Norfolk Bird & Mammal Report 1976



Norfolk Naturalists' Trust Properties

Date Acquired		Acreage		Status*	
	On the Coast				
1926 1937	Cley Marshes Duchess's Pightle, Burnham Overy		435 1	Gift Gift	S.S.S.I.†
1937	Great and Little Eye, Salthouse	• •	10	Purchased	S.S.S.I.
1945	East End of Scolt Island	• •	76	Purchased	N.N.R.
1955	The Eye, Salthouse	• •	21	Purchased	S.S.S.I.
1965	Holme Dunes	• •	400	Purchased, Gift	S.S.S.I.
1903	Tiomic Dunes	••	400	& Agreement	0.0.0.1.
1971	Salthouse Marshes		200	Agreement	S.S.S.I.
		••		115.001110111	5.5.5.1.
	Broadland				
1928 and 1	Starch Grass (Martham)	• •	431/2	Purchased & Gift	S.S.S.I.
1930	A11 C D 1		72	Purchased	S.S.S.I.
1945	TT' 1 1' TO 1	• •	861	Purchased	N.N.R.
and 1		• •	801	Fulcilaseu	14.14.1.
1945			500	Leased	N.N.R.
1945	D / D 1	• •	355	Half Gift &	S.S.S.I.
1952			333	Half Purchased	S.S.S.I.
1948	Surlingham Broad	• •	253	Purchased	S.S.S.I.
1949	Ranworth Broad	• •	124	Gift	N.N.R.
1949	Cockshoot Broad	• •	124	Gift	N.N.R.
1964	Firs Marsh, Burgh St. Peter	••	21/2	Leased	
1971	Martham Broad	• •	103	Leased	S.S.S.I.
1972	Hardley Flood	• •	90	Leased	
1972	Chedgrave Common		10	Leased	
1974	Barton Marshes	• •	101	Gift	
-27.		•••	4		
4000	Breckland		0.60	D 1 10 C'C	0001
1938	East Wretham Heath	• •	362	Purchased & Gift	
1942	Weeting Heath	• •	343	Gift	N.N.R.
1949	Thetford Heath	••	250	Gift	N.N.R.
	Other Areas				
1957	Thursford Woods		25	Gift	
1960	Hethel Old Thorn	• •	18	Gift	
1961	Scarning Fen		101	Gift	S.S.S.I.
1962	Hockham Fen (Cranberry Rough)	• •	20	Purchased	S.S.S.I.
1963	Roydon Common	• •	140	Purchased	S.S.S.I.
1966	Stoke Ferry Fen	• •	25	Agreement	S.S.S.I.
1968	Lenwade Water		37	Agreement	
1968	Dickleburgh Pightle	• •	1	Agreement	
1972	Smallburgh Fen		19	Leased	S.S.S.I.
1972	Ringstead Downs		26	Agreement	S.S.S.I.

Norfolk Bird Report - 1976

and

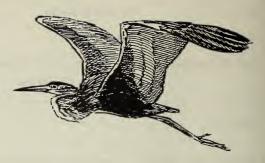
Editor: County Recorder: Editorial Assistants:	MICHAEL J. SEAGO D. A. DORLING P. R. ALLARD, A. D. BOOTE, J. F. W. BRI and Dr. M. P. TAYLOR	uhn, G. E. Dunmore				
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Norwich (Transactions Volume 24 Part 3)

THE NORFOLK & NORWICH NATURALISTS SOCIETY, Castle Museum,

NORFOLK BIRD REPORT 1976 Editorial



The Council of the Norfolk Naturalists Trust, in co-operation with the Norfolk and Norwich Naturalists' Society, is pleased to present the annual report on the birds of Norfolk.

Review of the Year. In the early months of the year short cold spells frequently benefit Norfolk birdwatchers (as opposed to prolonged periods of cold which the County has fortunately not experienced for a number of years). Such conditions often attract an influx of birds from the continent and also result in maritime species appearing inland. This happened in 1976 with a noticeable increase in species such as Goosander and Smew at the beginning of February; Ormesby and Filby Broads were well visited during this period with excellent views being obtained of Great Northern Diver and Red-necked Grebe.

The highlight of the winter and possibly the most surprising event of the year was the discovery of a male Black-throated Thrush at Coltishall on Feb. 21st which stayed until April 3rd. Bird-watchers from all parts of the country came to see the bird which was remarkably tame. Despite the cold spell earlier in the month it is more likely that it had arrived the previous October with other Asiatic vagrants.

In recent years spring, as far as the bird-watching calender is concerned, has been relatively late in reaching Norfolk and 1976 was no exception. There was a predominence of cold easterly winds in both March and April and summer migrants were slow to arrive, especially on the coast. However, in compensation winter visitors were still in evidence up to the end of April including both Goshawk and Red Kite.

The main arrival of summer visitors, and passage migrants, occurred in May. As usual this month produced an interesting selection of vagrants including Purple Heron, Glossy Ibis, Black Kite, Red-footed Falcon, Great Snipe and Serin. Most rarities during May are rarely seen for more than one day but the Great Snipe at Hardley Flood for four days was a noticeable exception, giving many observers very close views from one of the hides.

The most interesting record in June was a Lesser Golden Plover at Breydon. Whereas most records of this species in this country relate to individuals on grassland this bird remained entirely on the mudflats, mostly in the company of a small flock of Grey Plovers.

The breeding success of the County 'specialities' was somewhat variable. The most worrying tend, however, was the dramatic decline in the number of 'booming' Bitterns.

Apart from a Roller in the Brecks, July was a generally uneventful month, characterised as usual by the main commencement of the autumn wader passage.

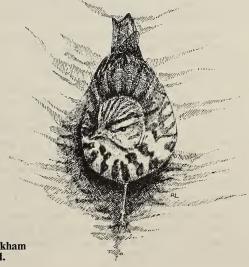
The second half of August and September produced, compared with recent years, an above-average number of 'falls' of continental passage migrants on the north and east coasts. Wrynecks were much in evidence and the variety of migrants included 4 Aquatic and 3 Greenish Warblers. Other vagrants seen during this period included Fan-tailed Warbler (the first British record), Bonelli's Warbler, Radde's Warbler (a very early date and the first record of this species on the east Norfolk coast), Lesser Grey Shrike, Tawny Pipit and Little Bunting. Rare waders were virtually absent in the autumn apart from Great Snipe, with 3 further records, obviously arriving in association with other continental migrants.

There were several noticeable sea-watches in the autumn for those dedicated few observers brave enough to face the onshore gales. Several high counts of

Shearwaters, Skuas and Little Gulls were obtained.

As opposed to 1975, October was generally disappointing owing to the lack of easterly winds. Nevertheless a number of vagrants were seen including a Roller, single Savi's and Arctic Warblers, and Richard's Pipit. The 'hoped-for' fall of Asiatic vagrants eventually occurred at the end of October when 3 Pallas' Warblers, an Olive-backed Pipit, and two Tawny Pipits (of one of the eastern races) were seen. Two observers were also fortunate to see two Cranes land briefly at Holkham during this period. The late autumn was also noticeable for the lack of immigrant Redwings and Fieldfares, which arrived in considerably smaller numbers than normal, a situation which still applied at the year's end. In contrast the end of December saw the arrival of considerable numbers of Wigeon in the eastern part of the County, following south-easterly gales.

Acknowledgements: Thanks are due to G.M.S. Easy for the Black-throated Thrush cover drawing and for text illustrations; also to Dr. A. Beaumont, R. J. Chandler, A. L. Howes, R. Ludford, R. Powley and D. I. M. Wallace for photographs and vignettes; to Holme Bird Observatory N.O.A. for access to their records, to the Norfolk Naturalists Trust Wardens; to the National Trust (Blakeney Point); to the Nature Conservancy (Scolt Head, Holkham, Bure Marshes (Woodbastwick) and Hoveton Great Broad); to the Cambridge Bird Club; to the Gt. Yarmouth



An Olive-backed Pipit remained at Holkham five days. It is the second county record.

Naturalists Society; to D. A. Dorling and P. R. Allard (for compiling the annual record cards); to Mrs. M. Dorling, J. T. Fenton; P. D. Kirby, Mrs. P. A. Rix and Mrs. M. J. Seago for valuable assistance and to all other contributors.

Recording. Records for the 1977 Report (including field descriptions of rarities) should be sent by the end of January to Michael J. Seago, 33 Acacia Road, Thorpe St. Andrew, Norwich NR7 0PP. Contributors are requested to submit notes in the order followed in B.T.O. Guide 13 (A Species List of British and Irish Birds). In order to minimise the work involved, records will not normally be acknowledged. The names of all contributors will be included in the Report. Following boundary adjustments in April 1974, this Report includes records from localities formerly appearing in the Suffolk Bird Report. Following the notification of the establishment of a County Records Committee in the 1975 Bird and Mammal Report, the Committee has considered all submitted records of semi-rare birds seen in the County in 1976. The response for descriptions has been most encouraging and where no details accompanied submitted records, 'follow-up' letters asking for such details resulted in only three negative replies.

Nevertheless the Committee would particularly request that where records of birds are submitted, and also seen by other observers, that the names of the other observers should also be submitted if known. Whilst many birdwatchers visit the County at week-ends and on holidays only a relatively small proportion submit any records (a situation which hopefully will improve). In considering records for 1976 several instances occurred where a description was requested, only to ascertain that the bird in question was seen by many other observers.

In view of the ornithological attraction of the County and the number of observers who kindly submit records, the Committee has had, by necessity, to be selective in asking for written descriptions. In the 1975 report it was stated that such descriptions are required unless the bird or birds were seen by three or more observers. Having had the opportunity of assessing 1976 records in this context it is not proposed to alter this general rule. However, it must be stressed that not all birdwatchers who visitwell-watched localities such as Cley are experienced in identifying certain problematical species and the Committee, in the future, will continue to ask for further details in certain instances. This situation occurred in a small number of cases concerning 1976 records and in two instances the Committee reluctantly determined that the written descriptions were not acceptable.

Having regard to the total number of descriptions submitted only a very small proportion was rejected. The Committee felt that only in a few instances had birds been misidentified; in most cases it was concluded that the written descriptions were inadequate to positively identify the particular species. For example, in the case of Black-throated and Great Northern Divers and Pomarine Skua, records were rejected as the birds were apparently only identified on the basis of their size in flight. With no other species nearby for comparison, size can be deceptive and can lead to misidentification. Sooty Shearwaters, especially if identified at long range, can be confused with dark-phase or immature Artic Skuas, especially if the latter species is seen in gale conditions when their method of flight is similar to a Shearwater. Whilst most records of birds of prey included details of plumage, few included any reference to their method of flight, wing action etc.; these factors can help to positively identify one species from another.

In relation to records for 1977 and thereafter observers are requested to enclose written descriptions where necessary of those species listed in the 1975 report with their records, in order to reduce the administrative burden and cost of postage in requesting further details.



Largest numbers of Greenshank were at Snettisham where as many as fifty assembled in July.

A summary of Greenshank were at Snettisham where as many as fifty assembled in Photo R. J. Chandler

Little Stint autumn passage began in mid-July with a straggler lingering at Breydon Water until the year end.

Photo R. J. Chandler





BLACK THROATED THRUSH

Vagrant from the Taiga Forest

The rarity—be it American or Siberian—is always sought with a zeal and determination peculiar to the avid birdwatcher. Rare warblers and pipits are encountered with some regularity, but the vagrant thrush or lark is distinctly rarer. It was not therefore surprising that the rumour of a Black-throated Thrush seen in Holkham Wood on 21st October, 1975, heralded a mini invasion of 'twitchers' from all parts of the country. Many visitors were understandably disappointed when it left the area after only three days. That was the fifth accepted record of the species in this country, and only the thirteenth record of an Asiatic thrush of the genus 'Turdus' since the first bird recorded was trapped in Sussex in 1868.

The unexpected however always occurs; especially in the world of birds. After a cold spell the following February which drove thousands of starving redwings south from northern England, a male Black-throated Thrush was found on 21st February in a meadow at Coltishall, conveniently just a few yards from a public footpath. This brought a major invasion of bird watchers with numbers estimated at over a thousand in the first three days—and nobody went home disappointed.

This handsome thrush, although superficially similar to the fieldfare is closer in habit to the ring ouzel, being about the same size as the ouzel with the same mode of stance and movement. Its plumage is uniform grey-brown on the head, mantle and back, with much paler rump. The throat and upper breast are black in summer but in the wintering bird this area is heavily streaked black. The belly is white with a slight smoky wash, legs brown, bill dark brown above and orange below.

In their native Siberian breeding grounds Black-throated Thrushes prefer areas of coniferous woodland with clearings and glades. They nest in a young pine or larch, the eggs numbering five or six and similar in appearance to those of the blackbird. The young leave the nest in mid-June migrating southward to northern India, Nepal and Iran in August. The vagrant to Britain usually arrives in October onwards, and one can only wonder at how much farther westward it would travel, fearing that such birds must perish in the Atlantic. A small proportion of the population in the southern extremes of their range are residents descending from the higher slopes to find refuge in the towns and villages. In the winter they search shallow streams, feeding mainly on animal matter, but also taking berries in severe weather. The extreme south-east of the breeding range overlaps with that of the red throated thrush and interbreeding takes place.

This Black-throated Thrush delighted a great many observers during its six-week stay at Coltishall. It is a vagrant from Asia added to the county list as recently as 1975.

Photos by Dr. A. Beaumont and A. L. Howes (inset)

To return to our Coltishall bird—to my knowledge he fed exclusively on worms for in all my visits to the site I never once saw him eat anything else. He was exceptionally tame and would allow observers to watch from very close by—some fencing and bales of straw providing an excellent observation point. Aggressive in manner, he could not abide blackbirds, but was more tolerant of the smaller thrushes. At times he seemed quite taken with his growing fan club and could be seen perched on a nearby drinking trough, puffing out his chest with pride as he surveyed his newly acquired winter territory. Often, when roosting in nearby trees he would sing to himself in sub-song, like a Sylvia warbler. He seemed to gain weight during his 37 day stay—not surprising since he took little exercise apart from his aggressive assaults on invading blackbirds. About half way through his stay he was ringed, and afterwards was noticeably less tame—probably a good thing for he would have been easy prey for the village cats. Towards the end of his stay he was observed to leave the area for a few hours at a time and at the first warm spell he was gone.

GEORGE DORMER



THIS YEAR'S report includes the first fruits of some comparatively new projects in Norfolk: the ringing of Canada Geese while flightless at Holkham, and the regular working of the coastal sites at Happisburgh, Sheringham and Titchwell. The Wash Wader Group on the other hand was established nearly twenty years ago, and the number of birds ringed together with the biometric data on them, is mounting fast. Recent movements to South and West Africa, and to the far north of Canada are mentioned in the Report.

There are plenty of surprises in the following list. Who could have imagined that the swallow they were ringing, weighing and measuring would eventually be found in Bulgaria, or the Jackdaw to Sweden, Robin to Algeria or Firecrest to the far north of Scotland? There are interesting controls of foreign-ringed Sand Martins, a Goldcrest and a Siskin...

Pullus means a nestling, and a control is a bird that is handled by a ringer when it is already carrying a ring fitted elsewhere.

Fulmar

The first long-distance recoveries of our breeding stock for many years:

Sheringham (pullus) 6.8.73 Ardrossan, Ayr (dead) 14.4.76

Sheringham (pullus) 3.8.76 South Shields, Durham (dead) 5.10.76

Cormorant

Iles St. Marcous, Manche, France (pullus) 26.5.73

Breydon Water (dead) 26.12.76

Gadwall

The first Czech Gadwall to be found in Britain; another was found a week later in Lincs.

Divcice, Czechoslovakia (pullus) Stanford Water (shot) 15.12.75

27.6.75

Abberton, Essex 18.8.75 Salthouse (shot) 1.12.75

Wigeon

Late reports from earlier years include these two ringed further afield:

Kholmogory, Archangel, Snettisham (shot) 3.1.69

USSR (pullus) 8.8.68

Loch Moraig, Scotland Burnham Market (shot) 24.9.75 (ad. female) 10.7.74

Shelduck

Salthouse 9.2.72 Heringsand, W. Germany 27.9.76 Salthouse 4.2.73 Kroonspolders, Netherlands (dead) 9.12.75

Canada Goose

Of over 900 caught at Holkham 11.7.76, 16 had previously been ringed at Holme 2.7.75, when 47 were ringed in moult. Of the 500 ringed at Holkham —the rest being released without ring—19 have since been recovered shot or found dead, the furthest being four in the Bury St. Edmunds area of Suffolk during the autumn or winter.

Oystercatcher

The following from well north of the Arctic Circle were found dead in

breeding areas.

Heacham (juv.) 14.11.70 Skavnakk, Finnmark, Norway 1.5.75 Snettisham (ad.) 19.8.67 Sorvik, Troms, Norway 29.7.75

Lapwing

King's Lynn (pullus) 22.6.74 La Haye d'Ectot, Manche, France 1.2.76

Ringed Plover

Illustrating the complexities of wader migrations:

King's Lynn (juv.) 12.8.73 St. Louis, Senegal 20.3.76

Bawsey (pullus) 9.7.75 Sunderland, Durham (injured, died)

1.3.77

Turnstone

Terrington 28.8.72 Alert, Ellesmere Is., Canada (control)

3.6.75

Redshank

Terrington 20.7.74 North Sea drilling rig 53°08'N, 3°19'E

(dead) 8.5.75

Posthuiswad, Netherlands (juv.) Breydon Water (dead) 14.2.76

25.10.75

Knot

North Wootton 31.7.73 Langabaan, Cape, S. Africa (control)

23,12,73

Dunlin

Birds controlled at Terrington July-August 1975 include individuals from Mauritania (Paris ring) and Czechoslovakia. Both had been ringed in autumn

Sanderling

Snettisham (ad.) 31.7.69 Aloen, Ghana (killed) Nov. 1975

Great Skua

From Britain's largest colony:

Foula, Shetland (pullus) 15.7.76 Haddiscoe Marshes (injured) 6.9.76

Common Gull

Illustrating the extent of breeding area represented amongst our autumn/ winter birds:

Kunnati, Estonia (pullus) 7.6.75 Holt (control) 19.12.76 Maasvlakte, Netherlands Salthouse (dead) 2.8.76

(pullus) 5.7.75 Sheringham 3.2.76

Holm Lake, Vasternorrland, Sweden (shot) 24.6.76

Black-headed Gull

Recorded movements fell into the pattern shown in the map on page 29 of the Norfolk Bird Report 1975. 22 foreign recoveries were reported.

Common Tern

A long-lived example:

Coquet Is., Northumberland Holme (dead) 10.7.76 25.6.65

Sandwich Tern

Trischen, Schleswig-Holstein, Brancaster (long dead) 26.8.75 Germany (pullus) 26.6.68

Barn Owl

Note the age of this bird also:

Salthouse (pullus) 27.7.67 Matlaske (dead) 19.12.75

Swallow

Brough, Yorks 28.9.74 Happisburgh (control) 3.5.76 Sheringham (on passage) 8.5.76 St. Osyth, Essex (control) 4.8.76 Happisburgh 19.5.76 Pop Gruevo, Tolbukhin, Bulgaria 31.8.76

House Martin

Ritthem, Zeeland, Netherlands Starston (found dead) Oct. 1975 26.5.72

Sand Martin

The movements from Switzerland are probably unprecedented; other movements involved parts of East Anglia, with single birds travelling to Dorset and Berks.

Yverdon, Vaud, Switzerland Watlington 12.7.75 16.4.75 Locarno, Switzerland 10.5.75 Middleton 12.7.75

De Dikkenburgh, Netherlands Downham Market 10.7.76

15.6.75

Jackdaw

A totally unexplained movement of a bird ringed in winter at a rubbish tip; note also its age.

Salhouse 27,12,66 Skaraborg, Sweden (shot) 1.5.76

Blue Tit

Selly Park, Birmingham (control) Titchwell 25.10.74

22,12,75 Coal Tit

Titchwell 13.10.75 Gaywood (cat) 18.6.76 Long- tailed tit

Six birds ringed at Trimingham 11.10.75 were controlled together at Sheringham the following day.

Bearded Tit

Movement around the Norfolk and Suffolk coastal area continues to be recorded.

Titchwell 22.8.75

Goole, Yorks. (control) 6.11.75

Song Thrush

Juvenile birds moving well south again, one Norfolk-bred, the other almost certainly on migration when ringed:

Ridlington 12.6.75

Armacao de Pera, Portugal (ring only

found) Feb. 1976

Trimingham 11.10.75

Eymet, Dordogne, France (killed)

5.12.75

Redwing

Holme 21.10.75

St. Saviour, Channel Is. 23.11.75

Blackbird

Recoveries were reported from France and other localities north to Sweden and two long-distance movements within the U.K. were to Antrim and Inverness.

Stonechat

Happisburgh 16.10.64

Hornsea, Yorks. (control) 7.2.76

Robin

The 1976 'fall' of Robins produced an impressive list of recoveries: from Holme, from Wicken, Cambs., and from Rochester, Kent, all within the month. Also the following:

Torham, Sweden (juv.) 16.10.76

Sheringham (control) 30.10.76 Tigzirt, Algeria (dead) 14.1.77

Sheringham 2.11.76 Reed Warbler

One of the Reed Warblers mentioned in the Norfolk Bird Report 1975 as controlled at Bexhill was back at Titchwell July 1976.

Blackcap

Note the movement after landfall of an autumn immigrant: Sheringham 23.10.76 Titchwell (control) 25.10.76

Whitethroat

Happisburgh 21.5.75

Purbeck, Dorset (control) 6.9.76

Goldcrest

From the ringing station on the S.W. coast of Norway:

Revtangen, Norway 19.10.76

Sheringham (control) 30.10.76

Firecrest

No comment!

Holme 13.10.75

Wick, Caithness 11.2.76

Meadow Pipit

Sheringham (pullus) 5.7.76 Cauna, Landes, France (dead) 20.10.76

Starling

Many recoveries from France, N. Europe and USSR, and one from the Ekofisk Field.

Goldfinch

Sheringham (control) 8.5.76 Shoreham, Sussex 5.8.75

Siskin

Bras-Menil, Belgium 19.10.75 Titchwell (control) 23.11.75

Redpoll

Recoveries involve movements to Belgium (3), Netherlands and W. Germany. Others show seasonal movement in Eastern England.

Mealy Redpoll

Hadleigh, Essex 7.3.76

Sheringham (control) 30.3.76

Chaffinch

Downham Market 20.12.75 Terjevann, Vest Agder, Norway (pullus) 1.6.76

Helgoland, W. Germany (control) 9.4.76 North Sea (dead on platform) 23.9.76

Brambling

A bird from Ipswich, Dec. 1974, was controlled at Downham Market, Feb. 1976, and two from Downham Market, ringed late in 1975, were found in Beds. and Derbys. (ring in owl pellet) later the same winter.

Titchwell 24.11.75 Mintlyn 15.2.75 Helgoland, W.Germany (control) 18.4.76 Aunay sur Odon, Calvados, France (dead) 24.3.76

Classified notes

These notes are based on *Birds of Norfolk* (1967) where fuller details regarding status, distribution, migration and ringing recoveries may be found. Important records for Wisbech Sewage Farm (part of which is on the Lincolnshire side of the county boundary) have been selected from the files of Cambridge Bird Club. Fuller details of Fens records may be found in the *Cambridge Bird Club Report* for 1976.

The order used is that of the B.T.O. Guide A Species List of British and Irish Birds (1971) and English names follow current practice. Observations refer to 1976, unless otherwise stated. To save space, all but the most essential initials have been omitted. Records are of single birds unless otherwise stated.

Black Throated Diver: North/Wash: Hunstanton Feb. 8th and 17th, March 5th and April 3rd. Holme March 20th and April 18th. Snettisham G.P. Jan. 18th, Wells March 19th. Stiffkey Binks (dead) April 22nd. Sheringham April 14th, 1-2 Oct. 17th to Nov. 20th, dead Dec. 4th. Cley Feb. 29th and Dec. 24th. Weybourne Oct. 30th/31st. East: Winterton Sept. 21st.

Great Northern Diver: North/Wash: Hunstanton, Jan. 4th, Feb. 17th, March 6th, Oct. 9th-10th. Holme, Sept. 23rd, Oct. 6th and 31st. Snettisham G.P. March 9th. Blakeney Nov. 14th. Cley Oct. 7th, 9th, 21st and 24th, 2 on Nov. 23rd. Sheringham May 26th, 2 Sept. 30th, Oct. 30th and Nov. 21st. West Runton, Oct. 30th. East: Winterton 4-7, Nov. 14th. Broads: Flegg Broads Feb. 5th-15th, Martham Feb. 8th, Lower Bure near Breydon Nov. 20th.

Red Throated Diver: North: Sheringham 63 East in 1½ hours Jan. 11th with 68 East in 1½ hours Jan. 24th. Broads: 1-2 Flegg Broads Feb. 14th-April 4th. Breydon Feb. 14th and 25th, East Somerton March 28th. Haddiscoe New Cut Feb. 23rd-March 8th.

Great Crested Grebe: East: Breydon high midsummer counts include 18 in June, 56 in July and 38 in August.

Red Necked Grebe: North/Wash: Holkham Nov. 13th, Snettisham G.P. March 14th, Hunstanton 3, Feb. 7th, Sept. 26th/27th. Wells Oct. 16th, Holme Sept. 26th, Sheringham 2 May 29th, Sept. 30th, Oct. 5th and 30th. Cley Dec. 24th, Salthouse Sept. 12th. East: Winterton Nov. 14th. Broads: Ormesby Feb. 5th-March 26th. Inland: Swanton Morley G.P. Jan. 28th.

Slavonian Grebe: North: Hunstanton up to 3 in Feb., 4 in March and singly Nov. 11th and 17th and Dec. 18th. Cley Dec. 3rd. Holkham 5 Nov. 11th. Holme Feb. 29th. Heacham March 10th. Sheringham March 7th and Sept. 30th. Wash: Snettisham G.P. Feb. 9th. East: California Feb. 11th and 12th.

Black Necked Grebe: North: Hunstanton March 20th and April 16th. Blakeney Harbour in breeding plumage April 30th. Cley Jan. 10th/11th. Broads: Ormesby Feb. 12th-14th and March 10th.

Little Grebe: Breck: 50 Fowl Mere July 25th with 17 on Mickle Mere indicate good breeding success. Wash: Maximum of 48 at Snettisham G.P. in Dec. Broads: Up to 12 at Martham in Feb., at least one pair bred Ormesby with 1-2 pairs in Muck Fleet area. Breydon. 5 pairs bred in adjacent dykes.

Fulmar: North: Total of 48 young counted on cliff ledges between Weybourne and Cromer as follows (JCM): Weybourne to Sheringham 20: Sheringham to West Runton 7; West Runton-East Runton 5; East Runton-Cromer 16. First back in autumn Oct. 23rd. One blue phase bird at Sheringham Nov. 20th. Wash: 50 pairs at Hunstanton from Jan. 7 young in Aug. East: 5 pairs at Happisburgh in June but no evidence of breeding. 1-3 Hopton cliffs in May/June. Inland: Felbrigg June 20th.

Manx Shearwater: North: Holme-Sheringham 1-2 April 22nd-25th and May 13th. 79 east July 28th followed by many records of up to 14 together until mid-Sept. with maxima of 30 off Blakeney Point and 94 off Sheringham Sept. 2nd. Titchwell 5 May 16th, Hunstanton 6 June 19th, 7 Sept. 2nd. Snettisham 6 Aug. 28th, 3 Oct. 10th, Thornham 2 Sept. 15th. East: Waxham Oct. 15th, Bacton 12 July 31st, 5 Aug. 1st. Winterton 4 July 31st.

Sooty Shearwater: Autumn total of over 70. North: Cley/Salthouse 8 Aug. 27th, 5 on 28th, 5 Sept. 2nd. Blakeney Point 2 Aug. 28th, 10 Sept. 2nd, 3 on 3rd/4th. Sheringham 2 July 31st, Aug. 27th, 2 on 28th, 17 west and 4 east on Sept. 2nd, 10 on 3rd and 1 Oct. 30th. Cromer 2 Aug. 27th, Holme 3 Sept. 4th, 4 on 5th, 1 Oct. 3rd. East: Winterton Aug. 28th.

Leach's Petrel: North: Holkham Sept. 10th (TD).

Cormorant: East: Oct. maximum of 158 at Breydon (a record for the estuary) with 14 in July and 18 in August. Broads: Filby, 77 Jan. 4th. Fritton Lake roost, up to 22 in Feb. and 20 in March. Wash: Ouse Mouth, up to 50 present. Fens: Welney, 32 in Dec. roosting on wires. North: Holkham Lake roost of 36, March 14th.

Shag: Many coastal records with maximum of 22 Hunstanton Nov. 7th. 16 at Yarmouth harbour entrance Feb. 4th and 10 roosting on Sheringham cliffs during Oct. Broads: Hickling, singles on May 31st and in Sept./Oct. Breydon, Sept. 20th. Fens: 1-2 on Relief Channel, Denver and on Ouse at Ten Mile Bank, Jan.-Feb.

Grey Heron: The following heronries were counted: Borders of Wash-Snettisham, 19 nests. Fens: Hilgay 33, Islington 51, Denver Sluice 3. Brecks: Didlington 10, Shadwell 6, Hockham Fen, 1. Broads: Belaugh 4, Upton 7, Wickhampton 14,

Strumpshaw 1, Barton 7, Fritton Warren 3, Hemsby Common 1, Reedham Park Carr 5.

Purple Heron: Broads: Cantley immature May 22nd (PRA). Additional 1975 records: Wells Nov. 8th (SCJ & NW), Salthouse Nov. 3rd (JBK).

Bittern: A dramatic decline, with only 9 booming in Broadland and an unmated male at Cley.

White Stork: South: Waveney Valley, bird present in June 1975 stayed until March 20th.

Spoonbill: Broads/Fens/Wash/North Coast: ones, twos and threes between April 3rd and September 12th.

Glossy Ibis: Fens: Wisbech S.F. May 16th-19th (KN, TT et al). First county record since 1952.

Garganey: Spring arrival from April 2nd at Sparham and subsequently at Cley, Breydon, Cantley, Hardley, Hickling, Strumpshaw, Tottenhill G.P., and Winterton. Only breeding records from Ranworth and Breydon.

Gadwall: Brecks: largest counts 150 Stanford August 13th and 65 Fowlmere Sept. 18th. Wash: Snettisham area, 42 on Nov. 21st. Broads: Strumpshaw, 45 June 15th. Filby 32 Aug. 12th. Breydon duck with 7 ducklings.

Wigeon: Fens: Welney, 16,000 in Jan. and no less than 35,000 by late Dec. East: Buckenham 4,500 Feb. 8th. Thurne Levels 1,500 Feb. 22nd. Breydon 6,000 Dec. 31st after SE gales.

Pintail: Fens: Welney 800 at beginning of year and 1,000 in late Dec. Brecks: up to 6 at Stanford, Fowl Mere and Mickle Mere. East: Breydon peaks of 171 Feb. 9th and 123 Dec. 27th. North: Cley c.250 Feb. 2nd and 200 Dec. 26th. Central: Swanton Morley G.P. 5 Jan. 5th.

Shoveler: Breck counts include 32 at Mickle Mere Feb. 8th. Fens: Welney 800 in late Dec. Broads: Filby 95 Jan. 28th, increasing to 146 Feb. 8th and still 115 March 19th.

Scaup: East: Breydon maximum of 23 Feb. 28th; Winterton 23 south Sept 26th. Broads: Filby, Rollesby, Ormesby and Bure at Stracey Arms ones and twos until May 30th and from Nov. 11th. North: Wells 8 Feb. 17th.

Tufted Duck: Breeding records—21 pairs at 4 sites in Brecks, elsewhere a minimum of 10 pairs at 9 sites.

Pochard: Few breeding records submitted, but surprising total of 70 birds of the year at Filby Aug. 7th.

Goldeneye: Maxima as follows—North: 65 at Scolt Head. Wash: 55 at Hunstanton. East: Lound Waterworks 22. Broads: 39 at Ormesby, Rollesby, Filby group.

Longtailed Duck: Wash: Hunstanton monthly maxima—Jan. 17, Feb. 26, March 70, April 20, Oct. 3, Nov. 10 and Dec. 20. Snettisham April 12th and Oct. 31st—Dec. 29th. North coast: occasional records of up to 13 until April 30th and from Oct. 30th. Brecks: Thompson Water 2 Nov. 7th. East: Winterton Oct. 31st and Yarmouth Jan. 3rd. Broads: Hickling Nov. 13th.

Velvet Scoter: Wash North coast: recorded monthly except June/July: maximum 20. East: Gorleston 5 Feb. 10th with 3-4 until April 5th. Yarmouth Feb. 13th and Winterton 2, Oct. 31st.

Common Scoter: Wash: Hunstanton maxima 3,000 in Nov. and 2,000 in Dec. Broads: Ranworth 8 May 30th. Inland: Lyng G.P. April 11th.



Eider: Coastal records each month and largest flocks for main localities given below: East: Gorleston 22, Feb. North: Scolt Head 26, Sheringham 21 in Sept. Wash: Snettisham-Heacham 228 Feb. 1st and Heacham 250 March.

Red Breasted Merganser: No numbers reported apart from the Wash where 58 at Snettisham in Feb. and 40 at the end of the year. East: Breydon 8 Jan. 4th. Fens: Denver Sluice/River Ouse at Ten Mile Bank parties of 5 and 9 in Feb.

Goosander: Winter observations from 21 localities including 11 at Breydon, 6 at Fritton and Stanford, 7 at Sheringham and 8 at Didlington.

Smew: Winter records of up to 4 at 14 localities, with up to 9 at Hickling Feb. 8th when arrivals noted elsewhere.

Shelduck: Wash: Snettisham maximum of 2,087 in Feb. Total of 150 young, Vinegar Middle June 27th. East: Breydon, winter peak of 729 Dec. 26th where interesting easterly exodus of 32 June 11th. Breeding records include 2 broods at Hickling, 105 young at Cantley B.F., 76 young at Hardley Flood, single broods at Hoveton Great Broad and Stanford Water, and several broods at Welney.

Egyptian Goose: Reported at Sparham, Swanton Morley, Lenwade, Bayfield, West Runton, Holkham, Wells, Salthouse, Gunton Park, Filby, Fritton and Hardley Flood.

Grey-lag Goose: East: Breydon, gaggle of 14 of the pink-billed Eastern race joined feral birds Jan. 26th-30th.

White Fronted Goose: East: Breydon area, 1-3 in Jan./Feb. Maximum of 146 Dec. 30th with 93 next day. Elsewhere in Yare Valley up to 16 Jan./Feb. and 7 in Dec. Broads: Hickling 58 Feb. 22nd and 26 Dec. 17th. North: Cley, 6 in Jan. 13 in March and 38 in Dec. Holkham, 80 in Jan. up to 150 in Feb. and March and 173 in Dec.

Bean Goose: East: up to 91 in usual area until Feb. 21st. 15 returned Nov. 1st with 33 on 4th and 71 by Dec. 9th. Breydon, up to 4 between Feb. 1st and March 20th and 5 Nov. 27th onwards. California, one dead on beach Feb. 12th. North: Holkham 2-8 between Feb. 1st and March 5th and 5 in Dec. Holme, 5 Feb. 14th. Cley up to 3 Jan. 30th-Feb. 17th and 4 Dec. 24th-29th. Fens: Welney, one during Feb. Wash: Snettisham 14 Jan. 10th.

Pinkfooted Goose: East: Single with Beans, Halvergate March 15th-20th, but none wintered. Wash: Snettisham area, peaks of 3,500 mid-Dec. and 2,710 in Jan., leaving second week in Feb. Last flock of 65 March 1st. Returned Oct. 27th (40) and 2,300 by end of Nov. North: Holkham, maximum of 18 March 5th and 250 Dec. 27th. Cley, 32 west Nov. 11th. Fens: Welney, 40 Dec. 6th.

Brent Goose: Maximum numbers at regular localities were: Breydon 121, Wells 1,800, Blakeney 1,350, Salthouse 250, Brancaster 1,200, Hunstanton-Holme 300, Snettisham 970 and Terrington Marsh 130. Recorded every month except June/July. At Cley exceptional numbers offshore Jan. 23rd when 740 west in $1\frac{1}{2}$ hours off Sheringham and 730 west there Nov. 14th. Unusual Sept. movement north off Winterton where total of 162 between 19th and 26th. Inland: Colney G.P. 6 Jan. 31st.

Barnacle Goose: East: Horsey 28 Feb. 29th with 2 at Breydon same day. Hardley Flood Dec. 26th onwards. North: Cley, 4 Oct. 30th, 8 Nov. 23rd, 14 Nov. 29th 12 Dec. 5th-8th, Salthouse 4 Nov. 1st, 8 Nov. 20th, Stiffkey, 17 Nov. 17th and West Runton, 10 Nov. 13th. Wash: Snettisham, 4 with Pinkfeet Nov. 20th.

Whooper Swan: Recorded up to March 21st and from Oct. 30th at 10 localities, with largest herds at Welney (48) and Hickling (46).

Bewick Swan: Recorded up to April 27th and from Oct. 13th. Largest concentration at Welney Washes where 1,000 in early Jan. and again at end of year. Elsewhere most impressive assemblies on Lower Bure marshes (219 Dec. 26th), Acle Bridge (117 Feb. 8th), Halvergate (118 March 20th), Heigham Holmes (100 March 14th), Clipresby (68 March 14th) and Filby Broad (51 March 20th). In Brecks, maximum of 9 at Fowl Mere. Easterly March exodus noticeable on 17th (50 + Sheringham) 19th (Cley 31) 23rd (Cley 18) 24th (Cley 11) and 26th (Breydon 12).

Buzzard: North: Felbrigg May 11th, Holt March 13th, Sheringham Feb. 8th-28th, Sept. 21st-Nov. 4th. Holme Oct. 24th and 28th/29th. Cley Sept. 7th. Wash: Snettisham Sept. 20th. Fens: Wisbech S.F. Sept. 28th. East: Breydon Nov. 9th, Fritton March 8th, Ormesby Feb. 29th, Hickling March 21st, Winterton April 4th-11th with 3 on 17th and Nov. 9th, Haddiscoe Dec. 26th.

Rough Legged Buzzard: East: Halvergate March 1st, Hickling Jan. 14th and May 1st, Caister-on-Sea April 29th, Ebridge Mill 1-2 April 19th, Winterton 4 April 17th, 3 on 24th, 1 on 29th, May 9th and Nov. 7th.

Sparrow Hawk: recorded from 32 localities but only known to have bred successfully at two sites. Migrants at Winterton April 4th-May 2nd with at least ten on first date.

Goshawk: Brecks 1-2 between March 21st and May 28th with a juvenile Sept. 26th. East: Winterton 2 April 24th, 1 May 2nd and another in from the sea Oct. 31st. Additional 1975 record: Brecks Dec. 21st.

Red Kite: An exceptional year. East: Breydon May 5th (PRA) Halvergate April 4th (LR) Gorleston March 26th (CHB) Hickling April 11th (JRW, SL), North Walsham/Ebridge April 1st (KB). North: Holme and Titchwell May 15th (HBO), Foulden June 15th (AJH). Doubless some of the records relate to the same birds.

Black Kite: Broads: Horsey May 2nd (BPO, MDO, PW, RW).

Honey Buzzard: North: pair present at one site from May 22nd, no proof of nesting but up to 4 present in August. Wells Oct. 11th-16th observed tearing out a wasp's nest at close range. Holme Sept. 16th, 2 Oct. 6th. Holkham Oct. 12th. Cley/Blakeney Nov. 7th, Blakeney Point Sept. 17th. East: Winterton Sept. 26th.

Marsh Harrier: Five pairs nested at 4 sites, 3 pairs were successful rearing a total of 8 young to free-flying stage. North: Titchwell, 6 east to west May 3rd. Wash: at least 15 roosting in one area Aug. 31st. Birds dispersed in early Sept. with last one Oct. 21st.

Hen Harrier: Recorded up to May 6th (Winterton) and 15th (Holme) and from Sept. 12th (Winterton). Many records from coastal localities, including 6/7 in Scolt Head/Titchwell area March 8th. Other totals include 3 at Winterton/Horsey and 4 Roydon Common.

Montagu's Harrier: North: female at former breeding site on 3 dates early/mid May. Cley May 5th and 15th/16th when doubtless same individual at Sheringham and between Hunstanton and Heacham. Wash: Snettisham May 12th. East: Winterton May 15th, Horsey June 26th and Hickling May 14th and Aug. 22nd.

Osprey: Recorded between April 30th and Oct. 15th at Catfield, Cley, Holme, Horsey, Hunstanton, Rockland, Snettisham, Strumpshaw, Wells, Wheatfen and Wisbech S.F.

Hobby: North: Cley 1-2 almost daily throughout summer. Holkham May 30th, Sheringham on 12th and 18th, Holme on 24th and Aug. 4th and Holt June 24th. East: Hickling 2 Aug. 19th and Happisburgh April 25th. Central: Barnham Broom injured Aug. 27th.

Peregrine: North: Old Hunstanton June 5th, Hunstanton Oct. 17th and Sheringham May 15th. East: Winterton/Horsey Feb. 29th, April 4th, 11th and 17th and May 12th. On two occasions bird carried falconer's jesses.

Merlin: Recorded at Postwick, Martham, Holkham, Breydon, Winterton, Horsey, Roydon Common, Hickling, Holme, Yarmouth, Wells, Sheringham, Titchwell, Wisbech SF, East Wretham and Snettisham, up to April 13th and from Sept. 18th. Mainly singles but 3 at Roydon Common and 4 at Winterton.

Red Footed Falcon: North: Holme May 15th (HBO) and Salthouse Heath on 17th (DHS).

Quail: Calling during summer at Felthorpe, Cley, Alderford, Morston and Titchwell.



A Honey Buzzard stayed at Wells six days, where many observers watched it tearing out a wasp's nest.

Golden Pheasant: Recorded from East Wretham, Wayland Wood, Thompson, Great Cressingham, Swaffham Heath, Brettenham Heath (30-40 in Nov.) and St. Helen's Well.

Crane: North: 2 Holkham Oct. 29th (GD).

Spotted Crake: Fens: Wisbech SF Aug. 31st, Oct. 10th and 23rd. Coot: Broads: Totals of 556 Filby Broad Feb. 8th and 381 Aug. 7th.

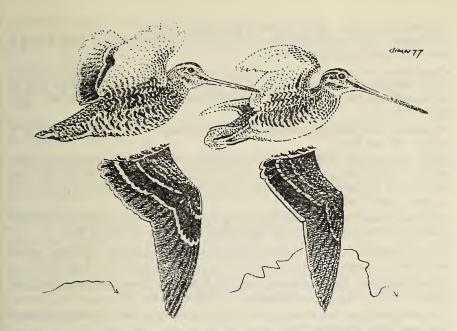
Oystercatcher: Breeding records of pairs include: East: Breydon area 5 (including 2 pairs for the first time on the actual estuary). North: Weybourne 3, Blakeney Point 200, Stiffkey Binks 23, Wells 13, Burnham Overy Channel 5, Bob Halls Sands 4 and Scolt Head 160-165 (only 40 young reared). Maximum count of 12,900 at Snettisham in Jan.

Lapwing: A large exodus March 13th when 6,000 per hour passing east at Sheringham.

Ringed Plover: Breeding records of pairs include: East: Yarmouth North Beach 1, Hemsby 1, Winterton-Horsey Gap 10-12, Waxham 1 and Happisburgh 2. Broads: Hickling 1 (successful). North: Blakeney Point 160, Stiffkey Binks 5, Wells 6, Burnham Overy Channel 5 and Scolt Head 120-130. Wash: Snettisham 12 and Lynn Point-Ongar Hill 2. West: Tottenhill GP 1, Bawsey 1 and Mintlyn 2.



Dotterel were recorded at Happisburgh, Hunstanton and Blakeney Point.



Great Snipe (left) and Snipe. Note on former greater bulk and broader wings, shorter bill, axillaries and under-parts barred overall (lacking prominent white belly of Snipe). Note also on Great black central wing panel with obvious white borders (but lacking very dark secondaries with white trailing edge of Snipe). Birds illustrated are immatures in autumn. This figure corrects that of flying birds in *British Birds* (69: 377-383). Arrowed lines indicate manner of escape flight, short and ending in sudden fall in Great.

Little Ringed Plover: Breeding: 16 pairs at 10 sites rearing a minimum of 14 young but undoubtedly under-recorded. First recorded at Swanton Morley GP March 27th but apart from Hardley Flood few records of migrants in spring away from breeding localities. More widespread in autumn with maxima of 7 at Wissington BF and Cley, 6 at Hardley Flood and 5 at Hickling and Wisbech SF, where latest Oct. 9th (2).

Kentish Plover: East: Breydon May 1st. and 18th/19th and June 8th/9th. Winterton female June 2nd-4th and 13th. Broads: Hickling May 20th. North: Cley April 11th-14th, irregularly May 2nd-26th, June 16th and July 31st. Blakeney Point May 9th and Aug. 28th, with a pair for a fortnight from June 7th.

Grey Plover: A late Spring passage with up to 420 at Snettisham in May. A noticeable exodus at Titchwell May 26th with 200 flying north-east. In Autumn peak of 560 at Snettisham in Aug. and an unusually high number of 104 at Breydon Oct. 5th.

Golden Plover: Largest concentration of 3,100 St. Benet's Level/Upton Level Oct. 9th. One of the Northern form in summer plumage on Breydon Saltings May 16th until the late date of June 19th.

Lesser Golden Plover: One in full breeding plumage at Breydon with Grey Plover June 8th-17th (PRA *et al*). The second county record.

Dotterel: East: Happisburgh 10 May 12th decreasing to 6 the next day. North: Hunstanton golf course 3 May 24th-27th and Blakeney Point 2, followed by a single bird, all flying westwards Sept. 17th.

Turnstone: Maximum count of 760 at Snettisham in Jan.

Jack Snipe: A late bird at Winterton May 1st. First autumn records, Filby Broad 2 Sept. 15th and Hickling on 16th.

Great Snipe: An unprecedented number of records: Hardley Flood May 25th-28th (JCE, DJH, *et al*), Blakeney Point Aug. 28th (CRH *et al*), an immature shot at Salthouse Sept. 18th (specimen in Norwich Castle Museum) and Holkham Sept. 26th (GJJ *et al*).

Whimbrel: East: Recorded at Breydon on most days in June with maxima of 7 on the 5th and 26th.

Black Tailed Godwit: Fens: at least 6 pairs bred at Welney. Elsewhere 3 pairs bred. Winter records, Breydon Jan. 21st. Cley Feb. 15th and up to 5 Snettisham until end of year. Passage birds between Feb. 28th and Nov. 13th with maximum of 14 at Wells Sept. 30th.

Bar-tailed Godwit: East: Breydon spring peak of 121 April 20th with autumn maximum of 50 Sept. 20th. Wash: Snettisham maximum of 2,600 in Sept.

Green Sandpiper: Largest autumn concentrations recorded at Hickling, where maximum of 32 Aug. 8th and Cantley BF, where maximum of 20 Aug. 22nd.

Wood Sandpiper: Spring passage May 4th-June 3rd. Two Cley June 21st. Few autumn records received; maximum of 8 Hickling Aug. 15th.

Common Sandpiper: Maximum of 40 at Wisbech SF Aug. 14th. Late birds at Breydon Nov. 27th and Dec. 27th.

Redshank: North: Breeding records include 22 pairs Blakeney Point and 30 pairs Scolt Head. Largest numbers noted at Breydon where up to 1,500 in second half of March. A dead bird at Breydon March 2nd was of the Icelandic race.

Spotted Redshank: Earliest record, Breydon March 18th. Main passage commenced April 22nd with, as usual, a considerable number of records in June including 4 summering birds at Breydon. Largest autumn passage noted at Hickling, Cley and Snettisham where up to 25 in early Sept. Wintering birds in Dec. at Breydon and Cley.

Greenshank: Winter records from Holme and Titchwell in Jan. and Thornham in Feb. Passage April 18th-Nov. 17th including birds throughout June. Largest numbers recorded in autumn at Holme and Snettisham, where over 50 in July, up to 34 in Aug. and 25 in Sept.

Knot: Maximum count of 20,000 at Snettisham in Oct. Inland records include 7 at Hickling April 19th and one at Hardley Flood July 30th.

Purple Sandpiper: Regularly recorded at the traditional wintering localities in the Wash (up to 6 at Snettisham and Hunstanton and up to 4 at Heacham) and at Sheringham (up to 2 in first winter period). Noted up to April 19th with isolated records also from Yarmouth, Winterton, Overstrand and Morston. Apart from one at Bacton on Aug. 6th birds in second winter period recorded only in Wash and along North Coast. A noticeable number of mainly single birds flying westwards along North Coast in Aug. and Sept.

Little Stint: One at Cley on Jan. 1st. Spring records: Hickling 3 April 23rd, 14 June 8th and 6 June 10th. Breydon 5 June 17th with 4 next day and Cley singles May 16th and May 30th-June 1st with 4 June 13th and 26th. Autumn passage commenced July 14th culminating in peak numbers at end of Sept. when at least 100 at Cley. One at Cley on Dec. 11th with another remaining at Breydon until Dec. 29th.

Temminck's Stint: North: Cley May 12th-19th, May 30th, July 14th-18th, July 26th and Aug. 7th-11th. Salthouse May 15th and Holme May 21st. Broads: Hickling July 28th and Aug. 25th. Fens: Wisbech SF July 17th/18th. Inland: Sparham GP May 20th-23rd.

Pectoral Sandpiper: North: Cley Sept. 17th-Oct. 10th. Broads: Hickling Sept. 9th-26th. Wash: Snettisham juvenile trapped Oct. 24th. Fens: Wisbech SF Sept. 15th-25th.

Dunlin: East: Breydon maximum spring total of 2,000 April 30th. Wash: Snettisham maximum of 8,000 in Aug.

Curlew Sandpiper: Only one spring record received—Breydon May 28th. One in summer plumage Cley July 4th. Main autumn passage of adults commenced July 25th with juveniles from Sept. 11th; numbers generally low with maxima of 10 at Breydon and Wisbech SF. A late bird at Breydon Nov. 19th.

Sanderling: Wash: Snettisham, up to 360 in May and 650 in July. East: an interesting series of records of up to 64 birds feeding regularly on grass-covered Gorleston Cliffs Feb. 9th-March 22nd. Inland: one standing in the road between A1076 and Weston Longville following severe gales Jan. 30th.

Ruff: Recorded at a variety of localities in winter months including Yarmouth, Caister, Cley, Hardley Flood, Halvergate Marshes, Hickling, Lower Bure Marshes and Welney, where up to 100 early March. Breeding: a few pairs may have nested at Welney but no proof.

Avocet: East: Breydon Jan. 16th, April 19th, 3 May 7th/8th, May 19th/22nd and Oct. 11th. Broads: Hardley Flood April 4th and 7 April 23rd. Hickling April 28th and 2 June 7th. North: Cley Feb. 28th, 1/2 April 2nd-June 16th, 3 Oct. 9th. Holme Dec. 5th. Wash: Snettisham May 14th, 4 May 15th and May 16th-18th.

Grey Phalarope: East: Breydon Jan. 24th (PRA, CJG). North: off Blakeney Point Sept. 13th (MAB), Cley Oct. 14th (GC) and Oct. 30th (BWJ).

Red-necked Phalarope: East: Winterton flying south Sept. 26th (PRA, ADB, TEB). Broads: Hickling July 12th and 31st (SL).

Stone Curlew: A Nature Conservancy survey revealed a Breckland total of 61 pairs including 30 pairs on the Norfolk Breck.

Great Skua: An unusual number of winter records:- Cley Jan. 4th, Sheringham Jan. 25th, between Snettisham and Heacham Feb. 1st and Hunstanton Dec. 19th. East: singles off Winterton Sept. 12th, 19th and 21st and Gorleston Oct. 18th. One released at Yarmouth Sept. 7th (ringed on Foula) having been injured the day before at Haddiscoe Marshes by striking power lines. North/Wash: autumn records Aug. 28th-Nov. 14th with large weather movements on Sept. 2nd when 231 east off Sheringham in 10\frac{3}{4} hours. 14 over Ouse Mouth flying westwards inland on Sept. 10th.

Pomarine Skua: One winter record, 2 east at Sheringham Jan. 3rd. East: Winterton Aug. 28th, Sept. 5th and Oct. 10th. Yarmouth Oct. 18th. North: West Runton 14 Oct. 30th and one Oct. 31st. Sheringham Aug. 28th, two Sept. 2nd, Sept. 3rd, two Sept. 10th, Sept. 12th and 15th, 5 Oct. 25th, Oct. 28th, 15 Oct. 30th, two Nov. 13th, 7 Nov. 22nd and one Nov. 23rd. Weybourne 3 Oct. 25th and 4 Oct. 30th. Salthouse 3 Sept. 2nd. Cley two Aug. 28th, Aug. 29th, Sept. 12th and 15th, Oct. 10th and 25th, 5 Nov. 17th and one Nov. 23rd. Blakeney Point 3 Sept. 2nd. Wells 6 Oct. 30th. Holme Aug. 13th, Sept. 16th (flying inland) and Oct. 28th. Wash: Hunstanton 2 Sept. 2nd and one Oct. 24th.

Arctic Skua: One spring record, Cley May 26th. East/North/Wash coasts: main

autumn passage July 25th-Nov. 23rd with largest gale movements on Sept. 2nd when 150 east off Blakeney Point and 165 east off Sheringham. A late bird at Holme Dec. 12th. Brecks: one flying south over Foulden-Watton Road Sept. 12th.

Long-tailed Skua: Blakeney Point Aug. 30th (RMC), Sept. 12th (AJL) and 13th (PNC) and Salthouse Sept. 2nd (BWJ).

Lesser Black-backed Gull: An unusual concentration of 91 adults (mostly showing characteristics of the Scandinavian race) and an unknown number of immatures in a field at Rollesby Sept. 16th.

Herring Gull: Yellow-legged birds at Sheringham May 15th and Breydon July 21st.

Common Gull: North: a pair nested at Blakeney Point rearing one young.

Glaucous Gull: East: Yarmouth Feb. 19th and 23rd. North: The regular adult in the Cley-Sheringham area up to April 16th and from Aug. 18th; also occasional records of immatures including 2 at Cley Jan. 3rd and Scolt Head March 28th. Wash: Hunstanton immature Jan. 4th with an adult and different immature Feb. 4th.

Iceland Gull: A second-year bird at Holme Feb. 14th (HBO).

Mediterranean Gull: A total of 7 records. A first year bird at Morston Jan. 24th (DJH, SCJ), a second-year bird at Yarmouth Feb. 18th (PRA), a second-year bird west at Sheringham April 3rd. (JCM, DHS, KBS), a first-year bird also west at Sheringham June 1st (SA), an adult in summer plumage at Cley July 4th (JHM) and immatures at Winterton Aug. 8th (PRA) and west at Cley Sept. 12th (KB).

Little Gull: In early part of year only four records received:- Chedgrave Jan. 11th, Sheringham Feb. 2nd, Filby Broad April 19th and Sheringham April 23rd. Passage birds May-Nov. with unprecedented numbers in Sept. and Oct. North: at Sheringham in Sept. 21 east on 22nd, 35 on 23rd, 21 on 24th and 32 on 26th; in Oct. a total of 238 east on 30th in a north-easterly gale with 39 on 31st, when 42 also east at West Runton. East: 32 north at Winterton Sept. 26th, 23 south at Yarmouth Oct. 2nd, 21 south-east at Cart Gap in one hour Oct. 16th, 33 south at Yarmouth Oct. 18th and 44 south-east at Waxham in half an hour Oct. 19th.

Black-headed Gull: Successful breeding noted at Cantley BF where approximately 100 pairs present. No information from other sites.

Sabine's Gull: An adult in summer plumage east at Sheringham Aug. 20th (JMH, PP, KBS).

Black Tern: Spring passage May 5th-June 14th with only one noticeable movement, 38 east at Breydon May 24th. Only a very small-scale autumn passage from Aug. 18th (no flock exceeded 10 birds) with late records at Swanton Morley GP Oct. 17th and Yarmouth on 19th.

White-winged Black Tern: North: Cley adult west June 14th (JBK).

Common Tern: Pairs at breeding sites (number of fledged young in brackets where known) include:- Wash: Snettisham 75 (only 5). North: Scolt Head 450 (320), Bob Halls Sand 13, Stiffkey Binks 130, Blakeney Point 1500-1600, Cley NNT reserve 9 and Salthouse 4. East: Scroby Sands 50. Broads: Ranworth 29, Martham 3, Ormesby 5 (5), Hardley Flood 11 (27), Hoveton Great Broad 4 (8) and Cantley BF 1. Inland: Swanton Morley GP 1 (1). A late bird at Lenwade Nov. 6th.

Arctic Tern: Breeding: Two pairs each at Scolt Head and Blakeney Point. 5 north at Sparham GP April 25th. A bird of the 'Portlandica' phase at Winterton June 8th. An unusual number of birds off Cley in Sept. and Oct. (latest on 26th) with maximum of 27 Sept. 12th.

Roseate Tern: Only one accepted record, one west at Cley Sept. 4th (NJR).

Little Tern: Breeding records (number of fledged young in brackets where known) include: North: Thornham 25-30, Titchwell 32, Brancaster 14, Scolt Head 72 (17), Overy Channel-Wells 40, Stiff key Binks 28, Blakeney Point 170-200 and Salthouse 4. East: Scroby Sands 15 (first time since 1963), Sea Palling-Waxham 11 (15), Waxham-Horsey Gap 3, Horsey-Winterton 45 (15), Winterton 4 (unsuccessful), Winterton-Hemsby 5 (1) and Caister-on-Sea one (unsuccessful). Broads: Hickling 3. An inland spring record at Downham Market May 6th. A late bird at Holme Oct. 17th.

Sandwich Tern: Breeding: North: 4,000 pairs at Scolt Head (minimum of 4,000 flying young) and 45-50 pairs at Blakeney Point (6 flying young). East: 200 pairs on Scroby Sands. Earliest record, Sheringham March 28th. Inland: two at Tottenhill GP June 19th and one at Lenwade GP Sept. 23rd. Last recorded at Weybourne Oct. 27th.

Razorbill: North: Sheringham 196 east April 23rd.

Little Auk: North: Cley Nov. 1st, Sheringham Jan. 3rd, 25th and Oct 31st.

Black Guillemot: North: Holme and Hunstanton March 20th, Wells Jan. 3rd-29th and Dec. 19th.

Puffin: North: Holme to Sheringham parties of up to 8 recorded Jan., Feb., April, May and Aug. to Nov. East: Winterton (dead) Feb. 21st, Horsey (dead) May 1st and Caister-on-Sea April 25th.

Woodpigeon: North: Sheringham 1,100 west May 22nd. East: Winterton 72 headed out to sea with jackdaws April 4th.

Turtle Dove: North: Holme, remarkable total west May 15th with one flock of over 500. Sheringham 221 west May 16th, 253 west on 22nd and 253 west June 5th. Wash: Snettisham 500 late Aug./early Sept. East: Yarmouth/Gorleston 1-2 with Collared Doves Oct. 9th-30th with one till Dec. 16th.

Collared Dove: North: largest gathering 150, Holkham in Feb.

Barn Owl: Recorded at 74 localities. East: Hemsby, one with characteristics of the dark-breasted race April 18th (PRA).

Little Owl: Recorded at 31 localities.

Long Eared Owl: Single pairs bred at Weeting Heath, and East Wretham. Breeding season records from Brancaster, Hardley Flood, Brandon, East Somerton, Trowse, Felthorpe and Haveringland. Elsewhere recorded at 18 localities including up to 4 roosting at Massingham and 10/11 roosting at Brancaster. One on a gas production platform 40 miles N.E. of Yarmouth first week of Feb.

Short Eared Owl: Breeding season records at Rockland, Upton and Fleggburgh Common. 1-2 migrants in coastal localities until May 16th, only 2-3 autumn sightings. Maximum winter totals 5 at Wickhampton and 4 at Breydon.

Nightjar: Singing males noted from May 21st as follows: Brecks: Grimes Graves 3, Snakes Wood 2, Croxton Park 2, Home Mere 2, Thorpe Belt 1, Devil's Punch Bowl 1. West: Roydon Common 2, Leziate 1. North: Salthouse Heath 6. East: Winterton 1, a new locality. Central: Horsford/Felthorpe 5.

Swift: North: Hunstanton 3-4 pairs nested in the cliffs. Autumn exodus later than usual, with almost 50 October records from well scattered localities, the majority coastal. The latest at Holkham, Nov. 2nd.

Alpine Swift: 1975 record not previously published, Salthouse Heath, June 19th (JPG et al).

Kingfisher: Breeding confirmed at only 3 localities—Cantley BF, Strumpshaw and Wheatfen. Please notify all definite breeding records.

Roller: Brecks: Hilborough July 20th (TA). Broads: Upton Oct. 4th (AJD).

Hoopoe: 6 records as follows: Yarmouth April 18th, Holme April 20th-26th, West Walton May 4th, Horsey May 6th, Snettisham May 8th and Belton July 2nd-8th.

Wryneck: In Spring reported in May at Holme and Hunstanton GC on 1st; Wells, Weybourne and Sheringham on 2nd; Narborough on 6th and Happisburgh on 18th. In Autumn, two main influxes, the first during the last week of August with birds at Brooke, Cley/Blakeney Point (10), East Tuddenham, Fleggburgh Common, Gorleston, Hickling, Holme (3), Hunstanton GC (3), Morston, Sandringham, Scarning, Sheringham (5), Snettisham, Titchwell, Wells (3), Winterton (2), Wolferton, Worlingham and Yarmouth (5). The second influx mid to end of September with birds at Burnham Overy, Cley/Blakeney Point, Cringleford, Holme (3), Holt, Mulbarton, Overy Staithe, Sheringham (3), Swanton Abbot, Thetford, Wells, West Beckham and Yarmouth (2). A late bird at Blakeney Point Oct. 24th.

Woodlark: Recorded during breeding season in Brecks at Brandon, Broom Covert, Frog Hill, Lynford, Santon Downham, Santon Warren, St. Helen's Well and Weeting (2 sites). In North Brancaster Jan. 10th (2), Wells March 21st and Holme Oct. 9th. In East, one singing at Winterton March 1st.

Shorelark: North: extreme dates May 4th and Oct. 9th. Reported from following localities, with maximum counts in brackets—Holme (5), Titchwell, Holkham (5), Stiffkey (17), Blakeney/Cley/Salthouse (35) and Sheringham (7). East: extreme dates May 2nd and Oct. 31st. Reported from Happisburgh, Waxham, Hickling, Winterton and Breydon (9).

House Martin: An albino at East Wretham Sept. 19th. November records included a late brood at East Tuddenham, which left the nest on 1st, 15 at Sheringham on 9th and the last at Thetford on 13th.

Sand Martin: Spring arrival from March 14th (Salthouse). A very pale, almost white, leucistic bird, with brown axillaries at Cley Aug. 1st. Four October records with the last at Cley on 21st (2).

Golden Oriole: North: Wells, male singing, May 24th (IAP).

Hooded Crow: Maximum winter counts: West: Dersingham Common 72 Feb. 11th and 50 Dec. 5th. Sandringham Common 30 Jan. 20th. North: Weybourne 32 Nov. 1st. East: Winterton 79 April 3rd; Breydon 26 Nov. 4th. At Sheringham one interbred with a carrion crow, rearing five young.

Jackdaw: East: Winterton, Spring emigration as follows, with parties of birds flying out to sea: 105 March 28th, 73 April 4th and 11 April 17th.

Wren: A complete albino at Acle, Oct. 19th.

Bearded Tit: North: Bred at Titchwell (15 pairs), Overy Staithe (2 pairs) and Cley. Broads: Bred at Cantley (10 pairs), Strumpshaw (1 pair, a new site), Hardley Flood (2 pairs), Hickling (perhaps 100 pairs) and Horsey.

Black-Bellied Dipper: In first three months of year recorded as follows: North: Glaven at Hempstead Mill Jan. 3rd-Feb. 17th. Broads: Ormesby Jan./Feb. Central: Wensum at Taverham Mill Jan. 16th-Feb. 27th and at Lyng Feb. 1st. Bure at Buxton Mill Jan. 14th-24th and Feb. 29th, Horstead Feb. 15th-23rd, Crostwick Bridge Feb. 18th to March 14th, Spixworth Bridge Feb. 21st. Tud at Honingham Jan. 1st-29th and Costessey Feb. 21st-23rd. In December recorded on Yare at Barnham Broom Dec. 18th and Keswick Mill Dec. 28th; on Tud at Honingham mid-Dec.

Fieldfare: East: a pair summered in a coastal locality, also recorded at Hickling May 29th and June 4th. First autumn bird Cley Aug. 23rd.

Redwing: Extreme dates May 8th (Holme) and Sept. 1st (Wells). In addition a pair summered in a locality in East Norfolk, at which the male was heard singing on a number of occasions.

Black-throated Thrush: Central: Coltishall male Feb. 21st-April 3rd (RML et al). The second county record of this vagrant from Asia, appearing only four months after the first.

Ring Ouzel: Spring: recorded April 3rd-May 8th, with maximum of 9 at Wells and Winterton May 2nd. A late male at Winterton May 31st-June 3rd. Autumn: recorded Sept. 18th-Nov. 5th, with maximum of 4 at Cley/Blakeney Point Sept. 25th/26th and 4 at Yarmouth Oct. 30th.

Wheatear: Spring arrival from March 6th (Snettisham). Bred at Weeting Heath (35 pairs) and Salthouse (1-2 pairs). An unusual number of late autumn sightings, with 6 in November (Breydon and Snettisham 3rd, Norwich Airport 5th, Stoke Ferry 6th, Sheringham 9th and Gorleston 13th).

Stonechat: Breeding pairs at Weybourne in North, and from East at Horsey/Hemsby (10) and Breydon (2). Maximum winter count, 10 Holme Feb. 29th, while a total of 24 (7 ringed) passed through Happisburgh Oct./Nov.

Whinchat: During breeding season a pair at Fowl Mere May 16th, but no evidence of nesting. Very late birds recorded at Breydon Nov. 9th-13th and Upton Nov. 20th.

Redstart: Extreme dates April 24th (Winterton) and Oct. 31st (Holkham and Sheringham). Recorded during breeding season in Brecks at Cressingham Arms (1 pair), Two Mile Bottom (2 pairs), Weeting (1 pair) and Thetford Forest (1 pair in nesting box); and in North at Felbrigg (male in song in May).

Black Redstart: Breeding: Yarmouth 10 singing males with proof of breeding at 2 sites, autumn song Sept. 27th-Oct. 17th. Norwich 2 singing males, but no evidence of nesting. Hunstanton immature in town garden July 18th. Migrants: maximum spring count 6 Winterton April 3rd and autumn 7 Happisburgh Oct. 26th.



Ten singing male Black Redstarts spent the summer at Yarmouth.

Nightingale: The B.T.O. National Nightingale Survey revealed the following singing males in the county: Brecks: Brandon/Santon 4, Didlington 3, Foulden Common 7, Narborough 5, Quidenham 1, St. Helens Well 1, Thetford 2 and Weeting 1. Fens: Stoke Ferry 3. West: Roydon Common 2. North: Salthouse Heath 7 and Weybourne 1. Central: Alderford Common 1, Costessey 1, Lenwade Common 2 and Ringland Hills 1. Negative returns were received from Braconash, Attleborough, Felbrigg and West Runton.

Bluethroat: Spring: Titchwell May 15th-17th (male red-spotted). Autumn: Winterton Aug. 22nd, Blakeney Point Aug. 28th (2) and Sept. 16th-20th, Holme Sept. 19th, Overy Staithe Sept. 26th-28th. Additional 1975 record, Burnham Overy Sept. 13th.

Robin: Two significant autumn falls, each involving several hundred birds, at Sheringham Sept. 25th and Happisburgh last week of October.

Grasshopper Warbler: Spring arrival from May 1st (Caister). More breeding season records notified than for several years including singles at East Tuddenham, Massingham Heath, St. Helen's Well and Thetford Warren.

Cetti's Warbler: Broads: a total of 22 singing males in the Yare valley. Elsewhere, single males in song at Hardley Flood, Burgh Castle and near Beccles.

Savi's Warbler: North: Holkham Oct. 13th (GPC). Broads: Hickling one singing May 9th (PRA, ADB). Martham one singing May 24th (JC, JD). Hardley one singing May 29th-June 3rd (GED, JCE). Additional 1975 Broads record July 31-Aug. 1st (JC).

Reed Warbler: Spring arrival from early date of April 16th (Welney), with last autumn record Oct. 10th (Winterton).

Sedge Warbler: Extreme dates April 17th (Martham Broad) and Oct. 3rd (Winterton).

Aquatic Warbler: North: Cley Aug. 15th-23rd (DJH et al). Blakeney Point Aug. 14th (JK et al), 22nd (ES et al), 30th (SH, GKR) and Sept. 26th (MSC, KMM et al).

Icterine Warbler: North: Blakeney Point Aug. 22nd (2-3) and 23rd. Hunstanton GC Aug. 31st. East: Yarmouth Aug. 15th. Winterton Aug. 15th and 29th. Paston Aug. 30th

Blackcap: January record: Sprowston 3rd. December records: Holme up to 4 all month, Sheringham 10th, Holt 11th and 29th, Morston 11th (2), Gaywood 14th, Holkham 15th and Blakeney 23rd. Wintering blackcaps were recorded in some numbers throughout Britain.

Barred Warbler: North: Hunstanton GC Sept. 5th. Holme Aug. 15th-16th, 24th-31st, Sept. 2nd-8th (up to 2), 16th-18th, 19th-24th (2) and Oct. 18th. Blakeney Point Aug. 28th with 2 on 29th. Cley Aug. 23rd, Sept. 12th and 16th. Sheringham Sept. 13th and 21st. East: Trimingham Sept. 5th. Waxham Aug. 24th. Winterton Sept. 4th-7th. Happisburgh one ringed Nov. 13th, an extremely late date.

Lesser Whitethroat: North: Sheringham, one of Siberian race, S.c.blythi, ringed Sept. 16th. Late bird at Wells Oct. 31st.

Fan Tailed Warbler: North: Cley Aug. 24th (JND) and Holme Aug. 29th-Sept. 5th (JC, OM, PRC *et al*). The first British record of this diminutive grass warbler which has spread dramatically across Europe since 1970.

Greenish Warbler: North: Blakeney Point Aug. 14th (GED, DJH). Wells Aug. 21st-22nd (TB, GJH, ET et al). Holme Aug. 28th-Sept. 3rd (SCJ et al).

Chiffchaff: A wintering bird at Bradwell Jan. 21st-28th. North: Sheringham, singles of the two Northern races ringed Oct. 2nd (abietinus) and 26th/27th (tristis). East:



Three Pallas's Warblers occurred on the North coast.

Yarmouth, an influx of birds showing the characteristics of one of the Northern races Oct. 28th/29th, with a maximum of 6 and a single bird remaining until Nov. 15th. Winterton, one of Northern race, Nov. 7th.

Wood Warbler: A spring migrant at Wells May 9th. Breeding season records of singing males from Dersingham, Sandringham (2), Foulden Common, Kelling (2), Felbrigg (3) and Ringstead. Autumn passage migrants at Blakeney Point Aug. 15th, catching flies in tea-house. Holkham Aug. 21st and 30th. Wells Aug. 21st, 22nd and Sept. 26th. Yarmouth Aug. 28th and Stiffkey Aug. 29th.

Bonelli's Warbler: North: Holkham Sept. 5th (KVP, CM). The fourth county record.

Arctic Warbler: North: Holme Oct. 14th-19th (PRC et al). The seventh county record.

Yellow-browed Warbler: North: Holme Sept. 23rd. East: Yarmouth Sept. 25th-27th (2).

Pallas's Warbler: North: Wells Oct. 29th-31st (SCJ et al). Cley Oct. 31st (many observers). Sheringham Oct. 31st-Nov. 1st, trapped and ringed (DHS, KBS, MPT). Radde's Warbler: East: Waxham Sept. 26th (JW). The sixth county record and the first away from the north coast.

Dusky Warbler: North: two additional records, to those already published in NBR, bringing the county total to seven. *1968*—Holme, a different bird, Nov. 10th (JAWM *et al*). *1973*—Holkham Oct. 7th (SMG).

Firecrest: Spring: singles at Cley, East Tuddenham, Sheringham and Wells, with 2 at Holme April 2nd. Autumn: singles at Happisburgh, Hickling, Holkham, Honingham, Yarmouth and Waxham, while one which arrived at East Tuddenham Oct. 11th, remained in area for 3-4 weeks and was joined by at least 2 others Oct. 28th.

Spotted Flycatcher: East: Winterton Aug. 15th, a fall of 100 birds is worthy of mention.

Pied Flycatcher: Only 3 reported in spring: Blakeney Point May 9th, Knapton 10th and Holme 29th. Notable autumn influxes at Yarmouth and Sheringham in August. Late bird at Yarmouth Oct. 16th.

Red-breasted Flycatcher: North: Blakeney Point singles Sept. 12th, 16th, 25th and 26th. Titchwell Sept. 17th.

Richard's Pipit: North: Weybourne Sept. 29th (D. Burkitt) and Oct. 2nd (RL, SL). Tawny Pipit: North: West Runton Oct. 26th-31st (MPL *et al*). Blakeney Point Aug. 25th (FKC *et al*) and Oct. 30th (SCJ). East: Winterton Sept. 27th (MJI). The first year ever in which Tawny observations have outnumbered Richard's pipit.

Olive-backed Pipit: North: Holkham Oct. 31st-Nov. 4th (GBB, CAEK et al). The second county record of this vagrant from Asia, following the first in 1975.

Rock Pipit: Very late bird of British race, Breydon May 24th. Reported in autumn from Sept. 12th (Holme).

Water Pipit: Reported from Hickling (March, April, Oct. and Nov.), Snettisham March 11th-22nd) and Titchwell (April 6th).

Pied Wagtail: A nest constructed in Norwich Union building, Westlegate (Norwich) was 70 feet above ground level. At Coltishall a reed-bed roost contained up to 400 birds in Oct./Dec.

Grey Wagtail: Only 5 breeding records received, all from Central Norfolk, at Honingham, Horstead, Lyng, Marlingford and Taverham.

Blue-headed Wagtail: North: Cley May 1st and 7th. Holkham May 8th. Broads: Hickling April 26th, May 2nd and 17th. Ormesby May 1st.

Grey-headed Wagtail: North: Wells May 9th.

Waxwing: All records are given. Snettisham Jan. 3rd. Gaywood Jan. 8th-Feb. 5th (up to 11). Sheringham Jan. 31st. Gorleston Feb. 4th-March 2nd (up to 5) and Dec. 30th (4). Not since 1969 have so few been reported.

Great Grey Shrike: Usual number of sightings up to April 24th, but noticeably fewer in autumn from Sept. 24th. Recorded at 35 localities.

Lesser Grey Shrike: North: Cley Sept. 5th/6th (JHWR et al). The second autumn record in successive years.

Red-backed Shrike: Breeding season: A total of 9 pairs known to have bred in the county, but records from Breckland incomplete. Spring migrant(s) noted at Holme and Titchwell May 11th. An unprecedented autumn passage, at least for recent years—North: Hunstanton Sept. 25th. Holme 1-2 on seven dates Aug. 14th-Oct. 19th. Titchwell Oct. 24th. Holkham/Wells 1-2 on three dates Sept. 4th-18th. Blakeney Point 1-2 on four dates Aug. 21st-Sept. 18th. Cley Sept. 8th. Weybourne Sept. 18th. Sheringham Aug. 7th and Sept. 28th. East: Waxham Sept. 26th/27th. Ridlington Common Sept. 11th-15th. Winterton Aug. 15th-Sept. 21st, with peak influx of 7, Sept. 5th-8th. Yarmouth Aug. 22nd. Gorleston Aug. 25th. Broads: Hickling Aug. 1st, 19th and 29th.

Hawfinch: All records are given. Brecks: East Wretham Jan. 18th (6), Feb. 22nd (20), Aug. 19th (juvenile), Oct. 13th (3) and 27th (2). Santon Downham April 10th (10) and June 12th. St. Helens Well May 7th. Weeting Heath and Cockley Cley June/July (2). Cranworth Nov. 28th (6). North: Wiveton Sept. 19th. East: North Walsham March 28th. Central: East Tuddenham March 2nd (2), Arminghall 24th, Keswick 26th and Colney Hall 28th. Swannington Common April 1st (2). Norwich May 4th. Felthorpe Aug. 24th (juvenile). Broads: Salhouse May 1st (2).

Goldfinch: Impressive totals of birds on spring passage included records in the North from Sheringham of 600 west May 1st and 520 west May 11th; from Happisburgh in the East of 750 north April 30th and 2000 south May 10th.

Siskin: Only one report suggesting breeding, a female trapped Aug. 14th in the late stages of moult, at South Runcton. Maximum numbers during the first part of the year—Sandringham up to 50 in Jan., Norwich 15 Jan. 1st, Horsford 30 March 21st, St. Helen's Well 25 March 21st and 15 May 18th, Sheringham 107 ringed March—May. Holkham 6 Oct. 28th, were the only ones reported in the latter part of the year.

Linnet: Impressive spring passage noted at two localities in the East. Winterton northerly movement recorded April 4th-May 1st, with peaks April 18th (1000),

19th (1000) and 25th (5000). Happisburgh peak of northerly passage April 30th (2000).

Mealy Redpoll: Wash: Snettisham 15 Jan. 12th. North: Holme 6 May 9th. Wells 5 Jan. 3rd. Sheringham 51 ringed March-May.

Arctic Redpoll: North: Sheringham 2 trapped and ringed March 21st (DHS, KBS, MPT). Additional 1975 record Blakeney Point Oct. 13th.

Twite: North: Maximum concentrations Titchwell 500 wintering, Holme to Thornham 200 Nov. 7th and Cley/Salthouse 100 Oct. 31st and Dec. 28th. East: maximum counts in each winter Breydon 70 Feb. 17th and 30 Oct. 10th. Inland: Buckenham Feb. 21st.

Serin: North: Holme singles April 9th and May 24th (PRC). Additional 1975 record Holme May 15th-19th (GBB, PRC, DMW).

Brambling: In early part of year 300 in Jan. at Titchwell and 300 April 26th in Thetford/Santon Downham area (including 100 at St. Helen's Well). At Caister refuse tip a remarkable build up occurred with 300 Feb. 4th, 1000 on 5th and 2000 on 15th remaining until 20th. During latter half of year very scarce despite excellent beech-mast crop, with maximum at Felbrigg 50 Dec. 11th.

Corn Bunting: Noted during breeding season at Breydon, Cley, Cockthorpe, Happisburgh, Hemsby, Horsey, Horsford, Martham, Rackheath, Overy Staithe, Santon Downham, Swaffham, Swaffeld and Waxham. Jan. peak of 44 at Breydon.

Ortolan Bunting: North: Blakeney Point singles Aug. 14th, 16th/17th, 31st, Sept. 12th, 16th and 19th. Morston Sept. 17th.

Little Bunting: North: Cley Sept. 27th (SJR, MJG).

Lapland Bunting: North: Cley 14 Jan. 18th-March 13th and 9 Oct. 5th. Elsewhere up to 6 at Blakeney Point, Holme, Kelling, Morston, Sheringham, Stiffkey and Wells, extreme dates April 18th and Sept. 12th. East: up to 3 at Breydon, 2 at Bacton and singles at Winterton.

Snow Bunting: Extreme dates May 16th (Winterton) and Sept. 12th (Cley). North: maximum counts Holme 250 Jan. 1st and 300 Dec. 4th; Titchwell 200 Nov. 9th; Brancaster 100 Jan. 5th; Cley 150 Feb. 17th and 300 Nov. 2nd. East: Happisburgh up to 30 in Oct. and Winterton 33 Nov. 17th.

Ring-necked Parakeet: A pattern is already emerging of a peak during the autumn. Brecks: Downham Market Aug. 3rd. North: Holme Sept. 29th and Oct. 1st. Salthouse Heath Oct. 1st. Sheringham singles flying west April 11th, May 22nd, Sept. 29th, Oct. 4th, 5th and 10th. East: Caister: Sept. 28th and Nov. 9th (2). Fritton 2 Dec. 5th. Broads: How Hill Aug. 27th and Sept. 1st. Hickling 1-2 on several dates. Additional 1975 records—Stiffkey June 3rd, Holme Aug. 7th and Yarmouth Nov. 29th.

The following, not mentioned in the Classified Notes, were also recorded in 1976 (breeding species in italics): Gannet, Mallard, Teal, Canada Goose, Mute Swan, Kestrel, Red-legged Partridge, Partridge, Pheasant, Water-rail, Moorhen, Snipe, Curlew, Great Black-backed Gull, Kittiwake, Guillemot, Stock Dove, Cuckoo, Tawny Owl, Green Woodpecker, Great Spotted Woodpecker, Lesser Spotted Woodpecker, Skylark, Swallow, Carrion Crow, Rook, Magpie, Jay, Great Tit, Blue Tit, Coal Tit, Marsh Tit, Willow Tit, Long-tailed Tit, Nuthatch, Treecreeper, Mistle Thrush, Song Thrush, Blackbird, Garden Warbler, Whitethroat, Willow Warbler, Goldcrest, Dunnock, Meadow Pipit, Tree Pipit, White Wagtail, Yellow Wagtail, Starling, Greenfinch, Redpoll, Bullfinch, Crossbill, Chaffinch, Yellowhammer, Reed Bunting, House Sparrow and Tree Sparrow.

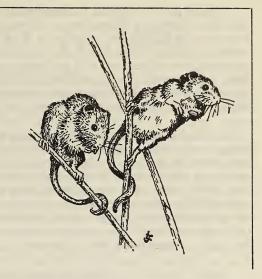
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NORFOLK MAMMAL REPORT 1976



Editorial

The Editor is pleased to present the 21st Norfolk Mammal Report. Even though this particular number has lost some of its former significance it is pleasing to note that this junior section of our publication has come of age.

The report owes its existence to the observations and records submitted by members and friends and our thanks go to all contributors. All information, however small in quantity and seemingly trivial in content, is received gratefully. Indeed, the Editor's greatest difficulty is eliciting more scraps about the commonplace. The House Mouse is a good example of a widespread and numerous species that is under recorded. The official distribution map for the whole country is largely blank! The Wildlife Youth Service of the World Wildlife Fund is running a special project during 1977 in an attempt to make the map more realistic. Other lines that members may wish to follow may be found in the Classified Notes.

Road casualties noted on a particular stretch of road that is used regularly can give interesting and useful figures. Many previous Bird as well as Mammal Reports have listed the casualties found on the A47 Yarmouth to Stracey Arms stretch. During 1976 mammal fatalities were: Rat 97, Rabbit 78, Hare 28, Stoat 6, Coypu 1. Regular checks in a garden, a length of hedgerow, taken over a period of years, give data that may help in assessing local trends.

Our last Report gave an ultra-brief account of the work of Chris Mason and Sheila MacDonald on the status of the otter in Norfolk, based on the publication of their findings. The Editor felt that our members deserved and needed a full, clear statement by the researchers themselves detailing their methods, findings and proposals. Time did not permit inclusion last year and since then they have been quoted, misquoted and contradicted many times in the public debate that continues. We are most grateful to them for contributing a special article for this report that should ensure our members are fully conversant with the evidence and able to judge for themselves the importance and urgency of the actions they suggest should be taken.

Loss of habitat is having a marked effect on more than one species as can be seen in the Classified Notes. On the other hand, certain features of the changing landscape of Norfolk are beneficial to others. If Greater Norwich includes the radiating dormitory suburbs with their pockets of woodland, parks, cultivated and neglected grounds, together with the hedges and shrubs attendant upon the dwellings, then Norwich is comparatively rich in species. Of course, a temporary haven can succumb rapidly to human pressure when, for instance, a small wood is taken into corporate ownership and is opened to the public.

Mention must be made of the increasing number of young mammals that are being fostered. The vastly increased and intelligent interest in wildlife has led to many more people being prepared to take practical action when they see distress, and this is wholly admirable. However, many of these supposed waifs and strays may well be retrieved by their natural parent if left alone and the human element removed. The time has to come when the young animal is released into the wild and the preparation for this major event in its life is a highly complex and specialist task, with an unhappily low expectation of success. The greatest possible care should be taken to ensure that human intervention is necessary or desirable.

Special thanks go to Philip Wayre for his fine photograph of an otter that enhances our major article and to Morris Gosling for bringing us up to date on coypu control. The Editor records his personal thanks to Bill Vaughan, Seal Research Division, Institute for Marine Environmental Research, to Rex Whitta, Wildlife Ranger for the Forestry Commission, to Arthur Woodhams, Pest Control Officer, M.A.F.F., for their invaluable specialist contributions and finally to John Goldsmith for his constant practical assistance. John continues to answer queries addressed to him c/o The Castle Museum, Norwich, NR1 3JU. Tel: Norwich 22233 ext. 649.



Contributions for the 1977 report should be sent to R. C. Hancy, 124 Fakenham Road, Taverham, Norwich, NR8 6QH, by the end of January, 1978.

Classified notes

INSECTIVORA

Whether or not the drought had any marked effect on the population it does seem probable that the parched state of our gardens forced many **Hedgehogs** to forage where conditions were more suitable. Many of our hedgehog watchers report markedly fewer visitors and fewer road casualties during the whole of the summer. Their fears were probably allayed during the following spring but the proof will be seen when the next annual records come in. Many of our small mammals drink little water as such. If their normal food plants or prey species can be found most of their requirement is met by its consumption. A more serious threat is highlighted by a contributor from central Norfolk who notes a marked decline possibly due to hedgerow removal and the reclamation of rough ground and field corners for farming.

Three adult opportunists, no doubt topping up their intake, were seen at the height of the drought drinking from a bird-bath in Saxthorpe. Another moved in with a pet tortoise in Norwich and produced three young.

After carefully selected garden plants had been given measured rations of bath water it was frustrating to see them uprooted by Moles. On a larger scale, definite moves to lower, moister ground were apparent in certain districts.

The only Water Shrews reported were from West Norfolk. This is a fascinating mammal to watch hunting in the clear water it favours. It is said to be particularly fond of water-cress beds though it is quite versatile and can be found some distance from a stream. Bird of prey pellets collected from possible habitats would be welcomed for analysis.

CHIROPTERA

Information on this group is scarce in the extreme. Bats on the wing are impossible to identify with certainty but members can be assured that non-specific reports are most acceptable. Even the most general comments from defined areas, if repeated over a number of years, are valuable. While hard facts are difficult to come by, comments to hand do indicate that a marked decline in overall numbers has been continuing in many districts for some time.

The Thetford experiment with bat boxes continues promisingly. At Ludham the Noctules again used the box for a short period before leaving for another roost several yards away. The highest evening count, adding those emerging from the box to those from an adjacent natural site, stood at 64. This has been a successful and encouraging experiment. Yet a big question remains. Where are the bats in winter?

A great deal of time has been spent locating and examining possible winter roosts, with very little success. This is still a very mysterious group and a great deal of work has to be done to understand them enough to give the help they may well need, but this is another case where our thirst for knowledge must be tempered with discretion. Temperature and humidity must be within fairly close limits and can easily upset. Disturbance of habitat already under pressure is as we know a major contribution to the decline of many species.

An interesting coincidence featured in a report of their years observations submitted jointly by two friends living in North Norfolk. One reported a Long-

eared bat caught by a cat in Holt during May and the other noted a parallel incident in Itteringham during August.

LAGOMORPHA

With a number of strains of myxomatosis in the county and Rabbit colonies developing varying degrees of immunity, the pattern is very confused. In some areas disease has almost eliminated the population but in others is reported to have exercised virtually no control, with varying degrees of effectiveness between these two extremes. The most casual observer is almost bound to see them in the county and one small colony is reported to be established in gardens quite near the city centre. A frequent query during 1976 linked the Hare with myxomatosis. We have no records of this species being affected but are assured that one case is on record from the early onslaught of the disease in this country. The occurrance must be extremely rare due to the method of transmission. Locally abundant, and increasing in South-West Norfolk, there are very large areas, particularly in Central Norfolk, where numbers of hares continue to fall. One corrspondent suggests that the leverets are very easy pickings for the foxes which quarter the fields in the district he reviews.

RODENTIA

The Short-tailed Field Vole is probably a frequent visitor to the ground below our bird tables but is infrequently observed. A Taverham contributor however has seen them regularly and has been impressed by their turn of speed. Another regular contributor whose car is in effect a mobile hide, watched a field vole running aimlessly up and down beside her vehicle and on another occasion saw one attacked by a Jay as it crossed the road. Their presence can be detected by characteristic runs between the lowest stems of the grasses and of course in owl pellet remains.

The status of the Water Vole continues to improve. They have been found along the Tud and the middle Wensum, indeed, sightings have been reported from Norwich Yacht Station. At Hockham Fen a Heron fed young to its nestlings.

The Editorial mentions the difficulty of compiling accurate distribution maps for our small mammals. Many interesting questions remain unanswered including





some on the relationship between the Wood Mouse and the House Mouse. For instance, has the former filled niches vacated by the latter? At Lyng, a trapping campaign at the end of the year produced equal numbers of the two species. At nearby Honingham, the Wood Mouse proved a persistent nuisance in the apple store. Outside in the same village, good numbers of Harvest Mice were found in ricks. A roadside nest was found at Aldborough and another on the fringe of the golf course at Norwich. A real mystery mammal, so far as Norfolk is concerned, is the Yellow-necked Mouse. Somewhat larger than the Wood Mouse and rather more clearly marked, its yellow collar is its distinctive feature. Colonies often share habitats with Wood Mice. If unusually large mice are noted or suspected, please contact the Editor or the Castle Museum.

The current Coypu situation is very clearly set out in this special note from Dr. L. M. Gosling, Coypu Research Laboratory, M.A.F.F.. "After reaching a peak in late 1975, the East Anglian coypu population is currently declining. The reduction is due to an increased trapping force (eighteen men since 1975) and an improved overall control strategy. In the six months from October 1975, when the improved strategy commenced, to March 1976, a total of 8,127 coypus were killed. In the comparable period ending in March 1977, a total of 5,616 were accounted for. The decline of 31% reflects a similar reduction in the live population. Numbers are expected to fall again in the coming winter leaving an adult population of less than 3,000 in the spring of 1978. The range of the population expanded slightly during 1975 when the population reached its maximum size and small colonies have recently been detected in north Essex and west Suffolk. These colonies are currently being trapped and further emigration will probably cease as the total population is reduced."

It is very gratifying to hear that our native Red Squirrel prospered during the year in at least one part of the county. Thetford Forest contains so much ideal habitat that it may well be one of the final national strongholds for this species. Elsewhere the news is less hopeful. Many reports speak of fewer sightings in old strongholds, though the link with the presence of greys is not necessarily made. One correspondent watched, on separate occasions, one collect beech nuts, one collect acorns and another sit down beside her husband and eat a mushroom. However, in the year under review the Grey Squirrel really demonstrated that it is here to stay and its pest potential. Many would-be controllers found it to be a most elusive quarry and any killed were quickly replaced by others moving in. Keswick Hall park was until recently a red stronghold but the only sightings were of greys. Norwich suburbs provide more records and their regular appearance at bird tables and

garden feeding stations can soon be expected. Their boldness and superficially engaging ways may well make kind-hearted folk overlook what they are likely to do to their bird nesting-boxes in the spring.

CARNIVORA

Judging by the many accounts of widespread steady increases, the Red Fox is the one large land carnivore that can cope with life in twentieth century Norfolk. Their territories vary in size, but they can, and do, travel long distances. Apparent seasonal increases in adults, however are more often due to greater pressure to take prey where there is more chance of being detected and a decline in natural cover. There are strange gaps in the county distribution map—the presence of more rabbits does not necessarily lead to an abundance of their obvious predator. Attempts to read signs could be fruitful. Mention has been made of criss-cross tracks over the fields in one district. Runs through hedges and under low barbed wire should be examined for tell-tale hair.

The reappearance of a Badger in setts long unused has given some cheer but is no cause for complacency. Stocks are very low and even if everything were in their favour it would be some time before badgers reached a level approaching the county capacity.

The Otter is the subject of our major article and depressing as the situation it portrays may seem, reports submitted for 1976 do nothing to relieve the gloom. Contributions from entirely reliable observers from certain key areas speak not just of no sightings but of no signs during the year. The recent publicity given to this mammal has made almost everyone in the county aware of the problem and in spite of the blinkered attitude of a minority, created an enormous amount of goodwill. This benevolence has yet to be channelled into positive restraint by all users of our waterways and active conservation attitudes by the essential minimum proportion of those who control them.

Stoats had a good year, in fact rather too good at Scolt Head Island where a female and five young wrought havoc among tern chicks. Two reports from central Norfolk say they are more common than for several years. Weasels too were frequently observed. One was found eating a dead hare on a road near Thetford and another was seen swimming the river at Hunworth. One found dead in a Saxthorpe garden was thought to have come off second best in an encounter with a cat.

The rare glimpses of American Mink including one with young, confirm that this potential pest is still with us, but its true status is difficult to assess. At least



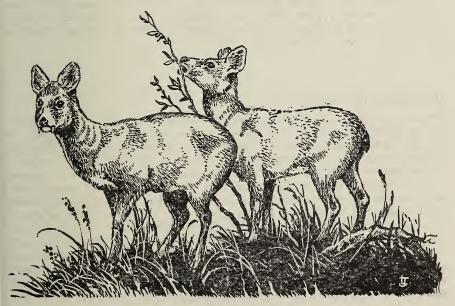
there are no indications that this quiet and elusive predator is causing obvious damage at present.

Dr. R. W. Vaughan of the Seals Research Unit sums up the East Anglian seal news as "situation normal". Numbers in the Wash show no significant change. At least one Common Seal made an up-river excursion and was seen in the Yare at Berney Arms on December 23rd. The Editor would be interested to hear from members with a literary or historic interest who have found references to seals in rivers in parish documents or any other unpublished material.

The entire world population of the Grey Seal is much lower than that of the Common Seal and the British Isles provide its most important breeding grounds. We are fortunate that our small Norfolk colonies appear to be well established.

ARTIODACTYLA

The Red Deer that met an unfortunate end in Catton during the summer was probably one of the group that had been seen from time to time for several years on the eastern outskirts of Norwich. New reports have come from Horsford. An unexpected confrontation with one of these beasts can be equally alarming for both parties but in a suburban area the excitement caused by their presence usually means trouble for the deer. The Thetford herd is in a very healthy state and, generally, deer in Norfolk are thriving. Chinese Water Deer are well-established and the Muntjac, with its tiny footprints so difficult to trace, appears to be increasing its range. Great interest was aroused in the Felthorpe, Horsford, Taverham area during the autumn by the all white, young Fallow buck, presumably from the local herd, which was seen by many locals. As it was just about to pass into local legend it reappeared during the following spring and could be seen running with a herd of young bullocks. The experiment with colour coding Roe Deer in Thetford Forest to monitor movements can be followed by visiting the Forestry Commission Office at Santon Downham, members can help by passing on their observations if they are fortunate enough to see any of the animals concerned.



OTTERS

IN NORFOLK

C. F. MASON and S. M. MACDONALD

Department of Biology, University of Essex, and

Department of Zoology and Comparative Physiology, University of Birmingham.

INTRODUCTION

Norfolk waterways should provide optimum habitats for otters. The rivers are slow moving, weedy and support dense populations of coarse fishes which form the preferred food of otters. The country also has large areas of fen and reedswamp, especially in Broadland, which are ideal for otters, and the extensive salt-marshes on the northern coast provide additional feeding areas.

Early reports tend to confirm this suitability of Norfolk for otters. Stephens (1957) described the species as numerous, though her results were based on hearsay rather than on survey, and Hewer (1974) considered that otters were holding their own, based on reports from the local otter hunt. However, the Norfolk Mammal Report for 1972 stated that, "no-where in the county do otters occur as frequently as they did even ten years ago", though again this is based on casual observations. In 1974, Dr. S. Erlinge, who has studied otters in Sweden for a number of years, visited England and, after examining three areas of Norfolk, concluded that the population was very sparse. We decided, therefore, that a comprehensive and objective survey of the whole county was urgently required and this we undertook during late 1974 and the first half of 1975.

THE NORFOLK SURVEY

Otters are exceptionally difficult animals to count, owing to their extreme shyness and nocturnal habits. However they leave sweet-scented scats, or spraints, in prominent sites along watercourses and which act as recognition and home-range markers among otters. The banks of Norfolk rivers are relatively free of prominent sites and are too deep for emergent stones etc. to act as sprainting sites. In contrast, the debris which collects around bridges and the structure of many bridges themselves provide ideal places to deposit scats. We therefore examined the area around and beneath every bridge along a water-course. Each bridge was examined at least twice during the period, in winter and spring, and watercourses where otters were not recorded, received one or two additional visits. We looked carefully for scats, foot-prints and food-remains. Dr. Erlinge (in litt.) considered that this method gave a reliable estimate of the otter population in Norfolk. In addition, records received at the Castle Museum during the period were included in the results, together with observations by people (reserve wardens, etc.) spending long hours in the field.



Long distance travellers, Turnstones ringed on The Wash have been recovered in Greenland, Iceland, Greece and Guinea Bissau.

Photo R. J. Chandler

In addition to visiting coastal mudflats, Dunlin may be found at beet factory settling ponds, sewage farms and Broadland wader grounds.

Photo R. J. Chandler





Such records were especially valuable in Broadland and on the grazing levels where surveying was difficult. Some 270 man-hours were spent in the field, mainly at week-ends.

Our results (Macdonald and Mason, 1976) confirmed that otters were indeed scarce in Norfolk. Of 233 sites visited, equivalent to 774 km by length of watercourse, only 32 (14%) had evidence of otters and even at these sites the number of scats was always small, indicating a very low density. Eight additional records were received. Most otters were in central Norfolk with the rivers around the edges of the county being low in numbers or devoid of otters. Male otters have a large homerange. Erlinge (1967) observed a range of 15 km in Sweden, while it is estimated that there is one male/10 km in England (Stephens, 1957). Females and cubs have more restricted movements within this home-range. We estimated from our detailed distribution map that there were 17 territories in Norfolk. Assuming each territory contained a male and a female, the carrying capacity of Norfolk can be estimated as 52-77 pairs and the upper end of this range seems likely when one considers the large area of potentially prime habitat in Broadland. The population of otters in Norfolk is thus seriously depleted.

There seems little doubt that the decline in Norfolk has occurred fairly rapidly. We recorded no otters on some rivers where they were known to occur only a few years before. The species is, however, also very mobile and individuals are likely to re-appear in areas where we were unable to locate them. Thus one, maybe two, otters were found on the Waveney in 1976 (Philip Wayre, pers comm) where we found none regularly present after an intensive search in 1975.

Perhaps not surprisingly our results have been criticized by those who hunt otters locally (see, for example, in King et al 1976, p.30). We have already argued (Macdonald and Mason, 1976) why hunting returns give an unreliable estimate of abundance.

Otters appear to have declined over much of lowland England, though good data are lacking. West (1975) reports a low density in Suffolk and King et al (1976) review the present situation. The species stronghold appears to be in the uplands of the west and north, where the population is necessarily low due to the sparse food supply. Scotland is still stated to hold many otters but such reports are based on scattered observations from few people. Such a view was generally held in Norfolk until a full survey proved the contrary, so complacency concerning the Scottish situation may be unfounded.

REASONS FOR DECLINE

The decline of the otter in England took place almost un-noticed, but a number of reasons for it can be advanced. Several factors, operating together, seem likely. These include:—

- 1 watercourse management and reclamation
- 2 increased disturbance through recreation
- 3 pollution
- 4 hunting
- 5 other persecution
- 6 hard weather
- 7 disease

Watercourse management and the reclamation of fens may seriously alter the habitat of otters. Weeds are mechanically, and sometimes chemically, cleared from rivers each year and bankside vegetation is cut down. Overhanging and rotting trees are also felled. As well as changing the ecology of the river (which is often

largely dependent on material entering from bankside vegetation) management also removes the otters' hide-outs and breeding places and may also make their movements more conspicuous.

Otters appear extremely sensitive to disturbance and the recreational use of rivers has increased drastically in recent years to the detriment of the species. Boattraffic in Broadland is inimical to the survival of the otter over much of the area and even such apparently harmless craft as canoes are quite dense on some Norfolk rivers e.g. in Breckland. The number of people fishing has also multiplied rapidly over the last two decades and regularly spaced anglers along the length of a river for much of the day and sometimes at night place severe constraints on the activities of otters.

Now that the otter is so scarce, inquisitive naturalists undoubtedly add to this disturbance and we entreat people to refrain from searching for signs of otters in the county unless they are involved in the official Mammal Society Survey.

Pollution has also been implicated in the decline of the otter. The rivers of Norfolk are largely free of gross pollution and all carry stocks of fish capable of supporting otters. More insidious forms of pollution, such as pesticides or heavy metals do however occur and it has been suggested that the major decline of otters coincided with a decline of avian predators, which has been proved to have been due to toxic chemicals. Any relationship is purely circumstantial and tenuous in the case of the otter. The welcome increase in birds of prey that has taken place with the phasing out from use of some of the more damaging chemicals has not been mirrored in the otter population.

It is unlikely that hunting, which has been carried out for centuries, is alone responsible for the decline of the otter but, now that the population is so low, hunting is a pressure that the species could well do without. The loss of, say, half a dozen otters per year out of a population of thirty-four is serious. Hunting also causes much disturbance and pregnant females or females with cubs may be particularly vulnerable. Hunting intensity is little related to the size of the otter population, such that at low density individual animals are likely to receive more harrassment whether or not they are eventually killed.

Shooting and to a lesser extent game fishing are big business in Norfolk. It is known that otters are still killed on at least one trout stream in west Norfolk. Otters feed primarily on course fish and eels so that they are likely to be beneficial to game fishing interests by removing the competitors and predators of trout. When shooting estates abut onto watercourses (i.e. most of Norfolk) it is likely that many game-keepers treat the otter in the same manner as they still do the badger and the tawny owl. Such persecution is totally unwarranted.

Disease has been suggested as a cause for the decline in otters but there is no evidence for this. Similarly, a suggested decline during the hard winter of 1962-63 is not backed by reliable data. Many rivers remained un-frozen during the period and an abundance of debilitated prey should have provided easy pickings for otters.

It is river management and increased disturbance which are probably having the most detrimental effects on otter populations at the moment (Chanin, 1976).

CONSERVATION MEASURES

With such a low population conservation measures are urgently required to maintain and increase stocks of otters in Norfolk. A priority is complete protection. The otter does not normally conflict with man's interests and persecution is unjustified. The species has been afforded legal protection in most other European countries.

Conservation measures are difficult to implement because of the otter's large home range and extensive movements. However the Dutch appear to have had considerable success with havens and Chanin (1976) has described how these may operate. There could be a network of small areas in which the otter gets seclusion and complete protection, where it is given priority over management and recreation interests. Linked with these would be stretches of watercourse which the otter could successfully exploit provided it could return to the maximum security refuge for resting and breeding. In management programmes, vegetation should be cleared on one bank only, or in strips on alternate banks, thus leaving the otter plenty of cover.

It has been suggested that some rivers could be designated protection areas, hunting being allowed over the remainder of the county. The two aims would



however be incompatible. Breeding may occur freely in the protected zone but a single river could never carry a large enough population to be viable in the long term. Youngsters would disperse into adjacent waterways where they would be under increased hunting pressure, protected waters being closed to the hunt. Havens would be providing improved sport for the hunt rather than ensuring the long-term survival of the otter. We really need an otter population in Norfolk near to the carrying capacity of the habitat, so that recolonization of adjacent counties where the species is virtually extinct (e.g. East Midlands) can take place.

The otter is a species peculiarly vulnerable to the activities of modern man. If we could rebuild and sustain a thriving population of otters in this country despite the dense human population, it would be a fitting monument to the strength of our conservation movement.

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19/3	East Winch Common	 	 80	Gift	S.S.S.1.
1974	Sparham Pools	 	 30	Agreement	
1974	Buxton Heath	 	 159	Agreement	S.S.S.I.
1975	Pope's Drift	 	 8	Agreement	
1975	Wayland Wood		80	Purchase	1222

In addition, the Trust shares with the National Trust in the management of the coastal reserve at Blakeney Point (1,335 acres), and it manages Arnold's Marsh, Cley (29 acres) on behalf of the National Trust.

By arrangement with the Nature Conservancy Council, Scolt Head Island, Ranworth Broad, Hickling Broad and the Breckland Heaths now form part of the National Nature Reserves.

*Status: N.N.R. denotes National Nature Reserve
S.S.S.I. , Site of Special Scientific Interest

†In 1966 Cley Reserve was established as a Bird Sanctuary under the Protection of Birds Act, 1954.

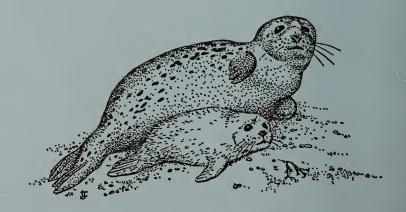
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Excellent bird watching facilities are available from 1st April to 31st October at Hickling Broad National Nature Reserve, Cley Marshes Bird Sanctuary (coastal) and Holme Nature Reserve (coastal).

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