER
C. LANSDELL
R. LEANEY
D. MAXFIELD
J. McCALLUM
M. METCALF
B. MOORE
J. MORANT
J. MORRIS
H. MURLAND
C. NEALE
G. M. NOBBS
M. NOBBS
J. OXENFORD
D. PASHLEY

J. PAUL
C. PENNING
J. POTTERTON
G. REEDER
F. P. REYNOLDS
D. RICHMOND
R. RICHMOND
T. SHARMAN
F. L. SIMPER
I. J. SIMPER
C. J. SMALL
J. SNAPE
G. TAYLOR
P. TAYLOR
J. UTLEY
M. WARREN
T. WRIGHT
K. ZEALAND

# NORFOLK & NORWICH NATURALISTS SOCIETY (Reg. Charity No. 291604)

## Patron: Her Majesty the Queen

Founded in 1869

The County's senior natural history society. It has for its principal objectives the practical study of natural science, the conservation of wild life, the publication of papers on natural history, especially those related to the county of Norfolk, arranging lectures and meetings and the promotion of active fieldwork. Specialist Groups cover most aspects of the county's flora and fauna.

### **Annual Subscription Rates:**

Junior £3.00 Ordinary £8.00 Family £10.00 Affiliation £15.00

## Secretary:

Dr. A. Leech, 3 Eccles Road, Holt, NR25 6HJ

#### **Publications:**

May: Transactions

August: Bird & Mammal Report Quarterly newsletter: 'Natterjack'

# Membership Secretary:

C. R. Dack, 12 Shipdham Road, Toftwood, Derchan, NR19 1JJ.

# NORFOLK ORNITHOLOGISTS ASSOCIATION for Birds and Bird-watchers

(Reg. Charity No. 267670)

The N.O.A. was established in 1970 to act as a parent body to Holme Bird Observatory (est. 1962), to further knowledge of ornithology, especially migration, to conserve habitats and disseminate knowledge of natural history through its wardens and reports.

#### Our Reserves are:

## **Holme Bird Observatory**

By agreement & purchase. Full-time Warden. 300 bird species seen in area, 393 species of moths recorded.

# Walsey Hills Information Centre & Migration Watch Point

Originally est. 1949. Purchased 1973. A vital migration watch-point.

### Holme Marsh Bird Reserve

Est. 1976. By agreement. 90 acres of relict grazing for waders & wildfowl. Part-time & voluntary wardening.

## The Quags, Kelling

A 14 acrc rough grazing marsh with pool purchased 1984. Passage and resident waders.

# Redwell Marsh, Holme

A 35 acre wetland pasture purchased 1985.

### **Annual Subscription rates:**

Individual £10.00 Husband/wife £13.00 Family £14.00 Junior £5.00 Single Life Membership £150.00

Members receive: free permits to our reserves, free N.O.A. Annual Report (pub. March), free Norfolk Bird & Mammal Report (pub. Aug.) and News Bulletins.

Address: Norfolk Ornithologists Association (Office), Aslack Way, Holme next Sea, Hunstanton, Norfolk PE36 6LP.

