Lapwing *Vanellus vanellus*

Key Sites: Inner estuary.

EC Wild Birds Directive: Not listed.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	Insufficient data	Insufficient data	Insufficient data
Wintering	22,765	1.1%*	1.1%
Passage			
Spring	196	Insufficient data (National passage population not defined)	0.0%
Autumn	7,188		0.4%

*Threshold taken from Cayford and Waters (1996) as cited in Stroud *et al*., (2001)

Description

The lapwing is a Palaearctic wader species. In Britain, resident breeding birds are joined in winter by birds from breeding areas further east. As a British breeding species, it is widely distributed in open country habitats. A variety of habitats are required within the breeding territory, including bare or sparsely vegetated ground and grassland. Lapwing are sight feeders, picking invertebrates from, or close to the soil surface, and earthworms form an important part of the adult diet. During the winter flocks move off high ground onto lowland regions, and can congregate on estuaries, particularly when inland feeding sites cannot be used due to freezing, although during prolonged cold periods flocks may move out of a region (Lack 1986).

Distribution within the Humber

Breeding

A fairly small population breeds around the Humber during the summer with a few pairs nesting on the landward side of the sea wall and a more sizeable population breeding on fenland areas and the Wolds. According to Catley (2000) the size of the breeding population has reached a critical level.

Non-breeding

Lapwing utilise mudflats less extensively than other wader species on the Humber and numbers on the intertidal areas fluctuate considerably during the winter period. Lapwing are a highly mobile species during the winter, favouring flooded marshland, meadows and arable fields around the Humber, although the inner estuary is important for lapwing throughout the year. On the outer estuary, from a line drawn from Saltend to New Holland, birds appear only to occur in important numbers during the spring and late autumn migration periods (Catley 2000; Tasker & Milsom 1979). The species only feeds on intertidal areas from July to September (Catley 2000) preferring pasture, stubble and ploughed fields during the winter.

However, lapwing continue to use the mudflats for roosting and loafing during the daylight hours. Lapwing commonly feed at night (Mather 1986) although historical and current information on feeding distribution in and around the Humber at night is lacking.

Seasonality

The greatest numbers of lapwing are found on the Humber during the mid winter period, mainly November to December or January. During periods of severe weather, lapwing leave the Humber to undertake cold weather movements to the south of the country (Catley 2000). Conversely, cold weather in northern England causes influxes of birds to the Humber.

Historical changes and trends

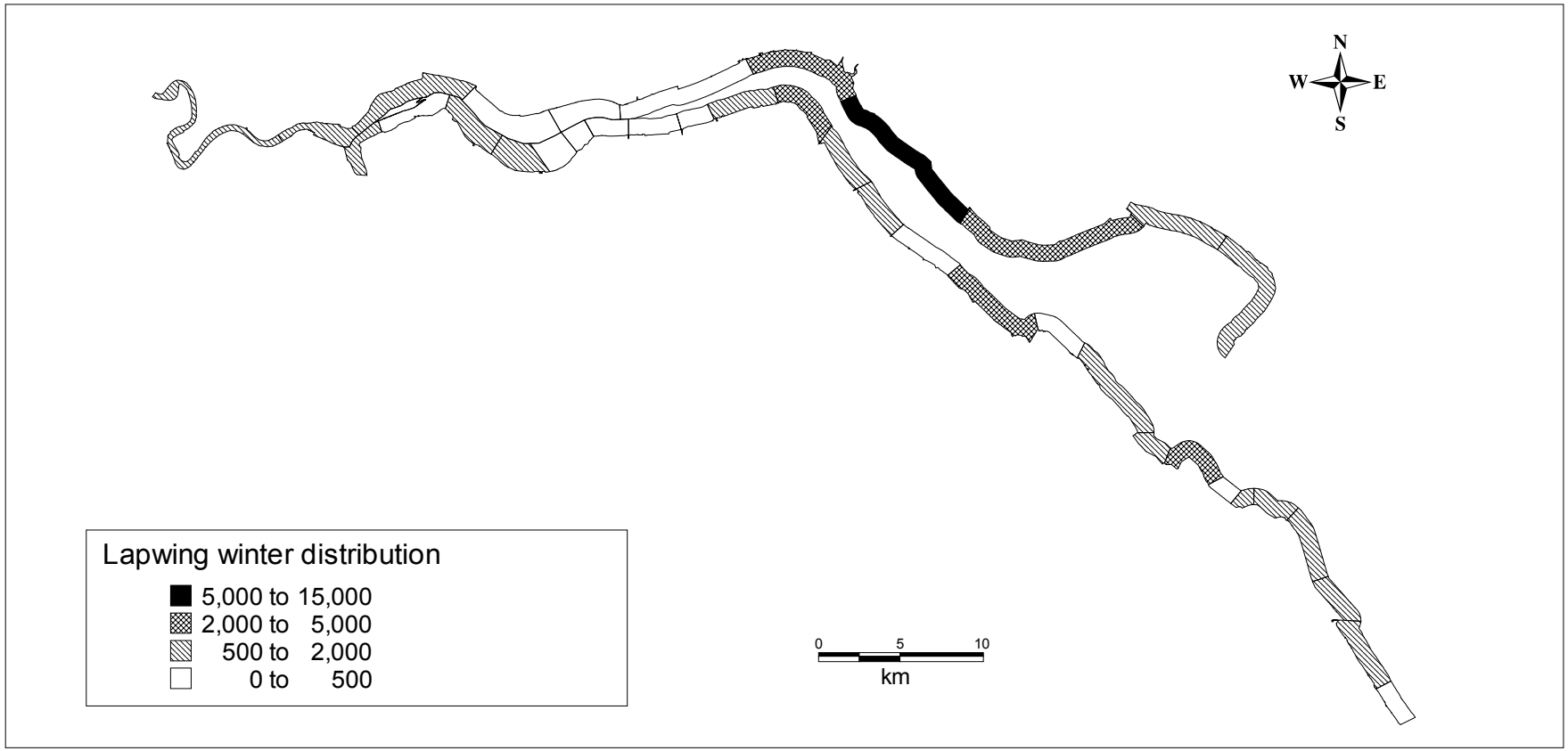
Although the species is widely distributed, there has been a substantial reduction in breeding numbers, with a UK reduction of 13% between 1968/72 and 1988/91. Breeding numbers have declined by about 50% across England and Wales since 1988 with Shrubb & Lack (1991) attributing the reduced breeding numbers to the decline in mixed farming practices over much of the UK. Despite the declines in the breeding populations, the wintering population appears to have remained stable in recent years, apart from an abnormally high count in the winter of 1994/5 (Cranswick *et al* 1999).

Conservation status

Protected under WCA 1981; EC Birds Directive (79/409/EEC); Appendix II of the Bonn Convention; UK Species of Medium Conservation Concern (Amber List).

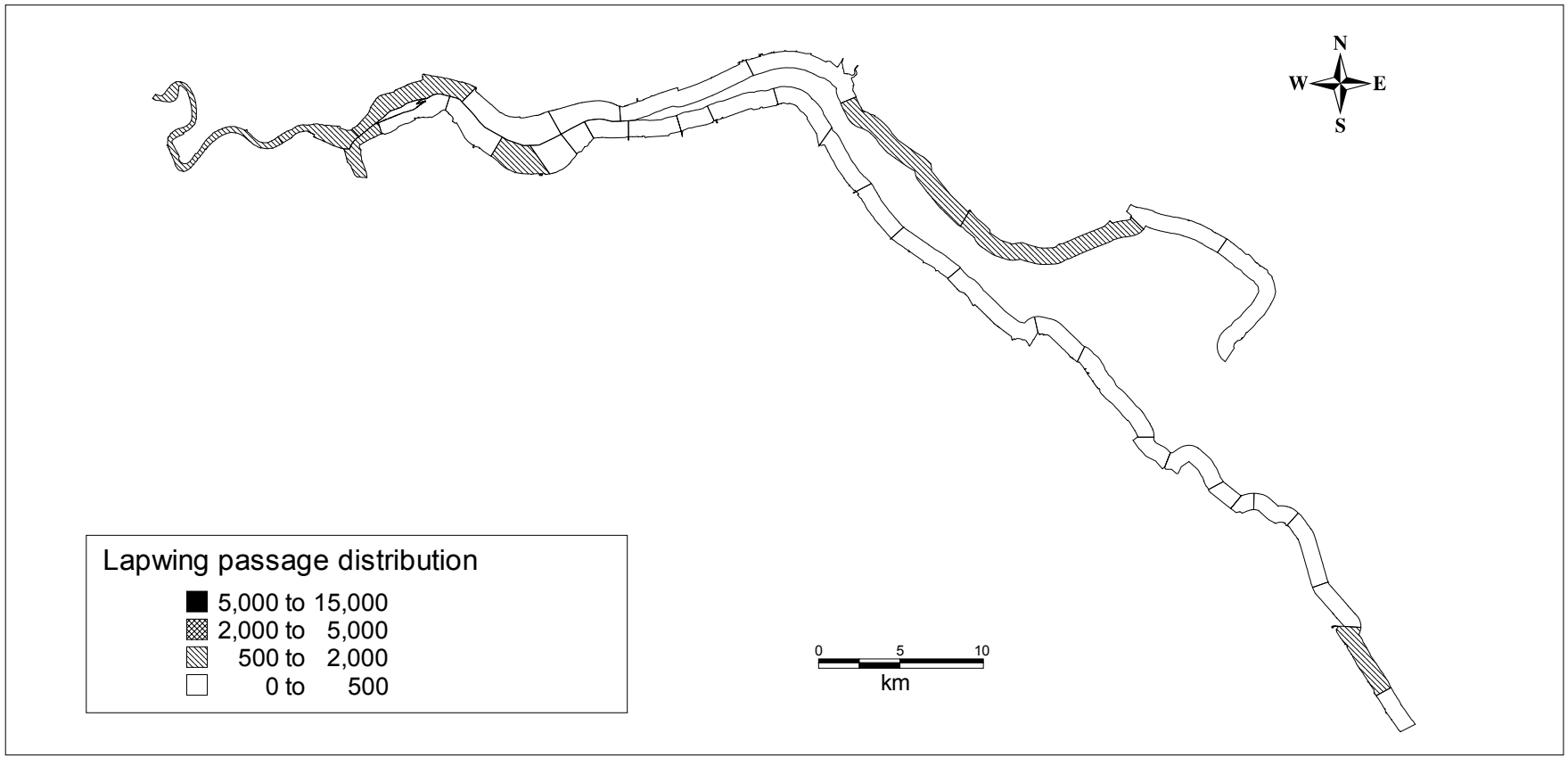
- 5 year winter peak mean of 22,765 (96/97-00/01).
- 5 year passage peak mean of 7,188 (autumn 96/97-00/01).
- 2000/01 maxima of 16,870 (winter).

- 1.1% of GB population (winter).
- 1.1% of biogeographic population (winter).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	575.50	1,800.00	1,927.75	467.00	27.75	32.75	2,701.75	5,185.33	4,525.00	1,250.00	726.00			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	557.50	202.60	4.80	550.20	1,538.00	180.00	56.80	45.60	103.50	70.00	1,575.00	2,125.00	1,283.20	636.00
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	4.00	2,156.00	0.00	544.00	1,250.75	2,110.60	51.25	1,249.00	1,011.60	583.00	1,057.50	1,113.00	469.60	

5 year mean annual peak maxima for wintering lapwing by sector, Source; Core WeBS counts 1996-2001.



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	1,130.00	1,120.00	679.75	68.33	16.25	19.75	159.00	1,878.50	676.50	79.67	268.50			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	671.60	100.60	5.20	221.80	958.00	129.80	6.80	30.00	70.25	44.50	360.50	57.75	134.20	9.40
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	5.00	449.20	0.00	69.40	41.00	15.00	77.50	315.67	0.00	150.00	286.67	528.25	0.00	

5 year mean annual peak maxima for passage lapwing by sector, Source; Core WeBS counts 1996-2001.

References

*CATLEY, G., 2000. Humber Estuary Wetland Bird Survey. Twelve months of high and low tide counts September 1998 to August 1999. Peterborough: *English Nature Research Reports*, No. 339.

CRANSWICK, P.A., POLLITT, M.S., MUSGROVE, A.J. & HUGHES, R.C., 1999. *The wetland bird survey 1997-1998: Wildfowl and wader counts.* Slimbridge: BTO/WWT/RSPB/JNCC.

LACK, P., 1986. T*he atlas of wintering birds in Britain and Ireland*. Calton: T. & A.D. Poyser.

MATHER, J.R., 1986. *The birds of Yorkshire. An account of their historical and present status and distribution*. London: Croom Helm Ltd.

SHEPHERD, I.G., HAYHOW, S.J. & RODEN, A., 1982. *Birds of Pyewipe Mudflats*. Hull: Department of Zoology, University of Hull.

SHRUBB, M. & LACK, P.C., 1991. The numbers and distribution of lapwings *Vanellus vanellus* nesting in England and Wales in 1987. *Bird Study*, **38**, pp. 20-37.

STROUD, D.A., CHAMBERS, D., COOK, S., BUXTON, N., FRASER, B., CLEMENT, P., LEWIS, P., MCLEAN, I., BAKER, H. & WHITEHEAD, S., eds., 2001. *The UK SPA network: its scope and contents. Volume 2 Species Accounts*. Peterborough: JNCC.

*TASKER, M. & MILSOM, T.P., 1979. *Birds of the Humber Estuary.* Hull: Department of Zoology, University of Hull.

TAYLOR, M., ALLARD, P., SEAGO, M. & DORLING, D., 2000. *The Birds of Norfolk*. Sussex: Pica Press.

Turnstone *Arenaria interpres*

Key Sites: Barton to Goxhill, Hessle to Hull including Hull frontage and Pyewipe to Northcoates.

EC Wild Birds Directive: Listed in Annex II/2 and III/2.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	N/A	N/A	N/A
Wintering	629	1.3%	0.6%
Passage			
Spring	216	Insufficient data	0.2%
Autumn	349	(National passage population not defined)	0.3%

Description

Turnstone are short, stocky waders named after their ability to overturn stones in search of food. The turnstone is a fairly common winter visitor and passage migrant in the UK. The British populations of turnstone are drawn from the northern European, Greenland and north-east Canadian breeding populations and winter around the entire coastline of the British Isles, favouring rocky shores. Turnstone generally forage in small groups on rocky or stony substrata. They take a wide variety of prey but feed predominantly on shrimps, winkles and barnacles (Harris 1979). At high tide they gather in communal roosts with other waders.

Distribution within the Humber

Non-breeding

Feeding sites: Catley (2000) found that the species is associated at low tide with stony, seaweed-covered areas and coarse sandy beaches. The majority of the Humber population is located on the upper estuary from Barton to Goxhill and Hessle to Hull and on the outer estuary between Pyewipe and Northcoates.

Roosting sites: At high water, the area from Goxhill to Barrow held the greatest concentration of birds in the Humber Estuary which suggests the importance of this area for roosting birds. Catley (2000) noted that birds from this area roosted either on the Goxhill pier or on arable fields. It is likely that roost activity on the estuary is under-recorded, as the species often uses derelict industrial areas and remote structures, with derelict land around Alexandra Dock (Hull) having supported flocks in excess of 200 on several occasions (R. Eades pers. comm. 2002), as well as flocks also using West Wharf, Hull (N.D. Cutts pers. obs. 2002) and Grimsby fish docks (Catley 2000).

Seasonality

Autumn passage commences in mid July with the main arrival occurring in August. The numbers of birds in the Humber increase gradually throughout the early part of the winter, with numbers then undergoing a decline in mid winter, but building up again in March with birds returning to their breeding grounds in Greenland and Canada (Catley 2000).

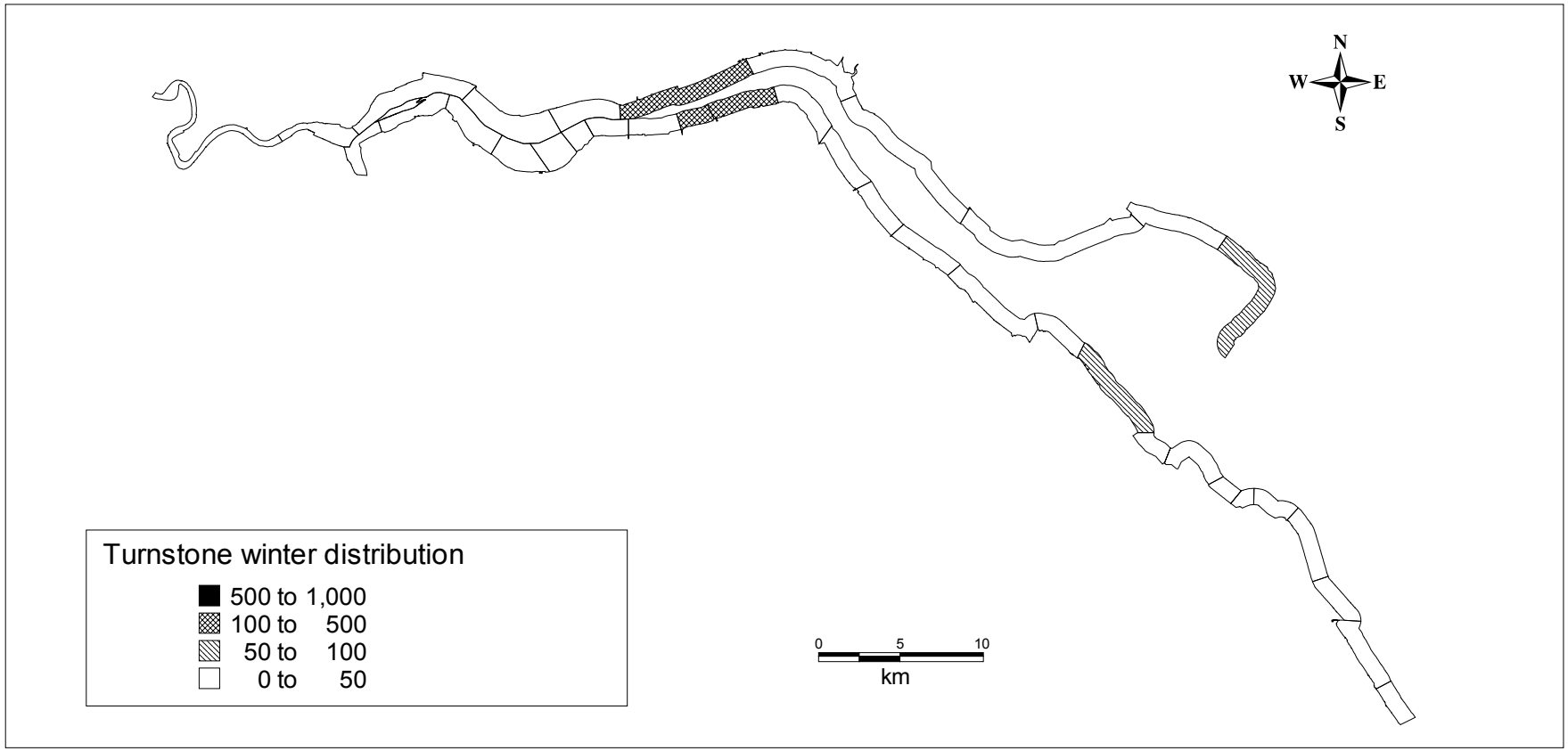
Historical changes and trends

The index values calculated from the WeBS programme (Pollitt *et al*., 2003) show a downward trend since the 1980's, although according to Stroud *et al* (2001) the cause of the decline is not apparent. There is no information on the long term population trends in the Humber however, wintering populations in 1999/00 and 00/01 surpassed the national level of importance (Musgrove *et al* 2001 and Pollitt *et al*., 2003), whilst the autumn count of 1990/91 also recorded a nationally important population (Kirkby *et al* 1991). The Humber population is probably underestimated because flocks often use inaccessible sites to roost, e.g. docks and piers. Population estimates from the low tide counts in 1998/1999 (Catley 2000) showed the low water population to be over a third larger than the high water population.

Conservation status

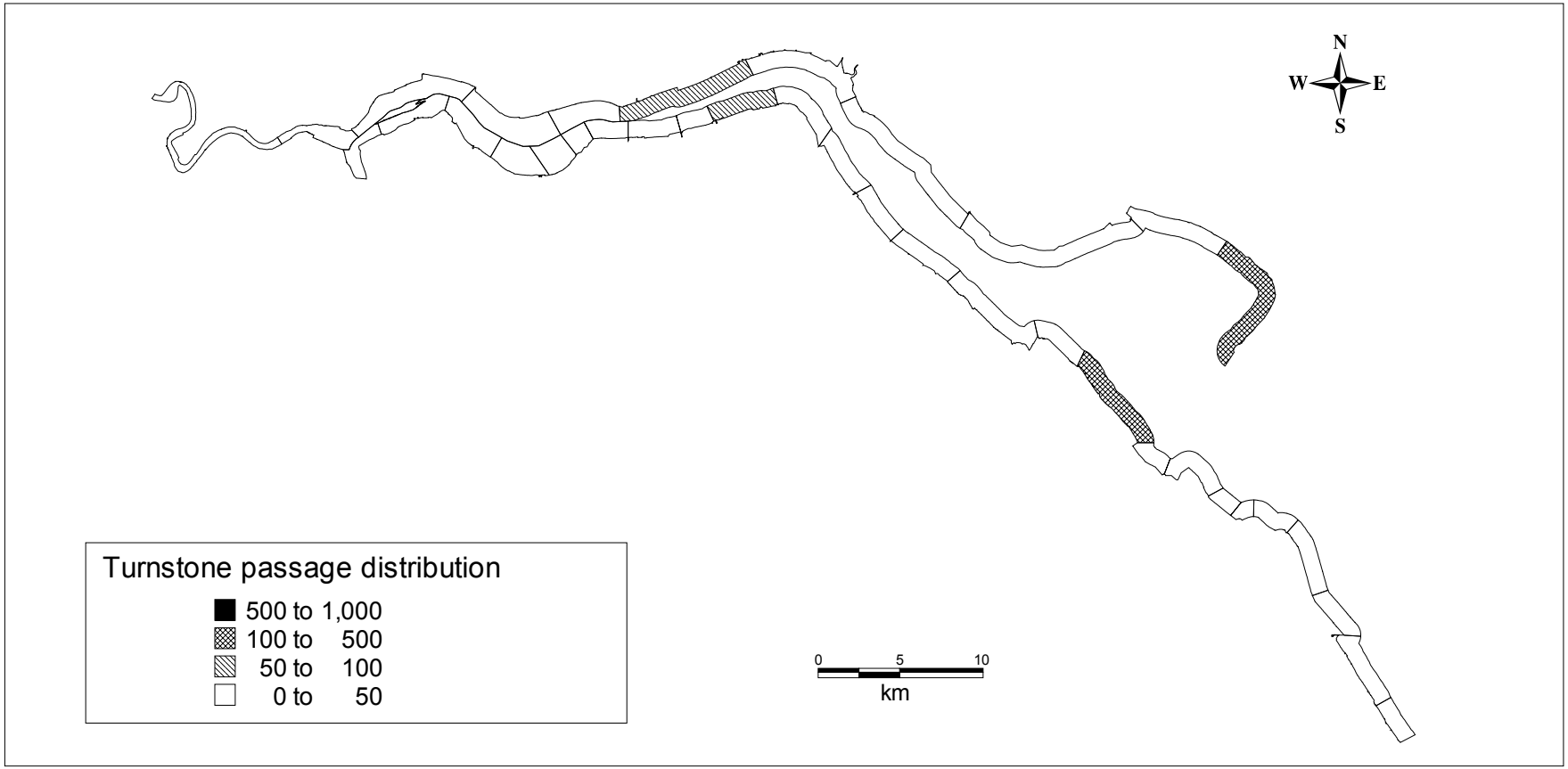
Protected under WCA 1981; EC Birds Directive; Appendix II of the Bonn Convention; Appendix II of the Berne Convention; UK Species of Medium Conservation Concern (Amber List).

- 5 year winter peak mean of 629 (96/97-00/01).
- 2000/01 maxima of 659 (winter).
- 1.3% of GB population (winter).
- 0.6% of biogeographic population (winter).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	0.00	0.00	0.75	0.00	4.50	147.00	1.25	7.50	24.33	5.00	50.66			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	186.66	216.00	4.60	3.60	7.20
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	14.00	0.00	48.50	74.00	30.75	41.60	3.50	10.00	13.75	0.60	4.60	3.40	0.00	

5 year mean annual peak maxima for wintering turnstone by sector, Source; Core WeBS counts 1996-2001.



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	1.00	2.00	0.66	1.50	8.75	72.50	8.00	7.50	25.75	0.00	142.50			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	0.00	0.00	0.00	0.20	3.50	0.00	0.20	2.60	18.75	23.50	82.00	0.80	6.80	6.75
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	12.25	0.00	26.75	102.40	4.25	16.80	0.50	2.60	0.40	0.25	6.50	9.50	1.60	

5 year mean annual peak maxima for passage turnstone by sector, Source; Core WeBS counts 1996-2001.

References

*CATLEY, G., 2000. Humber Estuary wetland bird survey. Twelve months of high and low tide counts September 1998 to August 1999. Peterborough: *English Nature Research Reports*, No. 339.

CUTTS, N.D., personal observation, 2002. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

EADES, R., personal communication, 2002.

HARRIS, P.R., 1979. The winter feeding of the Turnstone in North Wales. *Bird Study*, **26**, pp. 259-266.

KIRBY, J.S., FERNS, J.R., WATERS, R.J. & PRYS-JONES, R.P., 1991. *Wildfowl and wader counts 1990-1991*. Slimbridge: The Wildfowl & Wetlands Trust.

MUSGROVE, A.J., POLLITT, M.S., HALL, C., HEARN, R.D., HOLLOWAY, S.J. MARSHALL, P.E., ROBINSON, J.A. & CRANSWICK, P.A., 2001. *The wetland bird survey 1999-2000: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

POLLITT, M.S., HALL, C., HOLLOWAY, S.J HEARN, R.D.,. MARSHALL, P.E. ROBINSON, J.A., MUSGROVE, A., ROBINSON, J., & CRANSWICK, P.A., 2003. *The wetland bird survey 2000-2001: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

STROUD, D.A., CHAMBERS, D., COOK, S., BUXTON, N., FRASER, B., CLEMENT, P., LEWIS, P., MCLEAN, I., BAKER, H. & WHITEHEAD, S., eds., 2001. *The UK SPA network: its scope and contents. Volume 2 Species Accounts*. Peterborough: JNCC.

Sanderling *Calidris alba*

Key Sites: Spurn and intertidal flats between Grimsby Tower and Grainthorpe Haven.

EC Wild Birds Directive: Not listed.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	N/A	N/A	N/A
Wintering	486	2.3%	0.4%
Passage			
Spring	818	2.7%	0.7%
Autumn	628	2.1%	0.5%

Description

This small, very pale wader (in winter plumage) can be encountered at very close range on the sandy shoreline where it runs up and down like a 'clockwork toy'. The sanderling is a fairly common bird on sandy beaches around the UK in winter, picking items of food from the tideline that are deposited there by the receding waves. Britain and Ireland are of particular importance, supporting about 63% of European wintering sanderling (Prater 1981). Wintering birds originate from Siberia, whilst passage birds are thought to mostly originate from north-east Greenland. Passage migrants move through the UK mainly in April-June and July-October.

Distribution within the Humber

Non-breeding

In the Humber, as the sanderling is generally restricted to open, sandy shores, it is concentrated in the outer estuary, although low water data described by Catley (2000) showed that during spring migration the upper and middle Humber are also used. The wintering population is relatively small compared with large passage movements through the site. As might be expected, given its habitat requirements, the species occurs in greater numbers on the south bank of the estuary (Catley 2000).

Roosting sites: Regular high tide roosts are concentrated at Cleethorpes and Spurn. In August 1999 these two sectors supported almost the entire Humber population at high tide (Catley 2000). Tasker & Milsom (1979) noted that sanderling occasionally roosted along Chalk bank at Spurn and there is occasional interchange of birds between sites along the Humber Estuary, these movements partly dependent on the degree of disturbance. They also noted that disturbed sanderling move between the south shore and north shore on some occasions (Tasker & Milsom 1979).

Feeding sites: On the north bank of the outer estuary, the feeding distribution is almost entirely limited to the sandy beaches of Spurn, although over the last year small flocks have been recorded feeding on the Saltend site during passage (IECS 2001 & 2002). The south

shore of the Humber between Grimsby Tower and Grainthorpe Haven provides an important area for feeding birds (Catley 2000) whilst a survey of the Lincolnshire coast found wintering sanderling along the whole of the sandy coastline from Cleethorpes southwards, with most birds feeding along the tideline (Eco Surveys 1991).

Seasonality

Sanderling arrive from their Arctic breeding grounds from July onwards. Numbers increase rapidly, peaking in August, with subsequent reductions in numbers to the wintering population which is relatively small on the Humber. Spring passage occurs in April and May and is less pronounced on the Humber, partly because of its extended duration, but also because the northward migration is predominantly along the west coast of Britain. However, in some years, spring passages do occur in large numbers, particularly on the south shore of the estuary, as demonstrated by the current five year peak means for spring and autumn passage.

Historical changes and trends

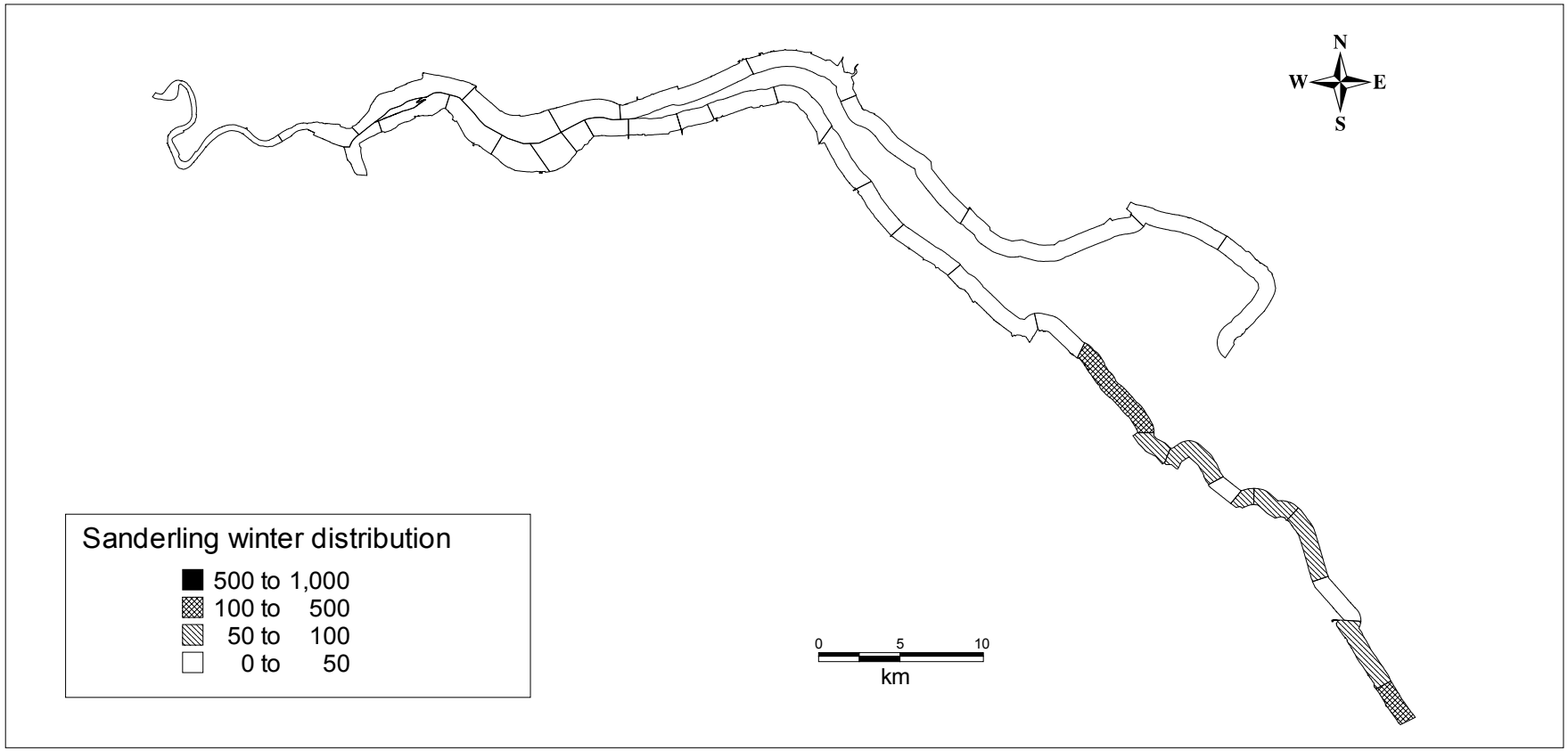
The index of sanderling numbers, derived from the Wetland Bird Survey, is highly variable from year to year but shows no long-term trend. Mather (1986) referred to numbers being fewer in the autumn during the 1980's at Spurn, but ascribed annual variations to be possibly a result of differential breeding success. Since the 1980's, the number of sanderling wintering on the estuary has remained stable, although passage on the Humber has been variable over the last 20 years. Eco Surveys (1991) noted that until 1983, spring passage occurred in March and April, although Shepherd *et al* (1982) found unusually large flocks with 1,200 individuals counted at Tetney in May. In 1983 and 1984 up to 3,000 were present in May on the south shore (Eco Surveys 1991). WeBS Core Counts in 1996/1997 recorded an exceptional spring passage in May of 1,136 individuals, which represented 1.1% of the biogeographic passage population.

Conservation status

Protected under WCA 1981; EC Birds Directive (79/409/EEC); Appendix II of the Bonn Convention; Appendix II of the Berne Convention.

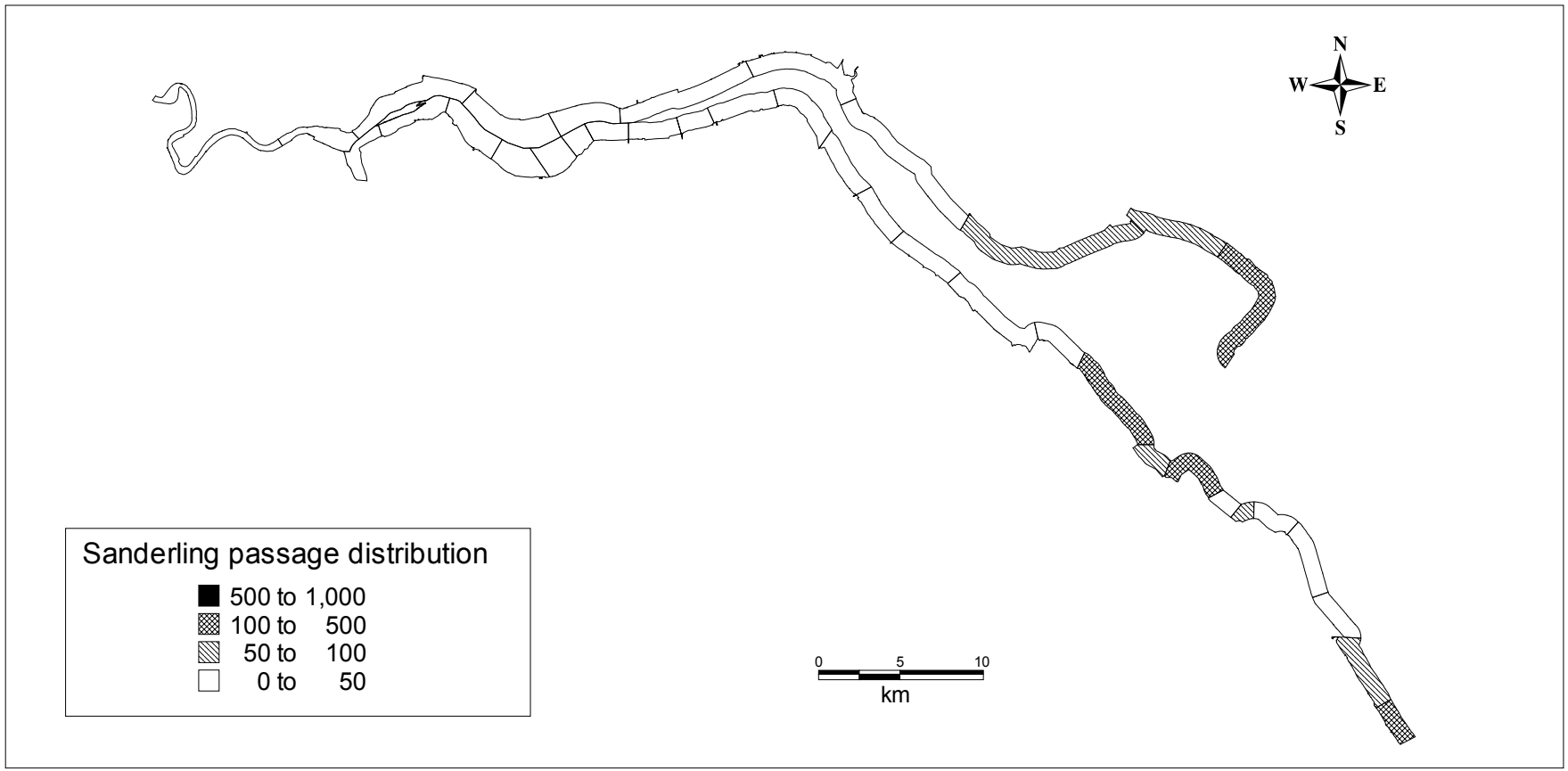
- 5 year winter peak mean of 486 (winter 96/97-00/01); 5 year passage peak mean of 818 (spring 96/97-00/01).
- 2000/01 maxima of 546 (winter) and 1,626 (spring passage).

- 2.3% of GB population (winter) 2.7% of GB population (spring passage) and 2.1% GB population (autumn passage).
- 0.4 % of biogeographic population (winter) 0.7 % of biogeographic population (spring passage) and 0.5% of biogeographic population (autumn passage).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.67	19.00	10.75	39.66			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	0.00	12.20	4.00	165.80	90.25	83.80	2.00	97.50	53.20	79.80	15.40	71.40	130.80	

5 year mean annual peak maxima for wintering sanderling by sector, Source; Core WeBS counts 1996-2001.



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	63.67	50.00	198.25			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	0.00	0.00	0.00	0.80	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.20
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	0.20	25.80	11.25	434.00	58.00	101.66	0.00	68.00	12.60	28.50	31.00	52.40	232.20	

5 year mean annual peak maxima for passage sanderling by sector, Source; Core WeBS counts 1996-2001.

References

*CATLEY, G., 2000. Humber Estuary wetland bird survey. Twelve months of high and low tide counts September 1998 to August 1999. Peterborough: *English Nature Research Reports*, No. 339.

*ECO SURVEYS, 1991. *Winter Wildfowl and Wader Feeding Area Study along the Lincolnshire and South Humberside Coast*. Report to the National Rivers Authority.

IECS, 2001. *Ornithological Monitoring, Saltend: Summary Trend Report #9 April 2000 to June 2000 Spring Passage*. Hull: Institute of Estuarine and Coastal Studies, University of Hull. Report to CES.

IECS, 2002. *Ornithological Monitoring, Saltend: Summary Trend Report #12 April 2001 to June 2001 Spring Passage*. Hull: Institute of Estuarine and Coastal Studies, University of Hull. Report to SCCL.

MATHER, J.R., 1986. *The birds of Yorkshire. An account of their historical and present status and distribution*. London: Croom Helm Ltd.

PRATER, A.J., 1981. Estuary Birds of Britain and Ireland. Calton: T. & A.D. Poyser.

SHEPHERD, I.G., HAYHOW, S.J. & RODEN, A., 1982. *Birds of Pyewipe mudflats.* Hull: Department of Zoology, University of Hull.

*TASKER, M. & MILSOM, T.P., 1979. *Birds of the Humber Estuary.* Hull: Department of Zoology, University of Hull.

Knot *Calidris canutus*

Key Sites: Cleethorpes to Grainthorpe (south shore) and Spurn Bight (north shore).

EC Wild Birds Directive: Listed in Annex II/2.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	N/A	N/A	N/A
Wintering	28,165	10.1%	6.3%
Passage			
Spring	1,336	Insufficient data	0.3%
Autumn	18,500	(National passage population not defined)	4.1%

Description

Knot wintering in Britain are the *islandica* population which breeds in high-arctic Greenland and Canada with the UK supporting over 60% of the world population of *islandica* knots in January (Davidson *et al* 1991). The wintering population is almost entirely restricted to estuaries, where they aggregate into flocks of many thousands of birds. They take a variety of bivalve molluscs such as *Macoma balthica* but also worms and crustaceans. The species require large, open mudflats to roost and feed.

Distribution within the Humber

Non-breeding

Knot are abundant on the Humber Estuary, which is of international and national importance for the species both during passage and in winter. Knot are highly mobile within the Humber during all seasons but occur mainly in the outer estuary (Catley 2000). Large intertidal movements occur between feeding and roosting areas on the north and south shores of the outer estuary (Catley 2000).

Roosting sites: The majority of birds roost on the outer estuary with the majority of the Humber population roosting on the Sunk Island to Spurn reach during the autumn (Catley 2000). However, knot are generally a highly mobile species, with high tide roosts shifting location in most months. These movements are likely to be the result of bad weather conditions, tidal conditions or disturbance forcing birds to change high tide roost sites. High tide roosts can be found on the north bank between Sunk Island and Spurn with 9000 birds regularly using the site. However, during the late winter and spring, knot prefer to roost on the south shore from Cleethorpes to Grainthorpe (Catley 2000). Eco Surveys (1991) suggest that on spring high tides, when intertidal roost sites are inundated by the tide, or when key roosts are disturbed, knot vacate the estuary, generally on a south easterly heading.

Feeding sites: Feeding occurs mainly in Spurn Bight, but surveys by Tasker & Milsom (1979) identified the Foulholme Sands area as becoming increasingly important during late

winter as the population here increases in size. Small flocks move further into the estuary as far as the Saltend to New Holland area, but are usually present in insignificant numbers, and are infrequently recorded further upstream in the inner estuary. Eco Surveys (1991) found major feeding sites located on the south shore at Cleethorpes and the Grainthorpe Basin, with smaller flocks using Pyewipe Flats and the Skidbrooke-Saltfleet reach.

Seasonality

The main influx of knot occurs between September and November. The wintering population on the estuary remains stable through December before a mid winter peak in January. In January, large flocks which have moulted on the Wadden Sea move into the British Isles (Prater 1981), and this influx which is seen on the Humber results in a mid winter peak. This peak is followed by a fall in mid February, with a further very large fall in mid March. Beyond this, the population falls to zero by the first week of June. No birds are then present until the end of July when the autumn passage begins (Catley 2000).

Historical changes and trends

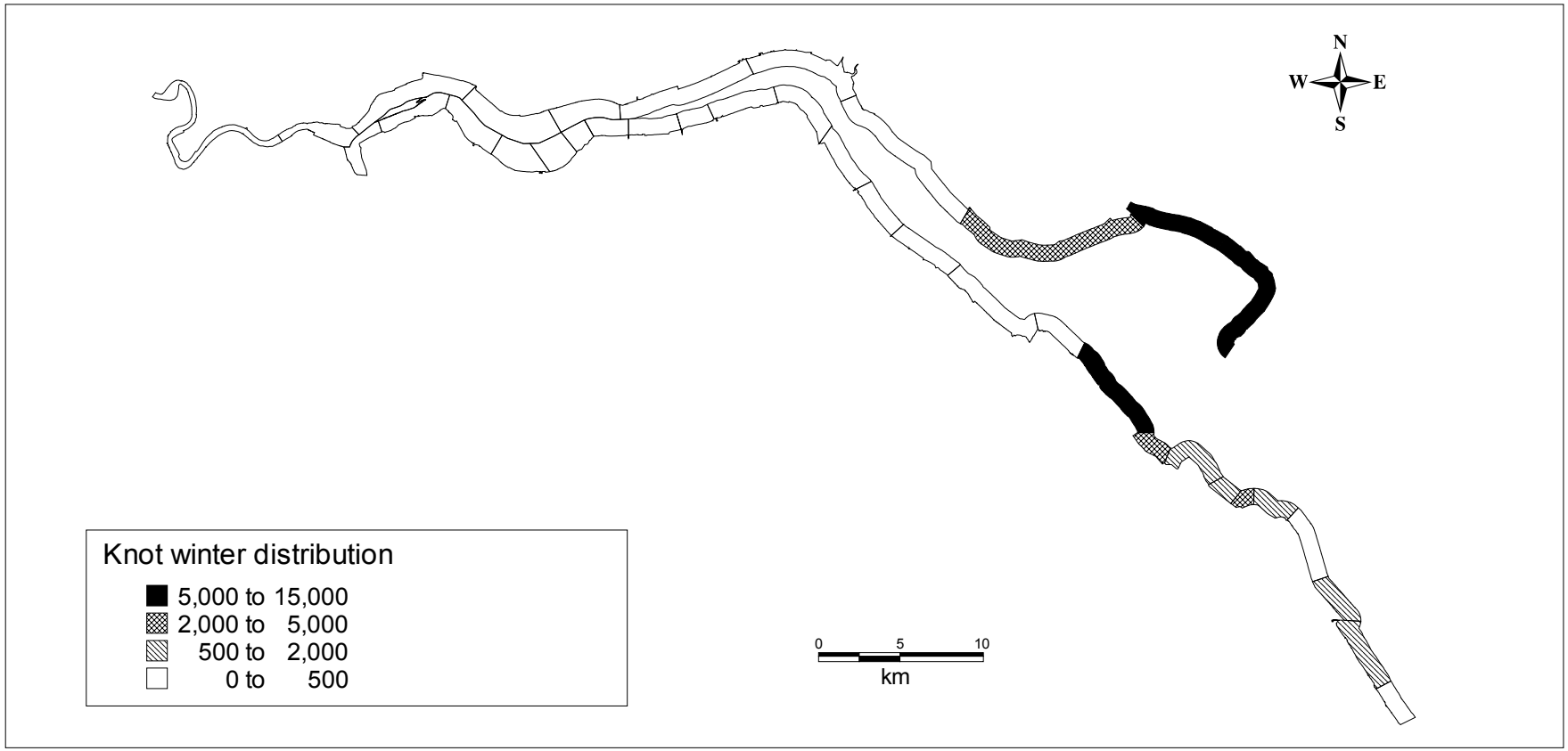
Since the late 1960's there has been a decline in the total numbers of knot in Britain and Ireland. Mean annual peak maxima of 300,000 between 1969 and 1975, declined to 220,000 between 1980 and 1988 (Batten *et al* 1990). A similar decrease has taken place in the European population although the European population of *C.c islandica* has now stabilised (Tucker & Heath 1994). There appears to be a recent trend of population decline and in 99/00 for the third consecutive year, the annual index of the Wetland Bird Survey decreased. The population count for 1999-2000 was the second ever lowest (Musgrove *et al* 2001). However, in 2000/01 the annual index rose sharply (Pollitt *et al*., 2003). Although large fluctuations can occur between years in the national and Humber populations, due to variability in breeding success in the high Arctic (Lack 1986), the overall wintering population on the Humber appears to have been relatively stable over the last fifteen years. There has however, been a general decline since the mid 1990's in the Humber, mirroring the national reduction (Catley 2000).

Conservation status

Protected under WCA 1981; Listed in Annex II/2 of EC Bird Directive; Appendix II of the Bonn Convention; Appendix III of the Berne Convention; Species of European Conservation Concern (SPEC 3); UK Species of Medium Conservation Concern (Amber List).

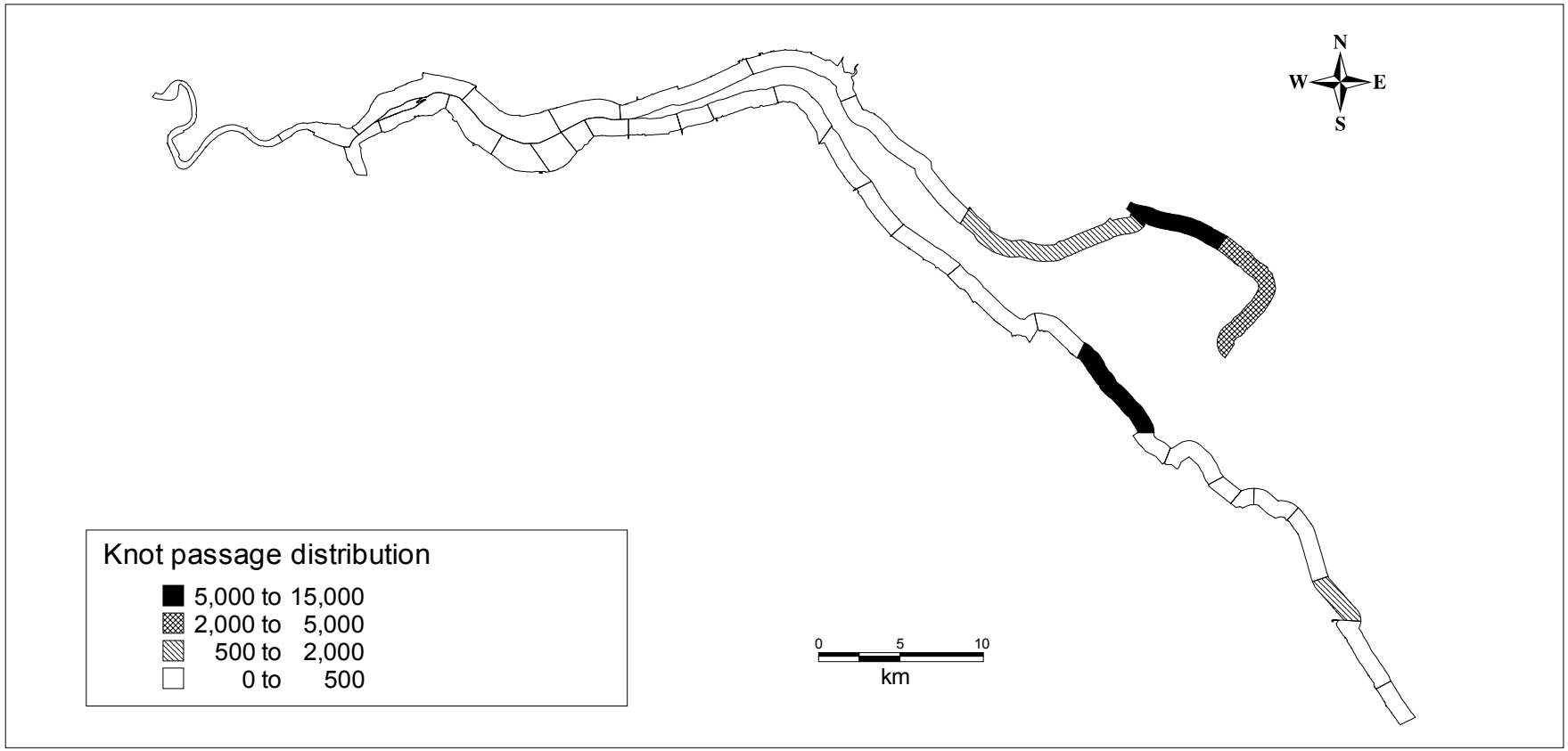
- 5 year winter peak mean of 28,165 (96/97-00/01).
- 5 year passage peak mean of 18,500 (autumn 96/97-00/01) and 1,336 (spring 96/97-00/01)
- 2000/01 maxima of 34,888 (winter).

- 10.1% of GB population (winter).
- 6.3% of biogeographic population (winter)
- 4.1% of biogeographic population (autumn passage).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	0.00	0.00	0.00	0.00	0.00	1.25	0.00	156.50	3,568.66	15,000.00	6,204.25			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	3.00	0.00	0.20	0.00	0.40	0.00	0.00	0.00	0.00	0.40	8.40	1.00	0.00	0.20
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	0.00	334.00	0.00	7,920.00	4,900.00	1,350.00	749.00	2,419.0	910.40	123.33	860.20	666.20	129.00	

5 year mean annual peak maxima for wintering knot by sector, Source; Core WeBS counts 1996-2001.



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	0.00	1.00	0.00	0.00	0.00	0.00	1.50	309.00	719.00	6,500.00	4,553.75			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	0.60	0.00	0.00	0.00	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	1.20	62.00	0.00	7,400.00	15.40	20.00	6.49	322.00	56.80	72.00	1,585.00	273.25	1.80	

5 year mean annual peak maxima for passage knot by sector, Source; Core WeBS counts 1996-2001.

References

BATTEN, L.A., BIBBY, C.J., CLEMENT, P., ELLIOT, G.D. & PORTER, R.F., 1990. *Red data birds in Britain*. London: T. & A.D. Poyser.

*CATLEY, G., 2000. *Humber Estuary Wetland Bird Survey.* Twelve months of high and low tide counts September 1998 to August 1999. Peterborough: *English Nature Research Reports*, No. 339.

DAVIDSON, N.C., d`A LAFFOLEY, D., DOODY, J.P., WAY, L.S., GORDON, J., KEY, R., DRAKE, C.M., PIENKOWSKI, M.W., MITCHELL, R. & DUFF, K.L. 1991. *Nature conservation and estuaries in Great Britain*. Peterborough: Nature Conservancy Council.

*ECO SURVEYS, 1991. *Winter wildfowl and wader feeding area study along the Lincolnshire and south Humberside coast*. Report to the National Rivers Authority.

LACK, P., 1986. *The atlas of wintering birds in Britain and Ireland*. Calton: T. & A.D. Poyser.

MUSGROVE, A.J., POLLITT, M.S., HALL, C., HEARN, R.D., HOLLOWAY, S.J. MARSHALL, P.E., ROBINSON, J.A. & CRANSWICK, P.A., 2001. *The wetland bird survey 1999-2000: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

POLLITT, M.S., HALL, C., HOLLOWAY, S.J HEARN, R.D.,. MARSHALL, P.E. ROBINSON, J.A., MUSGROVE, A., ROBINSON, J., & CRANSWICK, P.A., 2003. *The wetland bird survey 2000-2001: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

PRATER, A.J., 1981. *Estuary Birds of Britain and Ireland*. Calton: T. & A.D. Poyser.

*TASKER, M. & MILSOM, T.P., 1979. *Birds of the Humber Estuary*. Hull: Department of Zoology, University of Hull.

TUCKER, G.M. & HEATH, M. 1994. *Birds in Europe: their conservation status*. Cambridge, Birdlife International. 600pp.

Dunlin *Calidris alpina*

Key Sites: Saltend to Spurn, Pyewipe and Read's Island.

EC Wild Birds Directive: Not listed.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	N/A	N/A	1.7%
Wintering	22,222	4.0%	1.7%
Passage			
Spring	11,103	5.6%	0.8%
Autumn	20,269	10.1%	1.5%

Description

The dunlin is the most abundant wader in Britain. There are three sub-species, nominate *alpina*, *arctica* and *schinzii* occur annually in Britain, wintering adults being almost exclusively of the *alpina* population. *C.a.arctica* and *C.a.schinzii* occur on passage in Britain from July to September, but *C.a.schinzii* is the most abundant in UK. In winter and on passage, the dunlin utilises the entire mudflat for feeding, taking small invertebrates living in the mud. The dunlin is considered to be a vulnerable species in winter due to the occurrence of high concentrations on a small number of large estuarine complexes.

Distribution within the Humber

Non-breeding

The dunlin is a widespread species around the Humber at low water, but the largest concentrations are predominantly found between Saltend and Spurn, around Read's Island and on Pyewipe Flats.

Roosting sites: Dunlin may form large roosting flocks at high water in the Humber, although many birds remain along the tideline. On the south shore, birds which feed around Read's Island gather at high tide to roost (Catley 2000). However, some dunlin roost on Whitton Sand (Eco Surveys 1991), although the importance of this site has declined in recent years with the gradual accretion and vegetation of the mudflat, with flocks now using the Crabley to Brough reach both for feeding and roosting, depending on tides (N.D. Cutts pers. obs. 2002). Birds from Pyewipe move onto the Courtaulds roost (Eco Surveys 1991) and Tasker & Milsom (1979) detailed roosting sites along the north shore at Spurn and Cherry Cobb Sands Outstray (now reclaimed), which held the majority of roosting birds along the reach. Feeding birds from the outer estuary roost at Cleethorpes and Skidbrooke. A number of fields between Paull and Kilnsea are also used by roosting birds on occasion, and similarly, fields as far inland as 5km can be used as high water roosts in the upper Humber (N.D. Cutts pers. obs. 2002).

Feeding sites: There is strong evidence of seasonal variations in the distribution of feeding birds in the Humber Estuary (Catley 2000; Tasker & Milsom 1979; Goodall 1992). However, the spatial pattern of occurrence is clear with the intertidal area between Saltend and Spurn being the most important site in the Humber, holding between 44% and 92% of the estuary totals. The recent study using low tide count data from1998-1999 (Catley 2000) identified subtle temporal variations within this section of the estuary with the Saltend area being particularly important during the winter, while passage birds occurred in greatest numbers at Sunk Island with a low level of usage in winter. Goodall (1992) noted that "middle estuary dunlin were heavier than outer estuary dunlin at the passage seasons, but lighter in mid winter" and Tasker & Milsom (1979) found Foulholme Sands to be more important for migrating flocks than Spurn Bight. However, recent surveys (IECS 2001) at Saltend recorded nationally important dunlin flocks during spring passage 2002, the flock representing 27% of the peak passage maxima for the Humber (using the most recent available WeBS data from 1997/8-1999/0 to give a 3 year passage mean annual peak maxima) compared to a maxima representing perhaps 5% from the same period in 2001, suggesting that some variations in spatial and temporal usage occur in the middle to outer estuary.

On the south shore, highest feeding concentrations occur around Read's Island and Pyewipe flats but large numbers are also found between East Halton to Immingham Dock, Cleethorpes, Grainthorpe and Saltfleet-Skidbrooke. In winter, when energy requirements are at their highest, feeding also occurs in flooded coastal fields around Kilnsea (L. Mander pers. obs. 2001).

Seasonality

There are three races which occur on the east coast, of which *C.a.artica*, is only a rare visitor. Dunlin of this sub-species may occur on the Humber (Goodall 1992). In years when there is poor breeding success, adults of this sub-species are present in the Humber as early as June but they normally move through July and August. Very small numbers remain on the Humber through autumn, with some *shinzii* juveniles still present until November (Goodall 1992). *C.a.alpina* arrive in Britain mainly from late October having moulted in the Wadden Sea (Prater 1981). These birds remain on the Humber until February and then return north via the Wadden Sea (Eco Surveys 1991). In the Humber, the population first peaks in October/November with the arrival of flocks of the *alpina* and *schinzii* races. The maximum peak occurs in January but the level of usage in December/January on the Humber depends largely on weather conditions in continental Europe. Large numbers of *schinzii* are also recorded moving through the Humber during April/May.

Historical changes and trends

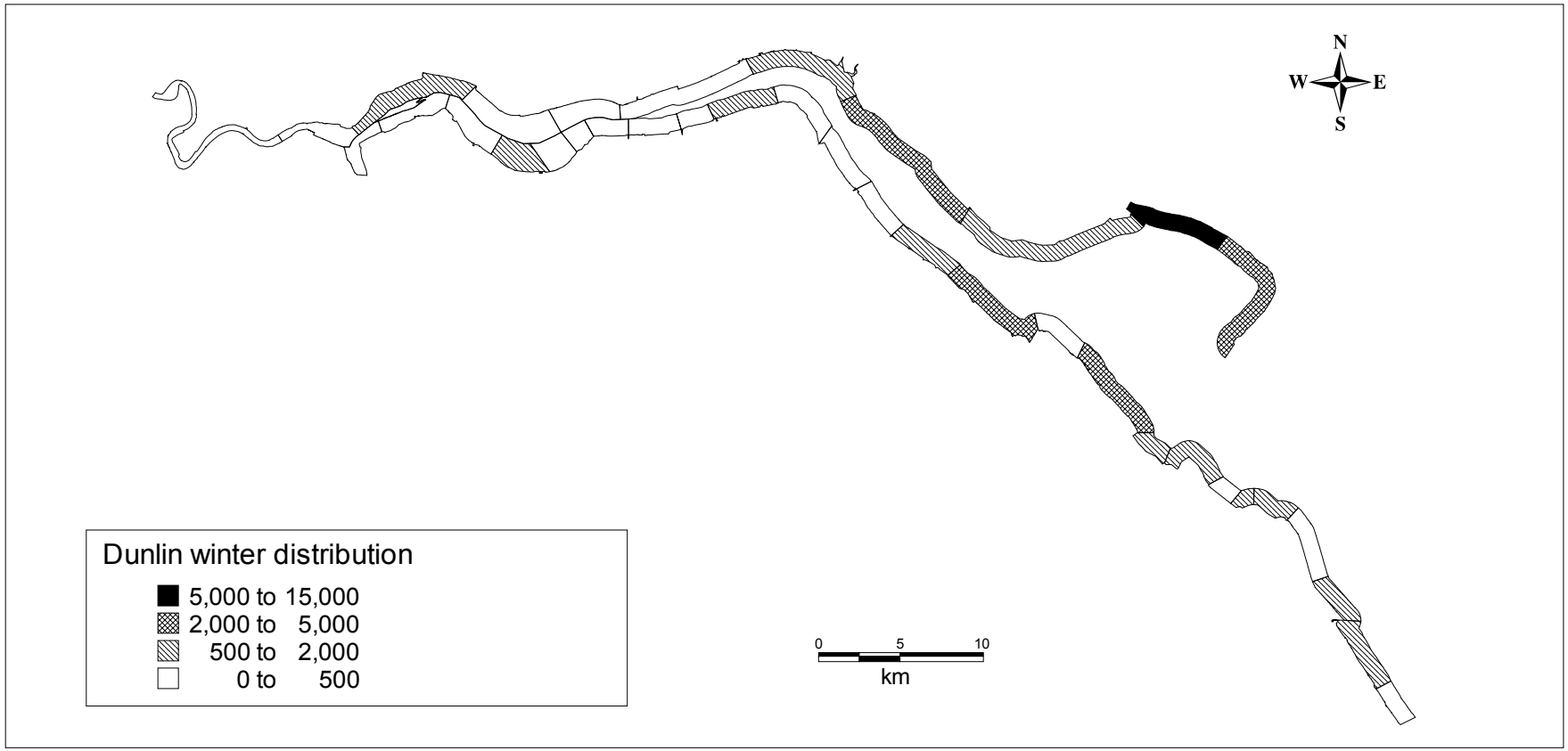
The population of dunlin declined by almost 50% between the mid 1970's and mid 1980's in the United Kingdom, long term indices for the species indicating that populations have since partially recovered. It has been shown that a decrease in dunlin numbers on particular estuaries has been closely correlated with the spread of the cordgrass *Spartina anglica*. Populations in the Humber are thought to have remained stable over the last 20 years, with numbers particularly high in 1998/9 with 40,121 individuals recorded in the Humber. Local declines have been noted on the Humber, with Pyewipe seeing a decline in the wintering population in the 1980's (Eco Surveys 1991), although this site is currently of importance during most months (Catley 2000).

Conservation status

Protected under WCA 1981; EC Birds Directive; Appendix II of the Bonn Convention; Appendix II of the Berne Convention; Species of European Conservation Concern (SPEC 3); UK Species of Medium Conservation Concern (Amber List).

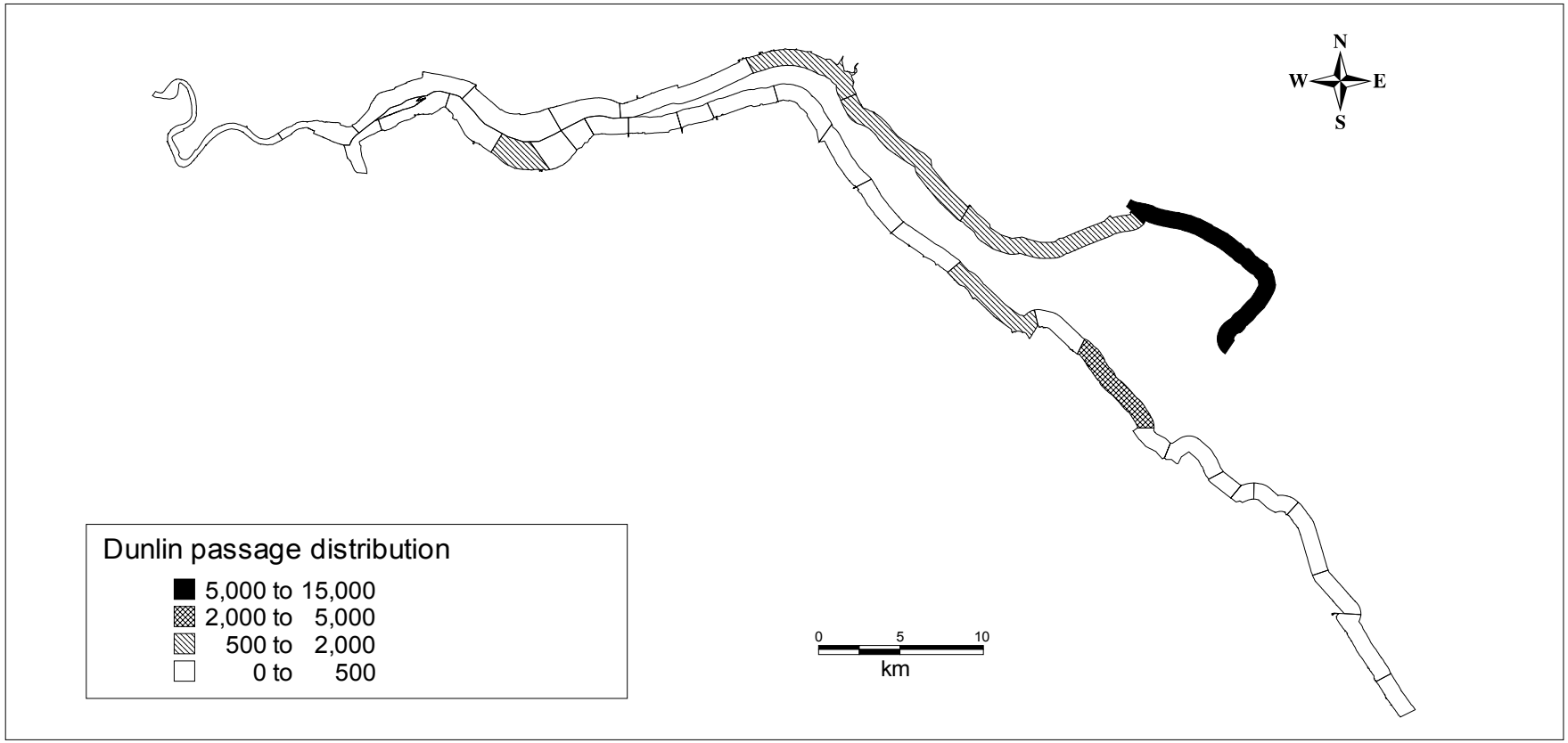
- 5 year winter peak mean of 22,222 (96/97-00/01); 5 year passage peak mean of 20,269 (autumn 96/97-00/01).
- 2000/01 maxima of 18,502 (winter) and 24,075 (autumn passage).

- 4.0% of GB population (winter) 10.1% of GB population (autumn passage); 5.6% of GB population (spring passage).
- 1.7% of biogeographic population (winter); 1.5 % of biogeographic population (autumn passage).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	91.75	316.00	1,069.50	238.00	22.25	68.75	1,738.75	3,912.00	1,535.66	11,750.00	2,705.00			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	69.80	184.80	4.80	132.60	1,785.40	321.40	0.40	27.20	74.00	57.20	650.00	101.00	81.60	358.00
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	618.80	2,092.00	0.80	3,284.00	1,066.50	875.00	366.66	799.00	550.80	408.20	1,099.25	602.40	245..80	

5 year mean annual peak maxima for wintering dunlin by sector, Source; Core WeBS counts 1996-2001.



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	420.00	244.00	223.50	60.00	16.66	40.50	1,992.5	1,901.33	1,957.50	9.666.66	6,756.25			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	15.80	100.00	0.00	80.60	1,751.80	202.00	1.00	5.80	30.50	32.25	13.00	9.33	18.00	253.00
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	318.50	1,929.00	0.00	4,880.00	367.66	216.00	24.75	229.33	160.80	214.33	249.80	99.75	86.20	

5 year mean annual peak maxima for passage dunlin by sector, Source; Core WeBS counts 1996-2001.

References

*CATLEY, G., 2000. Humber Estuary wetland bird survey. Twelve months of high and low tide counts September *1998 to August 1999*. Peterborough: *English Nature Research Reports*, No. 339.

CUTTS, N.D., personal observation, 2001. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

*ECO SURVEYS, 1991. *Winter Wildfowl and Wader Feeding Area Study along the Lincolnshire and South Humberside Coast*. Report to the National Rivers Authority.

*GOODALL, A.L., 1992. *The dunlin, Calidris alpina in the Humber Estuary*. Hull: University of Hull, unpublished thesis.

IECS, 2001. *Ornithological Monitoring, Saltend: Summary Trend Report #10 July 2000 to September 2000*. Hull: Institute of Estuarine and Coastal Studies, University of Hull. Report to CES Ltd.

MANDER, L., personal observation, 2001. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

MUSGROVE, A.J., POLLITT, M.S., HALL, C., HEARN, R.D., HOLLOWAY, S.J. MARSHALL, P.E. ROBINSON, J.A. & CRANSWICK, P.A., 2001. *The wetland bird survey 1999-2000: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

PRATER, A.J., 1981. *Estuary birds of Britain and Ireland*. Calton: T. & A.D. Poyser.

*TASKER, M. & MILSOM, T.P., 1979. *Birds of the Humber Estuary*. Hull: Department of Zoology, University of Hull.

Ruff *Philomachus pugnax*

Key Sites: Blacktoft Sands (wintering and passage), Brough Airfield (passage and possibly summering).

EC Wild Birds Directive: Listed in Annex I and II/2.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	Insufficient data	Insufficient data	Insufficient data
Wintering	14	1.9%*	Insufficient data (Biogeograhic passage population not defined)
Passage			Insufficient data
Spring	4	0%	(Biogeograhic passage
Autumn	128	1.4**	population not defined)

*Wintering population equates to 1.9% national population. However, when determining national importance, 50 individuals is normally used as a minimum threshold, (Pollitt *et al.*, 2003).

** Threshold taken from Stone *et al.*, (1997).

Description

The ruff is a rare breeding bird in Britain, with only small numbers wintering in Britain and Ireland. The majority of the birds winter in small numbers both inland and on the coast (Lack 1986), and the main breeding habitat is low lying, wet, grassy meadows (Gibbons *et al* 1993).

Distribution within the Humber

Breeding

The Scunthorpe Museum reports that a male was seen displaying to three females on Alkborough Flats on 8th May 1977. Birds have been recorded on Brough Airfield during the summer with moulting birds out of breeding plumage observed on the adjacent mudflats (K. Jennings pers. comm. 2002). However, breeding status on the airfield is not known.

Non-breeding

The key sites are used during the autumn, winter and spring, with Blacktoft Sands Nature Reserve being particularly important for passage and wintering birds. Indeed, areas adjacent to the Humber Estuary are the most favoured and relatively large flocks have also been recorded on Broomfleet Brick Pits and Brough airfield during this period.

Wintering birds

Occasionally, solitary individuals are recorded during winter on the north bank of the outer Humber (Tasker & Milsom 1979), and there are also small numbers that winter on the south side of the estuary (Eco Surveys 1991). During winter, the species is often recorded in small flocks at Blacktoft Sands with 20 birds in 2000, whilst larger flocks have also been recorded from the Ousefleet reach, adjacent to Blacktoft Sands, with up to 140 present in December 2001 (RSPB pers. comm. 2002).

Passage birds

Tasker & Milsom (1979) found that on the north bank of the outer estuary, the species is predominantly found during autumn passage. It occurred on virtually all mudflats including the freshwater Fisherman's Channel, the various outstrays and even around some of the large puddles and ditches. Small flocks have additionally been recorded at Sunk Island in 1999/2000 (Catley 2000). During autumn peak passage in October, analysis of WeBS core counts from 1998-1999 show that sectors ISA (Walcot to Alkborough Beacon) and NA (M62 to Faxfleet) including Blacktoft Sands supported large numbers of the species, surpassing the qualifying level of national importance of 50 birds set by Musgrove *et al* (2001). During the autumn, Blacktoft Sands Nature Reserve regularly supports over 100 birds (RSPB 2002), and it is possible that some interchange with other wetlands such as Broomfleet Brick Pits and Brough Airfield occurs (BAOG 2002; N.D. Cutts pers. obs. 2002).

Seasonality

The main migration months are August and October on the Humber Estuary, with the peak occurring in the latter month. Numbers begin to decrease as the autumn passage ceases and numbers remain low for the winter.

Historical changes and trends

The ruff is a rare, localised breeding bird in Britain (Gibbons *et al* 1993). Historically, the species had a more widespread breeding status, but the population declined to near extinction during the 18th and 19th Centuries due to land drainage and human disturbance (Batten *et al* 1990); sporadic nesting continued until 1922. Recolonisation from 1963 occurred in the Ouse Washes (Taylor *et al* 2000) and the number of birds wintering increased rapidly over the second part of the century after the first wintering records for Britain in Cambridgeshire in 1934-35 (Prater 1981). Since the 1990's, numbers of ruff wintering in Great Britain have increased dramatically (Musgrove *et al* 2001).

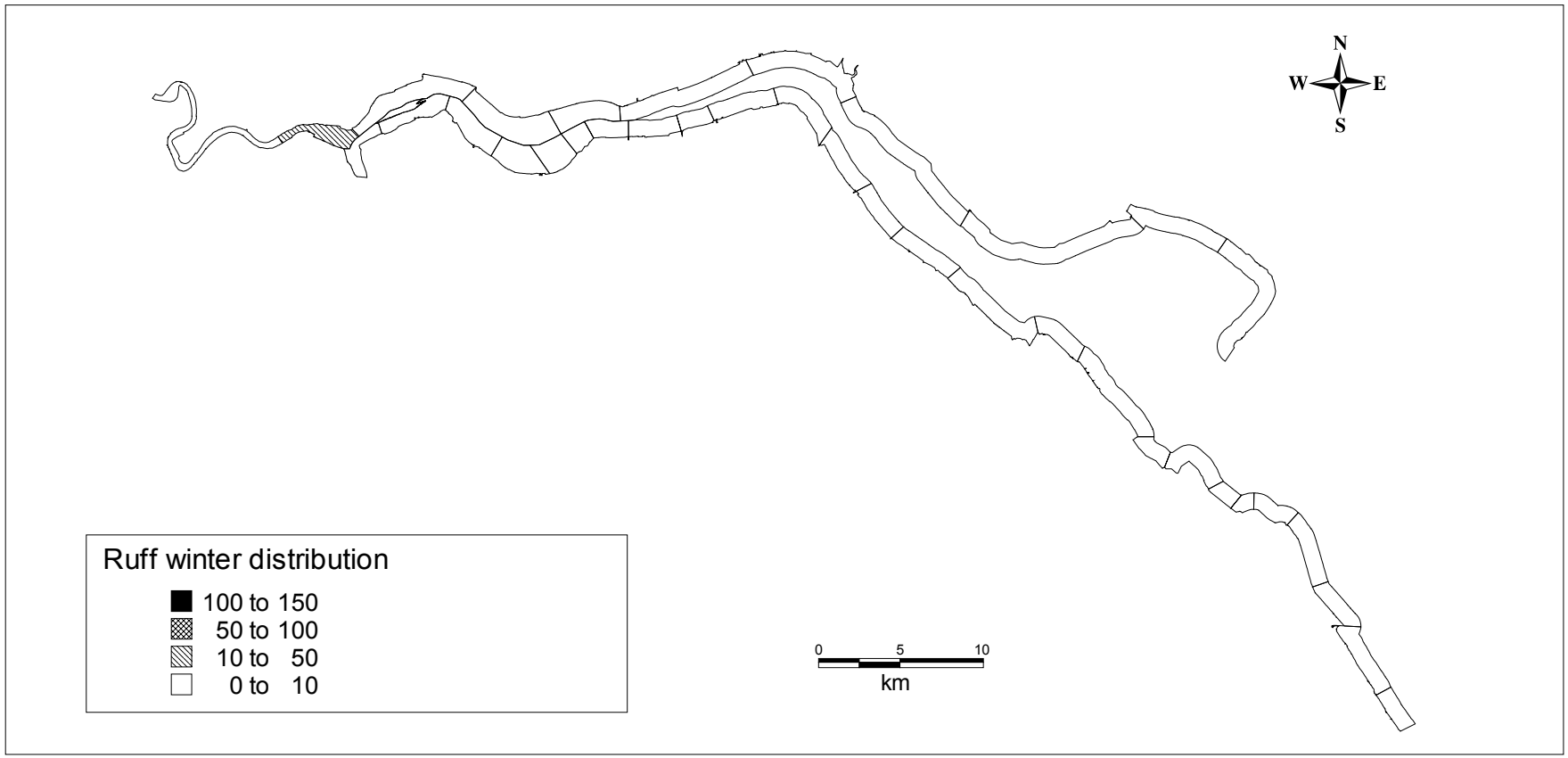
Mather (1986) describes the ruff as a bird of passage both in spring and autumn, mainly during the latter period. Increasing numbers are now spending the winter months in the Humber Estuary.

Conservation status

The species is protected under Schedule 1 Part 1 of WCA 1981; Listed in Annex I and Annex II/2 of EC Birds Directive; Appendix III of the Berne Convention; Species of European Conservation Concern (SPEC 4); UK Species of Medium Conservation Concern (Amber List).

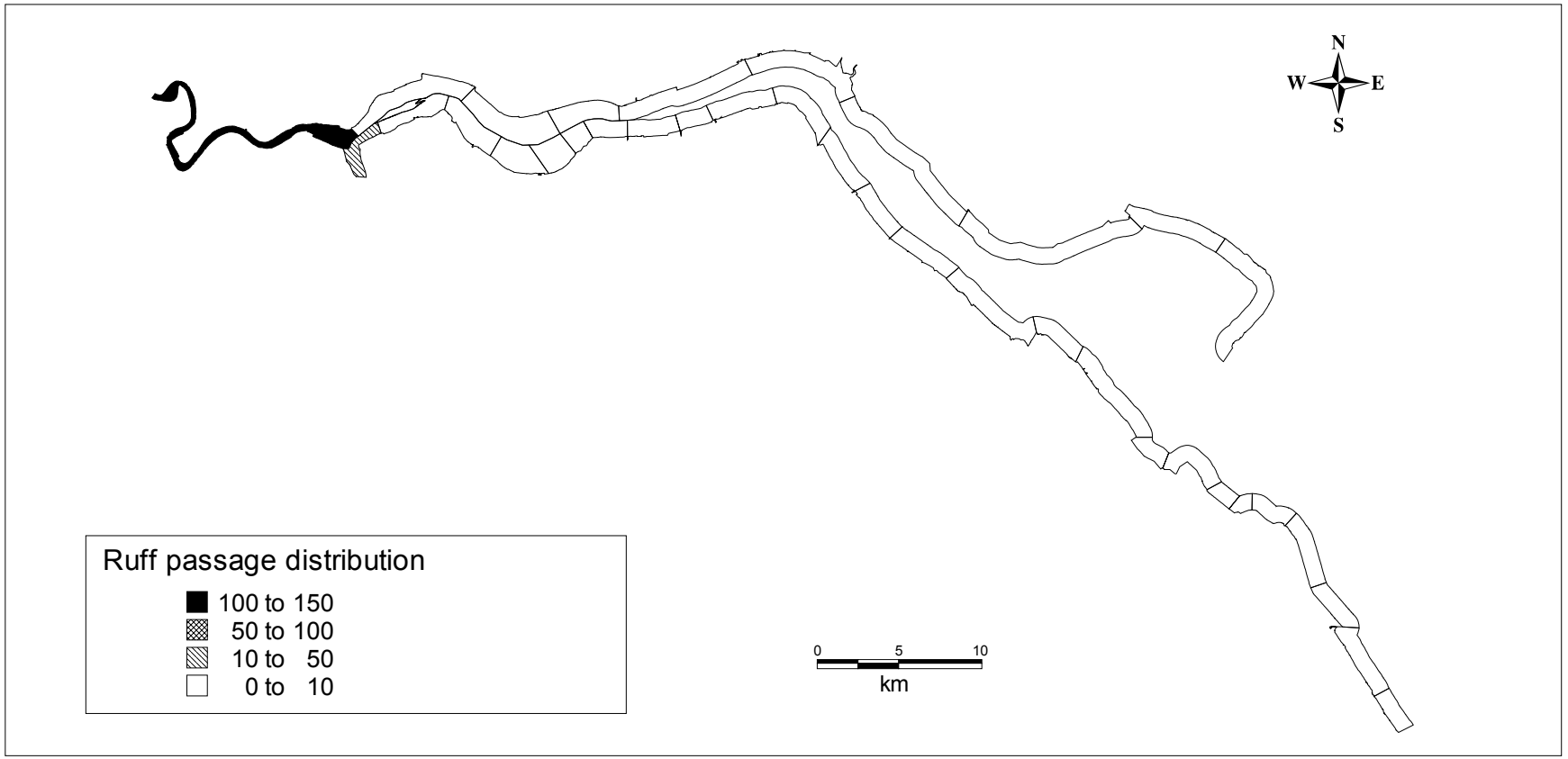
- 5 year winter peak mean of 14 (96/97-00/01); 5 year passage peak mean of 128(autumn 96/97-00/01).
- 2000/01 maxima of 4 (winter) and 187 (passage).

- 1.9% of actual GB population (winter), although where the 1% threshold is less than 50 birds, 50 is usually used as the minimum threshold.
- 1.4% of GB population (autumn passage).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	0.50	10.00	0.00	0.00	0.00	0.00	0.00	0.25	0.75	0.00	0.50			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.40	3.60
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	0.00	0.60	0.00	4.40	0.40	0.60	0.80	0.00	0.00	0.00	0.00	0.20	0.00	

5 year mean annual peak maxima for wintering ruff by sector, Source; Core WeBS counts 1996-2001.



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	110.00	110.00	8.75	0.00	0.00	0.00	0.00	5.75	7.50	0.00	8.25			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	11.20	0.00	0.00	0.20	5.20	0.00	0.00	0.60	0.00	0.20	0.00	0.00	0.00	0.00
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	0.00	0.40	0.00	0.40	1.00	0.00	0.00	3.00	1.40	0.00	0.60	4.20	0.20	

5 year mean annual peak maxima for passage ruff by sector, Source; Core WeBS counts 1996-2001.

References

BAOG, 2002. *Brough birders data-counts for breeding birds*. Brough Airfield Ornithological Group, unpublished.

BATTEN, L.A., BIBBY, C.J., CLEMENT, P., ELLIOT, G.D. & PORTER, R.F., 1991. *Red data birds in Britain*. London: T. & A.D. Poyser.

*CATLEY, G., 2000. Humber Estuary wetland bird survey. Twelve months of high and low tide counts September 1998 to August 1999. Peterborough: *English Nature Research Reports*, No. 339.

CUTTS, N.D., personal observation, 2002. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

*ECO SURVEYS, 1991. *Winter wildfowl and wader feeding area study along the Lincolnshire and South Humberside Coast.* Report to the National Rivers Authority.

GIBBONS, D.W., REID, J.B. & CHAPMAN, R.A., 1993. *The new atlas of breeding birds in Britain and Ireland: 1988–1991*. London: T. & A.D. Poyser.

JENNINGS, K., personal communication, 2002. English Nature. Bullring House, Northgate, Wakefield, West Yorkshire,WF1 3BJ.

LACK, P., 1986. *The atlas of wintering birds in Britain and Ireland.* Calton: T. & A.D. Poyser.
MATHER, J.R., 1986. *The birds of Yorkshi*re. London: Croom Helm Ltd.

MUSGROVE, A., POLLIT, M., HALL, C., HEARN, R., HOLLOWAY, S., MARSHALL, P., ROBINSON, J., & CRANSWICK, P., 2001. *The wetland bird survey 1999-2000 wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

POLLITT, M.S., HALL, C., HOLLOWAY, S.J HEARN, R.D.,. MARSHALL, P.E. ROBINSON, J.A., MUSGROVE, A., ROBINSON, J., & CRANSWICK, P.A., 2003. *The wetland bird survey 2000-2001: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

PRATER, A.J., 1981. *Estuary birds of Britain and Ireland.* Calton: T. & A.D. Poyser.

RSPB, 2002. RSPB Blacktoft Sands Nature Reserve. *Ornithological report for 2001*. Royal Society for the Protection of Birds, UK.

RSPB, personal communication, 2002. Personal communication from the Royal Society for the Protection of Birds (RSPB) to English Nature re: the Ousefleet reach, adjacent to Blacktoft Sands.

STONE, B.H., SEARS, J., CRANSWICK, P.A., GREGORY, R.D., GIBBONS, D.W., REHFISCH, M.H., AEBISCHER, N.J. & REID, J.B., 1997. *Population Estimates of Birds in Britain and in the United Kingdom.* British Birds 90 pp 1 – 22.

*TASKER, M. & MILSOM, T.P., 1979. *Birds of the Humber Estuary*. Hull: Department of Zoology, University of Hull.

TAYLOR, M., ALLARD, P., SEAGO, M. & DORLING, D., 2000. *The birds of Norfolk*. Mountfield: Pica Press.

Curlew *Numenius arquata*

Key Sites: Pyewipe, Saltend, Foulholme Sands.

EC Wild Birds Directive: Listed in Annex II/2.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	N/A	N/A	N/A
Wintering	3,253	2.2%	0.8%
Passage			
Spring	1,436	Insufficient data	0.3%
Autumn	3,359	(National passage population not defined)	0.8%

Description

The curlew is a reasonably common breeding bird of damp moorland and heath areas in the UK. After the breeding season, many of the birds move onto marine coastal areas to undergo a post-nuptial moult, especially favouring mudflats and sands extensively exposed at low tide where they feed on polychaetes such as *Nereis diversicolor* and bivalves such as *Macoma balthica*. They also frequent extensive areas of wet grasslands. Curlew are very faithful to their winter sites, some birds staying from the autumn to spring migration/dispersion. Like most waders, at high water curlew form large roosts on either the upper shore or on fields and marshes behind the sea walls.

Distribution within the Humber

Breeding

Catley (2000) noted "there were no instances of potential breeding reported from the immediate environs of the estuary". Breeding does however occur in fenland around the region including around the lower River Derwent and River Foulness valleys (N.D. Cutts. pers. obs. 2002) and the Ancholme valley (Catley 2000).

Non-breeding

Roosting sites: Catley (2000) found that curlew prefer to use high tide roost sites close to their favoured low water feeding sites. Large curlew roosts occur around Read's Island, from Goxhill to East Halton Skitter, Saltend, Cherry Cobb and Sunk Island (Catley 2000). The area from Saltend to Spurn is particularly important for roosting curlew as birds feeding in the outer estuary (south shore) move there to roost and Tasker and Milsom (1979) reported that large numbers of birds roosting on the north side on medium or spring tide tides come from the Pyewipe area. At high tide, when the mud is covered, curlew roost on the saltmarsh and upper shoreline areas where available. However on spring tides curlew are often forced to move inland to roost, where they generally favour pasture but also utilise stubble fields (N.D. Cutts. pers. obs. 2002).

Feeding sites: Curlew feed at a particularly low density which makes it difficult to identify keys areas for the species. However from several studies in the Humber (Catley 2000; Tasker & Milsom 1979; Eco Surveys 1991; IECS 1999), the mudflats at Pyewipe are definitely a preferred feeding area on the south shore, while the mudflats from Saltend to Sunk Island support the largest concentration of feeding birds on the north shore.

In winter, some birds move inland from the Humber to feed on stubble and sugar beet fields on both shores of the estuary (Tasker & Milsom 1979; G. Weaver pers. comm. 2002). Although this activity is not restricted to daylight hours, Tasker & Milsom (1979) found birds travelling up to 5 miles from the estuary and generally returning to roost before dark. Field feeding occurs around the Humber but the size of the population currently using the farmland habitat around the Humber is unknown. There have been no studies of the way that curlew use the adjacent habitat to feed in the Humber, however it is likely that usage of farmland habitat varies with intensity of farming activity and weather conditions, as well as with activity on the estuary such as wildfowling (Prater 1981).

Seasonality

Autumn passage commences in mid June with peak counts of visible migration later in the month and throughout July. However, numbers on the Humber Estuary continue to build-up to peaks in August or September with the post-nuptial moult, some birds then moving on, and others remaining on the site to over-winter. Therefore, a drop in numbers occurs as the autumn progresses, possibly also linked to increased wildfowling activity on the estuary and the increased availability of inland feeding sites, with the population remaining stable from November to March. Spring migration is reported from early March to late May, although numbers recorded are far smaller than in autumn. Wintering birds leave from February onwards and numbers fall rapidly through March and April. However despite this decline, small numbers of curlew remain on the Humber during the mid summer and it is thought that these birds may be young non-breeding adults, returning to their natal area (Catley 2000).

Historical changes and trends

Using British maxima for 1989/90 (Kirby *et al* 1991) and 1999/00 (Musgrove *et al* 2001), it would appear that there has been a potential increase in the national population between those two seasons of *c*. 38%. This generally accords with data presented in Stroud *et al* (2001) and Cranswick *et al* (1999), which indicate a national and international increase in the population.

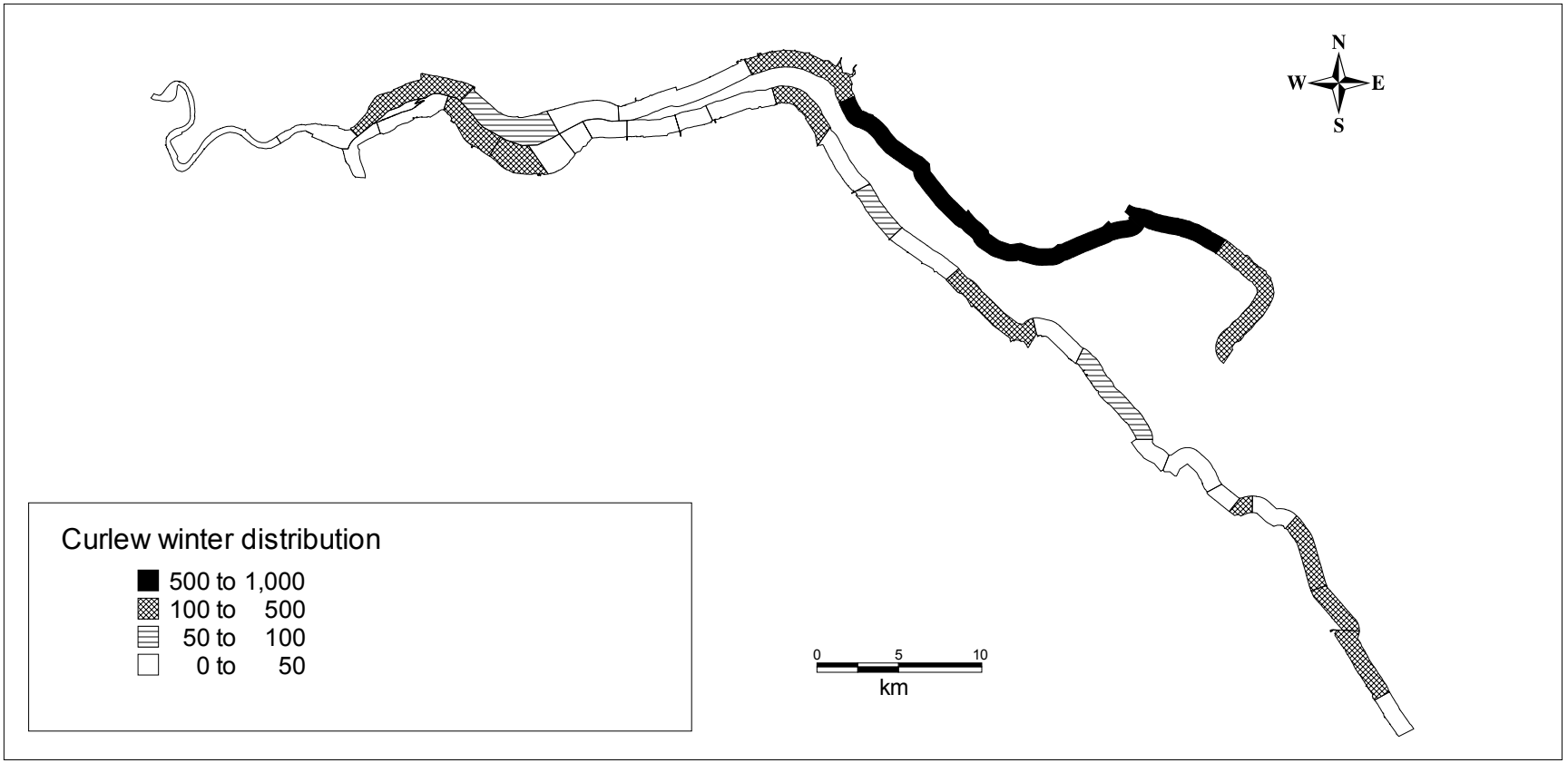
On the Humber the 5 year mean annual peak maxima 1985/86-1989/90 is stated as being 4,107 individuals (Kirby *et al* 1991) with the 1995/96-1999/00 value 3,050, suggesting a decline in numbers over the last decade or so. However the 1985/86-1989/90 mean is misleading as the dataset from only one year (1987/88) was complete for the Humber, and the methodology used to assess the 5 year mean annual peak maxima at that time used only full datasets, compared to the current methodology which employs a factor on incomplete datasets. Therefore, the 1985/86-1989/90 figure is actually the peak maxima for the period, with an average for the period (using the incomplete datasets) of 2,751 individuals compared to 3,050 for 1995/96-1999/00, suggesting, if anything, a small increase in usage on the Humber.

Conservation status

Protected under WCA 1981; Listed in Annex II/2 of EC Birds Directive (79/409/EEC); Appendix II of the Bonn Convention; Appendix III of the Berne Convention; Species of European Conservation Concern (SPEC 3); UK Species of Medium Conservation Concern (Amber List). The species was removed from the quarry list in 1982.

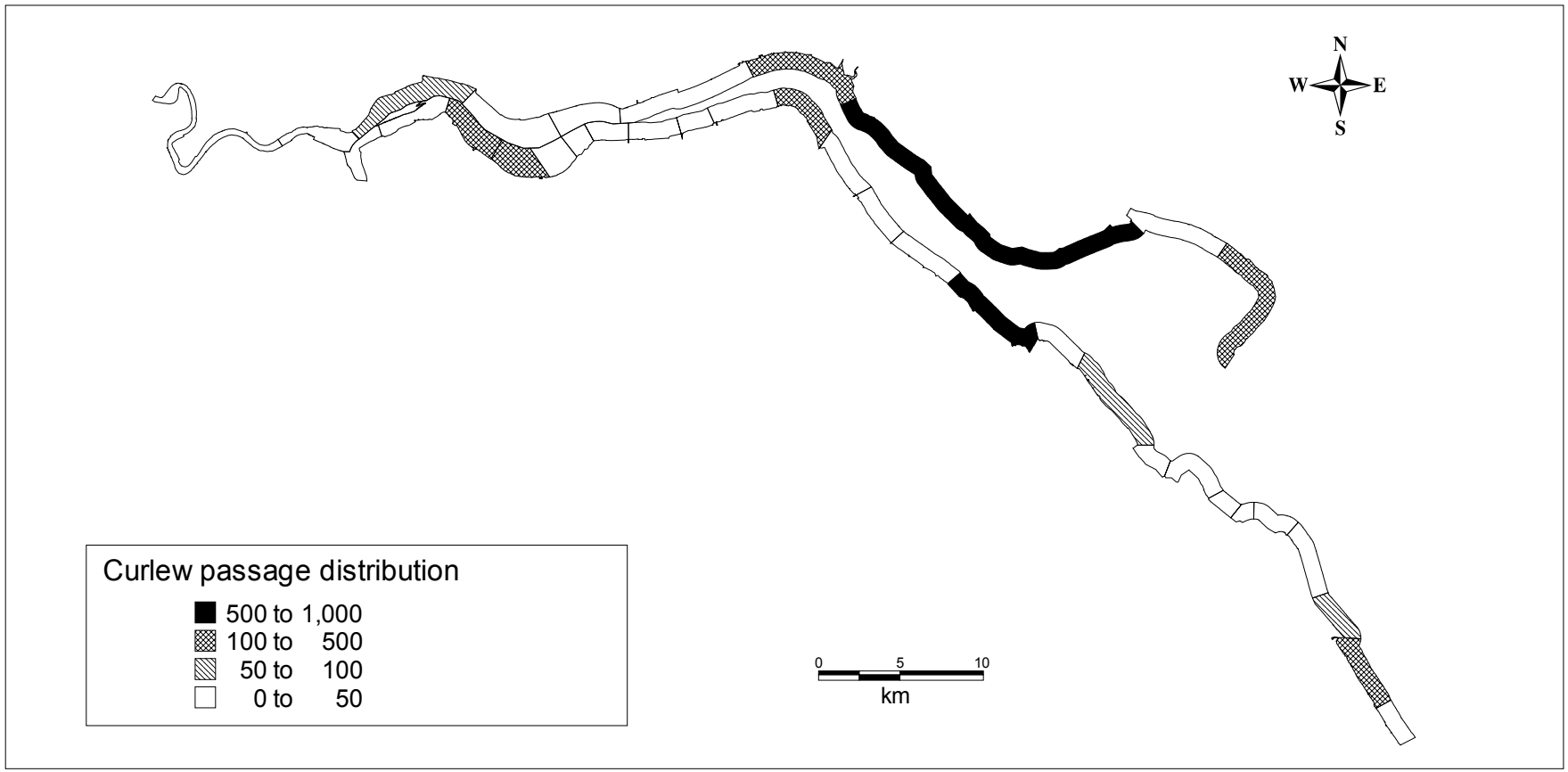
- 5 year winter peak mean of 3,253 (96/97-00/01).
- 5 year passage peak mean of 3,359 (autumn 96/97-00/01).
- 2000/01 maxima of 5,273 (autumn).

- 2.2% of GB population (winter).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	25.25	14.00	142.50	45.75	0.25	3.00	259.67	877.00	613.00	783.33	393.66			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	27.80	12.20	16.00	138.40	260.60	43.00	10.00	19.80	17.20	16.75	58.00	406.00	19.40	58.60
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	20.40	426.60	0.00	76.60	35.50	16.80	17.75	139.50	9.00	182.25	148.00	292.40	17.00	

5 year mean annual peak maxima for wintering curlew by sector, Source; Core WeBS counts 1996-2001.



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	19.50	6.00	75.25	39.00	0.00	7.75	158.25	770.50	731.00	1,333.33	234.75			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	21.40	8.40	17.75	187.40	346.60	21.20	0.40	5.20	12.67	2.60	31.00	199.33	7.40	12.25
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	20.20	500.40	0.00	63.80	34.00	19.66	25.25	47.33	7.40	37.00	99.33	120.40	3.00	

5 year mean annual peak maxima for passage curlew by sector, Source; Core WeBS counts 1996-2001.

References

*CATLEY, G., 2000. Humber Estuary wetland bird survey. Twelve months of high and low tide counts September 1998 to August 1999. Peterborough: *English Nature Research Reports*, No. 339.

CRANSWICK, P.A., POLLITT, M.S., MUSGROVE, A.J. & HUGHES, R.C., 1999. *The wetland bird survey 1997-1998: Wildfowl and wader counts.* Slimbridge: BTO/WWT/RSPB/JNCC.

CUTTS, N.D., personal observation, 2002. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

*ECO SURVEYS, 1991. *Winter wildfowl and wader feeding area study along the Lincolnshire and South Humberside Coast*. Report to the National Rivers Authority.

IECS, 1999. *Middle Humber avifaunal usage.* Hull: Institute of Estuarine and Coastal Studies (IECS), University of Hull. Report to Stevenson & Wheeler.

KIRBY, J.S., FERNS, J.R., WATERS, R.J. & PRYS-JONES, R.P., 1991. *Wildfowl and waders counts 1990-1991. The results of the National Waterfowl Counts and the Birds of Estuaries Enquiry in the United Kingdom.* Slimbridge: The Wildfowl & Wetlands Trust.

MUSGROVE, A.J., POLLITT, M.S., HALL, C., HEARN, R.D., HOLLOWAY, S.J., MARSHALL, P.E., ROBINSON, J.A. & CRANSWICK, P.A., 2001. *The wetland bird survey 1999-2000: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

PRATER, A.J., 1981. *Estuary birds of Britain and Ireland*. Calton: T. & A.D. Poyser.

STROUD, D.A., CHAMBERS, D., COOK, S., BUXTON, N., FRASER, B., CLEMENT, P., MCLEAN, I., BAKER, H. & WHITEHEAD, S., eds., 2001. *UK SPA network: Its scope and content, volume 2. Species accounts.* JNCC.

*TASKER, M. & MILSOM, T.P., 1979. *Birds of the Humber Estuary*. Hull: Department of Zoology, University of Hull.

WEAVER, G., personal communication, 2002. English Nature, The Maltings, Wharf Road, Grantham, Lincolnshire, NG31 6BH.

Whimbrel *Numenius phaeopus*

Key Sites: Spurn Bight.

EC Wild Birds Directive: Listed in Annex II/2.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	N/A	N/A	N/A
Wintering	0	0%	0%
Passage			
Spring	47	0.9%	0%
Autumn	113	2.3%	0%

Description

The whimbrel is a large wader with a distinctive long down-curved bill similar to the curlew. It is a summer visitor to breeding sites in northern Scotland and is generally recorded on passage elsewhere in Britain. The European population winters south of the Mediterranean, chiefly along the coasts of Africa. Only very small numbers winter in the UK and Ireland. Most non-breeding whimbrel are seen during the spring and autumn migration periods, in transit through the UK and Ireland, to and from their northerly breeding areas in Iceland. During this period they occur on estuaries, saltmarshes, coastal lagoons and rocky shores (Lack 1986). Food consists of invertebrates including crustaceans, molluscs, marine and annelid worms.

Distribution within the Humber

Non-breeding

The species only occurs in passage on the Humber Estuary. At high water the main concentrations are found in the Spurn sectors, although additional numbers are present at Barton, around Saltfleet Haven and in Pyewipe (WeBS unpubl.). Low water counts show whimbrel to have a more widespread distribution but they are mainly concentrated in the outer estuary east of the Humber Bridge (Catley 2000). On the estuary, migration is rapid and there appears to be rapid turnover at staging sites. On the Spurn sectors, numbers exceeding 50 individuals have often been recorded in the autumn (Mather 1986; Bell & Degnan 2001; Catley 2000). In recent years some impressive southerly movements have been recorded at Spurn with 173 on 30th July 1999, while a total of 200 birds were counted on the 31st July 2000 (Bell & Degnan 2000 & 2001).

Seasonality

On the Humber, the autumn passage period is very prominent with the peak migration occurring in late July. There is also a trend for greater numbers of whimbrel along the east coast during autumn than in the spring (Lack 1986). The return movement in spring begins in April with peak counts recorded in May (Catley 2000).

Historical changes and trends

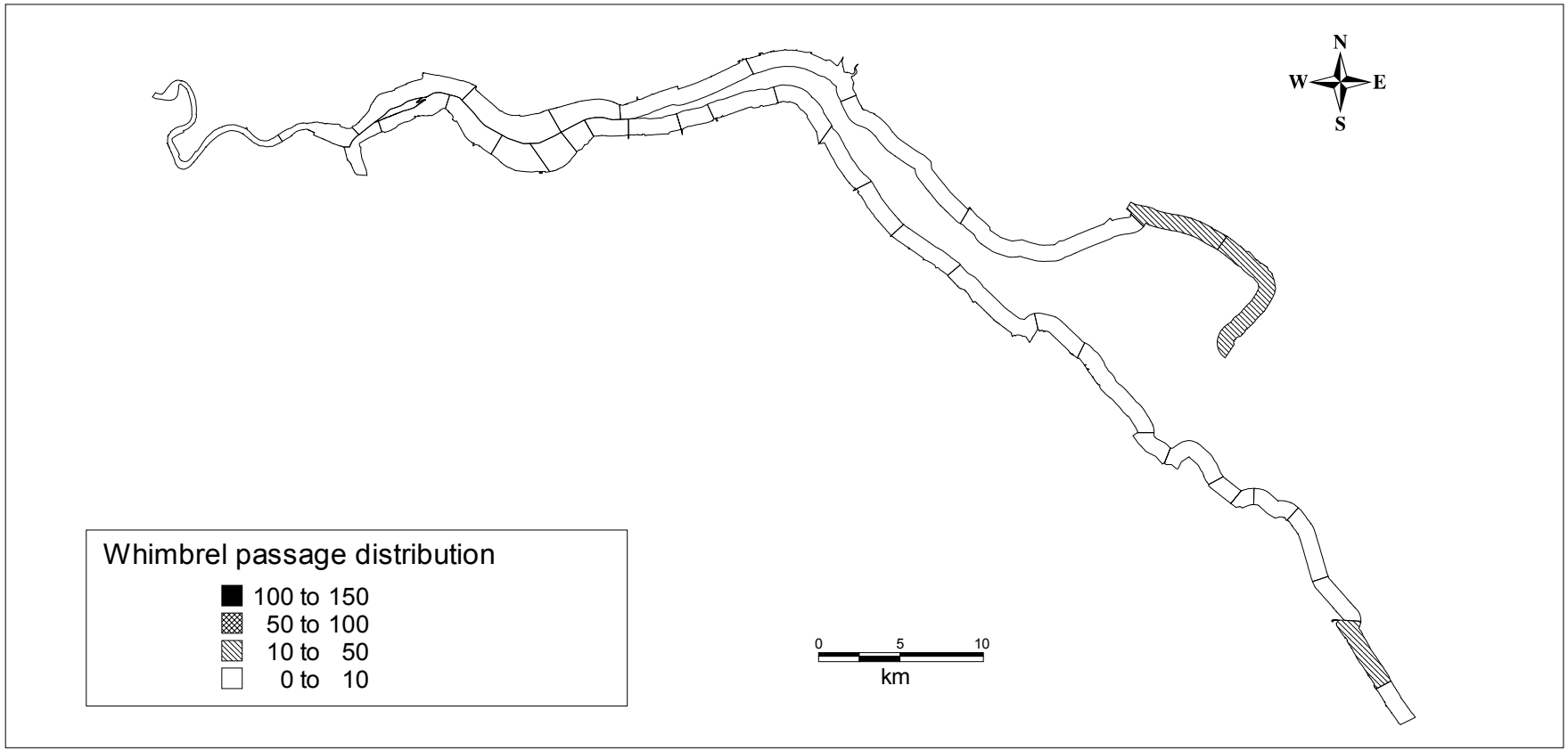
No marked change has occurred in the European breeding population, although numbers have shown fluctuations in the south of the range (Cramp 1998). During the last two centuries, numbers and distribution of the breeding British population have fluctuated considerably. Climate change is likely to be the cause of these fluctuations. Lack (1986) suggests that the increase in the breeding population since the early 1950's was due to a favourable climate (cold springs and early summers).

However there is no evidence to suggest that there was any change in the status of passage birds in the UK (Stroud *et al* 2001). Numbers on passage are thought to be stable in the Humber, with the maximum counts in the 1960's and 1970's recorded by Mather (1986) at Spurn, being similar to present passage numbers.

Conservation status

The species is protected under Schedule 1 Part 1 of WCA 1981; Listed in Annex II/2 of EC Birds Directive (79/409/EEC); Appendix II of the Bonn Convention; Appendix III of the Berne Convention; Species of European Conservation Concern (SPEC 4); UK Species of Medium Conservation Concern (Amber List).

- 5 year passage peak mean of 113 (autumn 96/97-00/01).
- 2000/01 maxima of 275 (autumn passage).
- 2.3% of GB population (autumn passage).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	0.00	2.00	1.33	0.00	0.00	0.25	0.33	4.00	2.00	38.75	17.60			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	2.80	0.00	0.00	0.00	0.60	0.00	0.00	0.00	8.00	0.20	1.00	0.40	0.40	0.20
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	0.40	2.40	0.00	3.60	7.75	3.75	0.25	0.67	0.40	1.50	1.80	16.60	0.40	

5 year mean annual peak maxima for passage whimbrel by sector, Source; Core WeBS counts 1996-2001.

References

BELL, N.A. & DEGNAN, L.J., eds., 2000. *Spurn wildlife No.9*. Spurn Bird Observatory Trust.

BELL, N.A. & DEGNAN, L.J., eds., 2001. *Spurn wildlife No.10*. Spurn Bird Observatory Trust.

*CATLEY, G., 2000. Humber Estuary wetland bird survey. Twelve months of high and low tide counts September 1998 to August 1999. Peterborough: *English Nature Research Reports*, No. 339.

CRAMP, S., 1998. *Handbook of the birds of Europe, the Middle East and North Africa. The birds of Western Palaearctic.* CD-ROM. Oxford: Oxford University Press.

LACK, P., 1986. *The atlas of wintering birds in Britain and Ireland.* Calton: T. & A.D. Poyser.

MATHER, J.R., 1986. *The birds of Yorkshire*. London: Croom Helm Ltd.

STROUD, D.A., CHAMBERS, D., COOK, S., BUXTON, N., FRASER, B., CLEMENT, P., LEWIS, P., MCLEAN, I., BAKER, H. & WHITEHEAD, S., eds., 2001. *The UK SPA network: its scope and contents. Volume 2 Species Accounts*. JNCC.

*TASKER, M. & MILSOM, T.P., 1979. *Birds of the Humber Estuary.* Hull: Department of Zoology, University of Hull.

*WeBS, unpublished. *Five year summary data for the Humber Estuary*. The wetland bird survey 1999-2000 wildfowl and wader counts. BTO/WWT/RSPB/JNCC.

Black-tailed godwit *Limosa limosa islandica*

Key Sites: Killingholme-Pyewipe, North Killingholme Pits (Saltend, Cherry Cobb but lately in much reduced numbers).

EC Wild Birds Directive: Listed in Annex II/2.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	N/A	N/A	N/A
Wintering	1,113	7.4%	3.2%
Passage			
Spring	60	0.5%*	0.2%
Autumn	915	7.6%*	2.6%

* Threshold taken from Stone *et al.*, (1997)

Description

Wintering black-tailed godwit in the UK are of the race *islandica,* which breeds in Iceland with small numbers in northern Scotland. Small numbers of black-tailed godwit also breed in England, with a stronghold on the Ouse and Nene Washes, however these birds are of the nominate *limosa* race which winter in west Africa. Black-tailed godwit of the nominate race *limosa* do occur on the Humber during passage periods and nominate birds of this race have occasionally summered although rarely bred successfully in the area, the most recent occurrence being on Read's Island in the 1980's (Cutts & Catley 2002).

When breeding, the species is generally confined to damp meadows and marsh, but during passage and over-wintering it also uses estuarine mudflats and adjacent lagoons. Prey items include polychaetes and molluscs on estuaries, with insects and seeds also taken on inland sites.

Distribution within the Humber

Non-breeding

The first returning *islandica* of the autumn appear during June with flocks at this time often scattered around the estuary with regular feeding/roosting sites being at Blacktoft Sands/Whitton, Winteringham/Read's Island and North Killingholme, Saltend and Cherry Cobb. Observations of colour ringed birds suggest that some of the flocks seen on the estuary during the early autumn are transient groups that subsequently move on to winter in other parts of the species range. However given the relatively recent usage of the estuary by the species in such large numbers, there are some variations in site utilisation. An example of the rapid increase in the Humber passage population was observed at Saltend (north bank), with a maximum of 148 birds recorded in 1995, increasing to 356 in 1996 and to 725 by 1997, but with marked decreases in the following years. There are now around 50 birds recorded at the site. In general, these flocks used the North Killingholme Pits as a high water roost, with similar patterns observed at the adjacent Cherry Cobb sector (G. Dobbs pers. comm. 2002). It would appear that distribution patterns have stabilised somewhat with the

majority of passage birds now using the North Killingholme to Grimsby Dock Tower area to feed but with nationally important flocks also regularly using sectors on the north bank of the mid to outer estuary.

At this time of year the birds spend long periods roosting and loafing while they undergo their complete post-breeding moult. Feeding appears to take up a relatively short period of available daylight hours, and as such, movements to feeding areas are often delayed until 2 to 3 hours after high water with birds returning to the roost site up to 2 to 3 hours prior to high water. Feeding areas favoured at this time have varied over time and in relation to the tidal height.

The mudflats to the south of the pits between North Killingholme Haven and the Calor Gas jetty at South Killingholme are used extensively by feeding flocks during this period. The birds feed on the lower areas of the mudflats, which are exposed around 4 hours after a spring high tide (ABP 2000). During the autumns of 1996 and 1997 the whole flock was observed moving from the North Killingholme roost to feeding areas at Saltend and Cherry Cobb. However these well defined cross estuary movements appear to have ceased in the last three autumns with only small numbers of birds noted crossing the Humber and a reduction in the importance of the Saltend and Cherry Cobb sites for the species (see above). At the same time the Killingholme section has become increasingly important for the species (Cutts & Catley 2002).

The autumn passage flocks and aggregations of moulting birds show strong site fidelity to favoured feeding areas; between Immingham Docks and North Killingholme Haven; between Goxhill Skitter Ness and East Halton Skitter Ness; at Cherry Cobb; around Read's Island and Winteringham and at Blacktoft Sands and Whitton Sand.

Current records for passage flocks suggest that the estuary has become one of the 10 most important UK sites, with over 1000 birds recorded on the middle estuary in recent years (N.D. Cutts pers. obs. 2002) with the key reaches being Killingholme to Pyewipe on the south bank and Saltend to Hawkins Point on the north bank (N.D. Cutts pers. obs. 2002).

By November the wintering flock adopts a new roost site on the Grimsby/Pyewipe frontage. On a falling tide the flock moves out to feed on the exposed mudflats in the Pyewipe basin, progressing north-westwards with the falling tide as far as the Oldfleet Drain outfall. As the tide turns the flock moves back to the Pyewipe roost site. On neap tides the flock will even roost on the edge of the tide line within the basin. A similar pattern of usage was noted during IECS survey work along the Pyewipe frontage in 1999/2000, with key feeding areas for the species identified from Mawmbridge Drain creek eastwards in the lower mid shore, with high water neap roosts on the upper shore adjacent to Mawmbridge Drain. Some third party disturbance to this flock was noted, generally resulting from public access along the flood defences (Cutts & Catley 2002; N.D. Cutts pers. obs. 2002). This latter point is of note given that the wintering population is entirely dependent upon the restricted area of mudflats and the high tide roost site in the Pyewipe basin.

Seasonality

Black-tailed godwit occur on the Humber in all months of the year. However, the main occurrence period is between late June and mid February, with a subsequent variable spring

movement involving passage flocks which may occur at any time during the March to mid May period.

Some movement between the Humber and the Wash has been observed on occasion from the analysis of colour-ringed birds. There is movement from the Humber to spring staging sites in East Anglia where birds may stay from February through to April prior to their northward migration to Iceland. Several birds have been observed on the Ouse and Nene Washes and at various sites in North and East Norfolk in the February to April period. A few birds have also been tracked from the Humber moving south into East Anglian wintering sites during the autumn period (Cutts & Catley 2002).

Historical changes and trends

The UK wintering status of the *islandica* race has been described by Cranswick *et al* (1999). Less than 100 black-tailed godwit wintered in the UK during the 1930's but numbers rose from then on, the increase being attributed to climatic amelioration in the breeding areas in Iceland. It was also suggested that a subsequent rapid decline during the early 1970's may have been attributed to the cooling of the spring climate during the late 1960's. However since the mid 1970's the number of wintering black-tailed godwit in the UK has risen steadily to their current sustained high level. Davidson (1998) suggests that the species has shown an increase of 62% since the mid 1980's.

Prior to the mid 1980's, only small flocks of black-tailed godwit of less than 10 individuals were recorded on the Humber. However in the autumn of 1989 a peak of 63 birds were recorded at North Killingholme Haven pits and subsequently a wintering flock of 31 at Pyewipe. Since then the number of black-tailed godwit wintering on the estuary has increased in most years through to 1996/1997 after which the population suddenly increased at an exponential rate, the rate of increase steadying again in recent years (Musgrove *et al* 2001). The peak count of 545 birds in 2000/01 is the lowest of the last 4 years and is less than one third of the peak counts in the two previous years.

The sudden changes in site preference discussed above may be related to the suitability of the area for feeding. Morris (1990) suggested that the distribution of feeding birds within the Dee estuary may have altered due to changes in the sandflats and mudflats on that estuary. The upper Humber has been in a very dynamic state throughout the 1990's with extensive erosion and deposition occurring between Blacktoft and Barton-on-Humber in particular, and this could have affected the suitability of the area for feeding black-tailed godwit (N.D. Cutts pers. obs. 2002). The construction of saline lagoons on Read's Island in 1997 has also had a profound effect upon the status of the site as a staging area for passage waders (Cutts & Catley 2002).

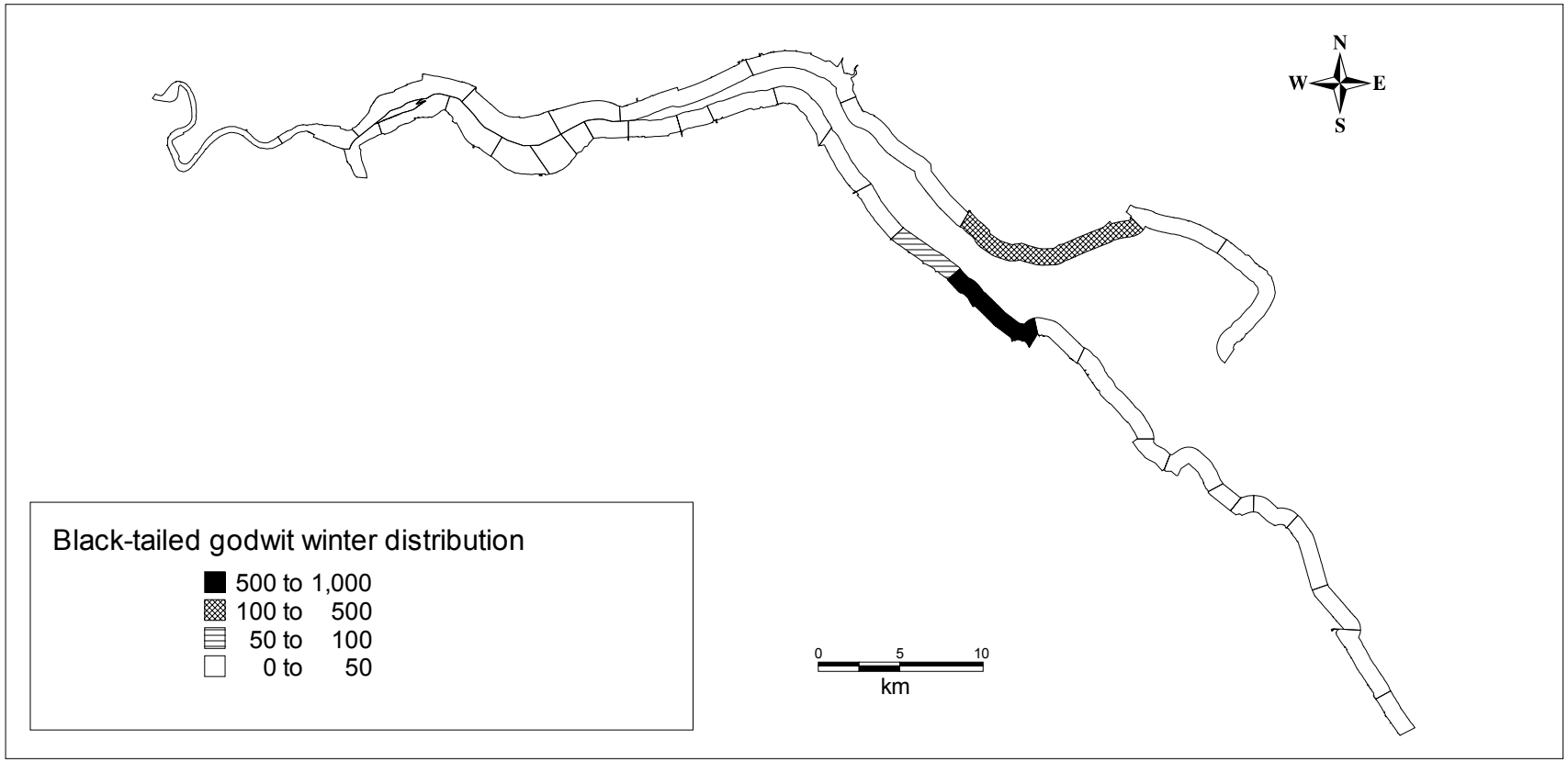
Conservation status

The black-tailed godwit is protected under Schedule 1 Part 1 of the WCA 1981; Listed in Annex II/2 of the EC Birds Directive (79/409/EEC); Appendix II of the Bonn Convention; Appendix III of the Berne Convention; Species of European Conservation Concern (SPEC 2); UK Species of High Conservation Concern (Red List).

- 5 year winter peak mean of 1,113 (96/97-00/01).
- 5 year passage peak mean of 915 (autumn 96/97-00/01).

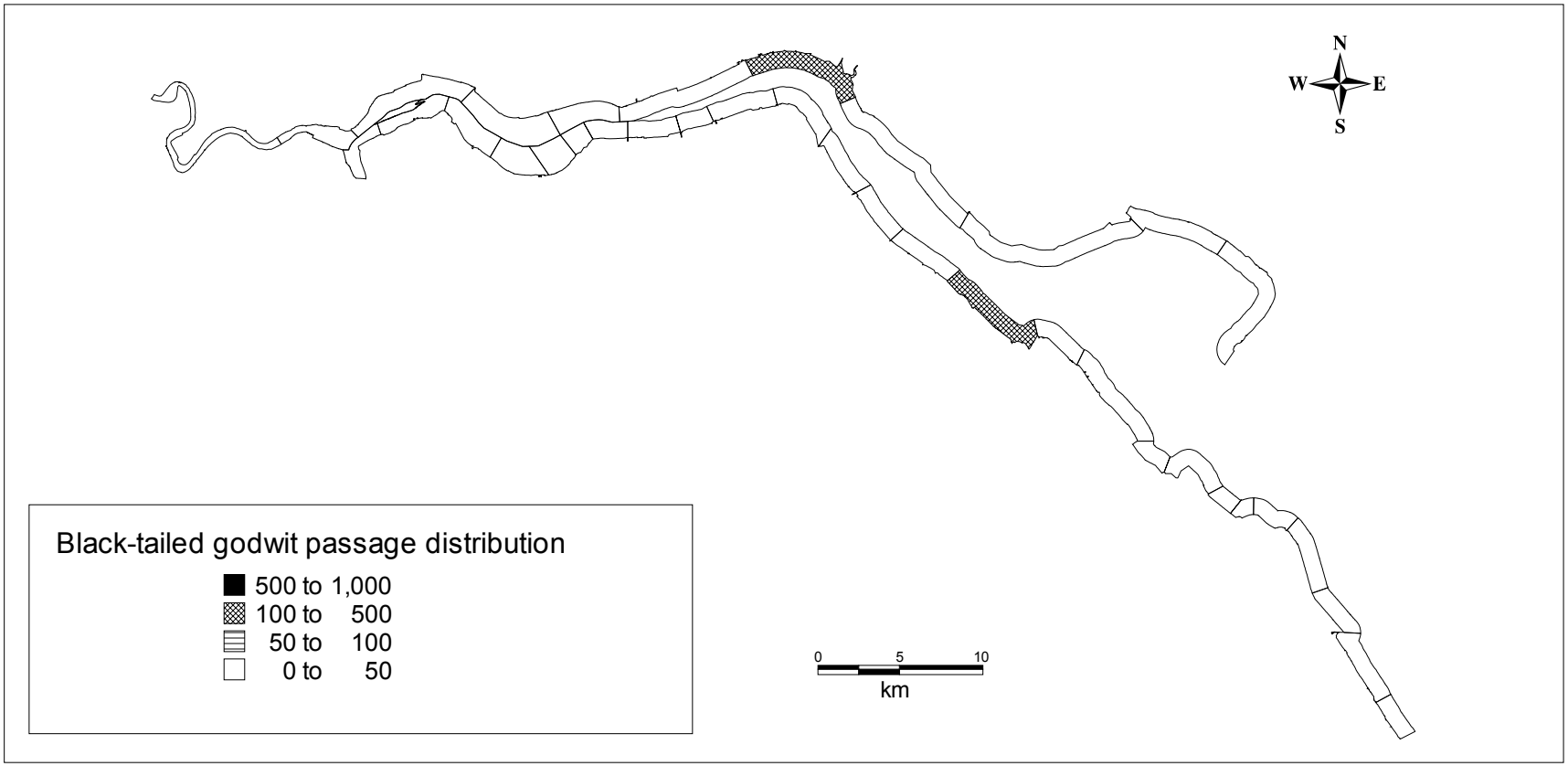
- 2000/01 maxima of 545 (winter).

- 7.4% of GB population (winter).
- 3.2% of biogeographic population (winter).
- 7.6% of GB passage population (autumn).
- 2.6% of biogeographic population (autumn).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	0.50	95.00	5.75	0.00	0.00	0.00	1.75	15.00	119.50	0.75	0.25			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	0.00	0.00	0.00	0.40	0.40	0.00	0.00	0.00	0.00	0.60	0.20	0.40	1.20	2.40
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	93.40	749.00	0.00	1.40	0.00	0.20	0.00	2.33	0.80	0.20	6.20	0.00	0.00	

5 year mean annual peak maxima for wintering black-tailed godwit by sector, Source; Core WeBS counts 1996-2001.



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	38.00	25.00	2.00	0.00	0.00	0.00	91.75	38.66	29.33	0.00	1.00			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	0.00	0.00	0.00	0.00	26.20	0.60	0.40	0.00	0.00	3.20	1.40	1.80	2.40	3.40
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	36.60	328.60	0.00	0.60	4.25	0.00	0.00	0.00	0.00	0.75	2.00	3.40	0.80	

5 year mean annual peak maxima for passage black-tailed godwit by sector, Source; Core WeBS counts 1996-2001.

References

ABP, 2000. *Humber International Terminal (HIT) ornithological survey: Annual monitoring report 1999/2000.* Associated British Ports, Report No. R882.

CRANSWICK, P.A., POLLITT, M.S., MUSGROVE, A.J. & HUGHES, R.C., 1999. *The wetland bird survey 1997-98*. BTO/WWT/RSPB/JNCC.

*CUTTS, N.D. & CATLEY, G., 2002. *The ecology and status of the Black-tailed Godwit (Limosa limosa) on the Humber Estuary.* Report to Associated British Ports.

CUTTS, N.D., personal observation, 2002. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

DAVIDSON, N.C., 1998. Compiling estimates of East Atlantic Flyway wader populations wintering in coastal Europe in the early 1990's: A summary of the 1996 WSG Wader Populations Workshop. *Wader Study Group Bull,* **86**, pp. 18-25.

DOBBS, G., personal communication, 2002.

MORRIS, G.E., 1990. Recent increases in wintering Black-tailed Godwit, Knot and Dunlin in the Flint Sands/Oakenholt Marsh/Connah's Quay area of the Dee estuary. *Clywd Bird Report 1989*: pp. 46-47.

MUSGROVE, A.J., POLLITT, M.S., HALL, C., HEARN, R.D., HOLLOWAY, S.J., MARSHALL, P.E., ROBINSON, J.A. & CRANSWICK, P.A., 2001. *The wetland bird survey 1999-2000: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

STONE, B.H., SEARS, J., CRANSWICK, P.A., GREGORY, R.D., GIBBONS, D.W., REHFISCH, M.H., AEBISCHER, N.J. & REID, J.B., 1997. *Population Estimates of Birds in Britain and in the United Kingdom.* British Birds 90 pp 1 – 22.

Bar-tailed godwit *Limosa lapponica*

Key Sites: Spurn Bight, Cleethorpes and Tetney.

EC Wild Birds Directive: Listed in Annex I and II/2.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	N/A	N/A	N/A
Wintering	2,752*	4.4%	2.37%
Passage			
Spring	211	Insufficient data (National passage population not defined)	0.2%
Autumn	1,016		0.8%

*Peak count for winter 98-99 used in the calculation of the winter five year peak mean is taken from the WeBS low tide count of that year (Pollitt *et al*., 2003).

Description

The bar-tailed godwit is a common passage and winter visitor to most coasts, especially sandy estuaries and beaches. The species breeds in northern Scandinavia and across northern Russia to the Bering Straits and Alaska, with the nominate race (*L. l. lapponica*) which is recorded in Britain, originating from Scandinavia and western Russia. Bar-tailed godwits normally feed in flocks at the tidal edge, taking mainly lugworm (*Arenicola marina*) but also a range of larger molluscs and polychaetes. Of the approximately 115,000 birds wintering in Europe, 45% are found in the British Isles (Rose & Scott 1997). Our estuaries are thus extremely important for the species.

Distribution within the Humber

Non-breeding

The Humber Estuary holds internationally important numbers during autumn and winter. Bar-tailed godwits occur almost exclusively in the outer estuary down river of a line drawn from Paull to Immingham Docks (Catley 2000) with the presence of a small population around Read's Island on the upper Humber.

Roosting sites: Bar-tailed godwits roost on a number of sites along the north shore. Birds feeding at Foulholme Sands, Saltend and Paull Holme Sands move to the upper shore of Foulholme Sands to roost, with birds also roosting at Cherry Cobb Sands Outstray (Tasker & Milsom 1979). The majority of birds feeding in Spurn Bight roost in Patrington Bay. On the highest tides in autumn and winter, large flocks can also be seen moving to the south shore. On the south bank, the largest roosts are found between Cleethorpes and Humberston Fitties and at Tetney, with birds dispersing from these roosts to adjacent sectors to feed (Catley 2000; Eco Surveys 1991).

Feeding sites: Catley (2000) reports the majority of bar-tailed godwits feed in Spurn Bight and in Patrington Bay during the winter, with 90% of the Humber population recorded

feeding in this area during January/February 1999. On the south shore the highest feeding concentrations occur between Cleethorpes and Humberston Fitties. The numbers visiting the mudflats upstream from Cleethorpes are relatively low, although Pyewipe appears to be important in late winter and spring with 84% of the estuary total in April (Catley 2000).

Seasonality

Bar-tailed godwits arrive on the Humber at the beginning of September, with the passage of juveniles. From the end of November, numbers increase to reach their peak in January and Prater (1981) notes that in Britain from November onwards, numbers increase as birds which have moulted in the Wadden Sea arrive to winter. The departure in spring begins in February and numbers drop dramatically in March, although towards the end of April and beginning of May there is a passage of small flocks of bar-tailed godwit through the Humber. According to Eco Surveys (1991) this could be part of the easterly movement described by Prater (1981) when birds are seen on the south coast moving to their moulting grounds on the Wadden Sea.

Historical changes and trends

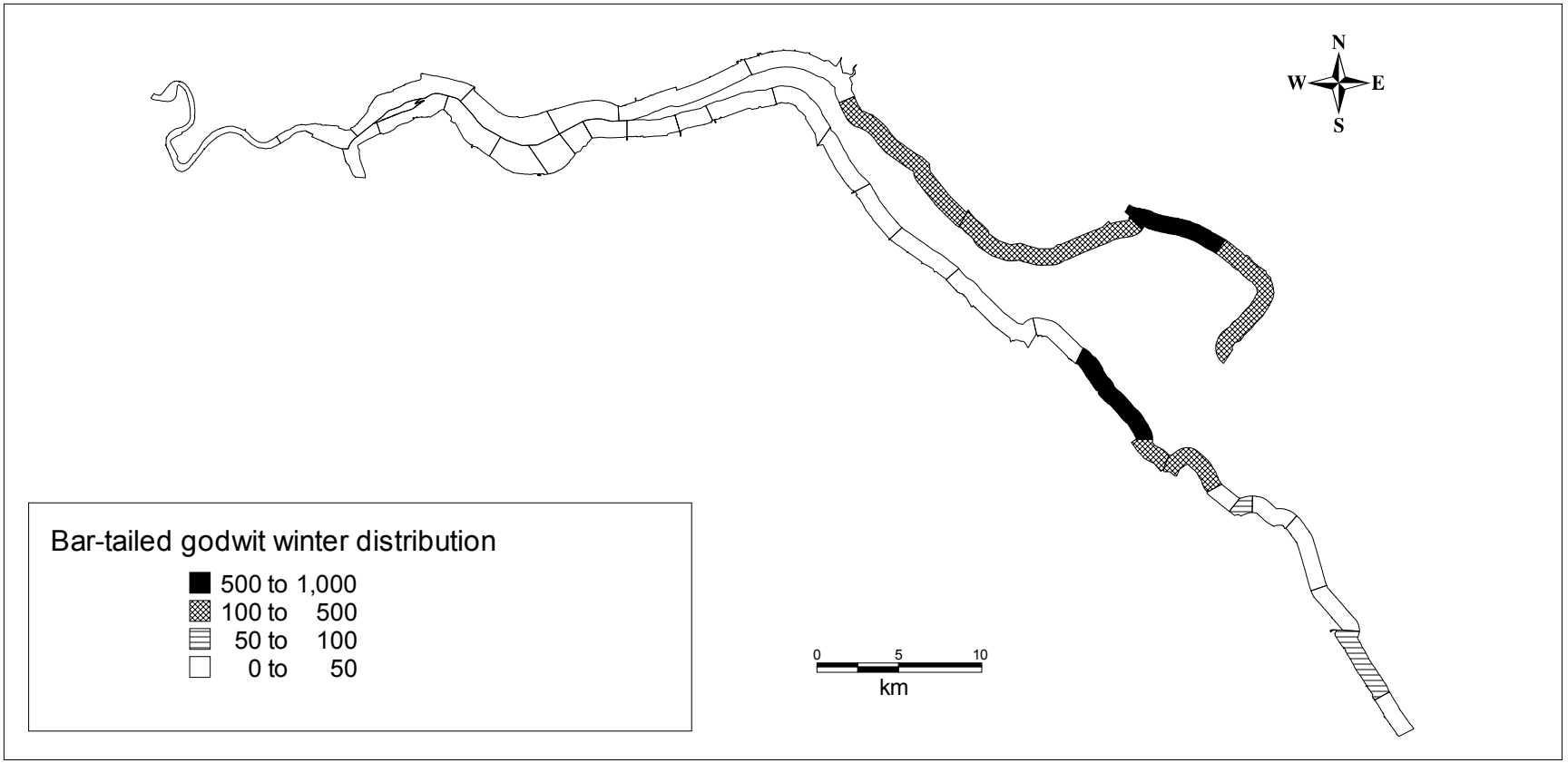
Numbers on the Humber have increased from 1,000-2,000 birds in the early 1990's to peak counts of over 2,000 birds for the past three years (Pollitt *et al*., 2003). Kirby *et al* (1991) noted that the peak on the east coast coincided with a spell of very cold weather, which has been found to trigger an influx of birds, particularly from the Wadden Sea. However it is unclear whether high numbers in the Humber reflect bad weather conditions in this area over the past 3 years, as numbers wintering on the east coast estuaries tend to have generally decreased during this period. Annual indices from the Wetland Bird Survey show that the numbers wintering in the UK have remained stable since the early 1970's, although there have been significant year-to-year fluctuations (Musgrove *et al* 2001). This is expected to be a consequence of weather conditions and breeding success.

Conservation status

Protected under WCA 1981; Listed in Annex I and Annex II/2 of EC Birds Directive (79/409/EEC); Appendix II of the Bonn Convention; Appendix III of the Berne Convention; Species of European Conservation Concern (SPEC 3); UK Species of Medium Conservation Concern (Amber List).

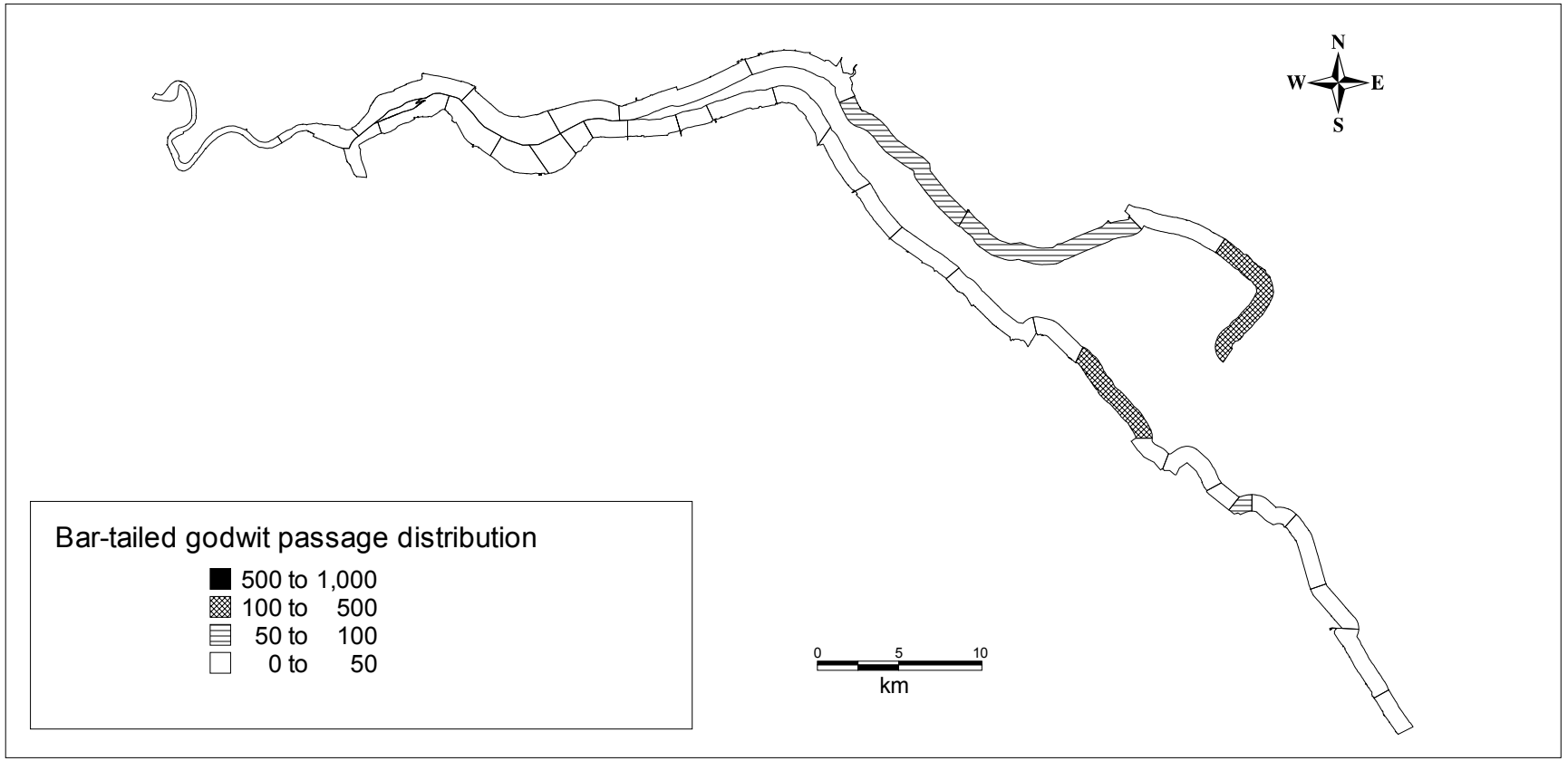
- 5 year winter peak mean of 2,752 (96/97-00/01).
- 5 year passage peak mean of 1,016 (autumn 96/97-00/01).

- 2000/01 maxima of 2,065 (winter).
- 4.4% of GB population (winter).
- 2.3% of biogeographic population (winter).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	0.00	0.00	32.75	15.25	2.75	0.00	1.00	320.00	146.33	770.00	322.75			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	0.00	0.00	0.00	0.00	16.00	1.60	0.00	0.00	0.00	0.00	0.60	1.20	0.00	0.00
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	0.40	30.00	0.00	771.40	268.66	360.60	34.66	36.66	57.75	16.75	41.00	62.40	12.40	

5 year mean annual peak maxima for wintering bar-tailed godwit by sector, Source; Core WeBS counts 1996-2001.



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	0.00	0.00	3.25	3.50	1.75	1.50	7.50	93.33	48.00	55.75	223.50			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	0.00	0.00	0.00	0.60	17.00	1.80	0.40	1.00	0.20	1.00	2.50	0.00	0.20	0.00
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	1.20	15.40	0.00	554.40	9.33	13.20	3.50	35.00	15.00	13.00	25.20	10.00	0.60	

5 year mean annual peak maxima for passage bar-tailed godwit by sector, Source; Core WeBS counts 1996-2001.

References

*CATLEY, G., 2000. Humber Estuary Wetland Bird Survey. Twelve months of high and low tide counts September 1998 to August 1999. Peterborough: *English Nature Research Reports*, No. 339.

*ECO SURVEYS, 1991. *Winter Wildfowl and Wader Feeding Area Study along the Lincolnshire and South Humberside Coast*. Report to the National Rivers Authority.

KIRBY, J.S., FERNS, J.R., WATERS, R.J. & PRYS-JONES, R.P., 1991. *Wildfowl and Waders Counts 1990-1991. The Results of the National Waterfowl Counts and the Birds of Estuaries Enquiry in the United Kingdom.* Slimbridge: The Wildfowl & Wetlands Trust.

MUSGROVE, A.J., POLLITT, M.S., HALL, C., HEARN, R.D., HOLLOWAY, S.J., MARSHALL, P.E., ROBINSON, J.A. & CRANSWICK, P.A., 2001. *The wetland bird survey 1999-2000: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

POLLITT, M.S., HALL, C., HOLLOWAY, S.J HEARN, R.D.,. MARSHALL, P.E. ROBINSON, J.A., MUSGROVE, A., ROBINSON, J., & CRANSWICK, P.A., 2003. *The wetland bird survey 2000-2001: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

PRATER, A.J., 1981. *Estuary Birds of Britain and Ireland*. Calton: T. & A.D. Poyser.

ROSE, P.M. & SCOTT, D.A., 1997. Waterfowl population estimates B Second Edition. *Wetlands International Publication* 44**,** Wageningen, The Netherlands: Wetlands International.

*TASKER, M. & MILSOM, T.P., 1979. *Birds of the Humber Estuary.* Hull: Department of Zoology, University of Hull.

Redshank *Tringa totanus*

Key Sites: Pyewipe, Spurn, Cherry Cobb and East Halton Skitter to Grimsby Dock Tower.

EC Wild Birds Directive: Listed in Annex II/2.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	Insufficient data	Insufficient data	Insufficient data
Wintering	4,632	3.9%	3.6%
Passage			
Spring	2,934	2.4%	2.3%
Autumn	7,462	6.2%	5.7%

Description

Breeding of redshank in the British Isles occurs on wet grassland and coastal marsh and is generally concentrated in the northern half of Britain (Gibbons *et al* 1993). Outside of the breeding season, redshank mainly frequent coastal habitats (Lack 1986). During the summer their diet mainly consists of spiders and worms, while during the winter, marine invertebrates such as *Hydrobia*, *Corophium* and *Nereis* predominate (Cramp 1998). Redshank feed both during the day and at night, whenever the tidal situation best suits their foraging style. During high tide when mudflats are covered, birds form small to medium-sized roosting flocks on the vegetated upper shore and often in coastal grassland.

Distribution within the Humber

Breeding

Recent data on breeding redshank are not available. However, in 1974, 20 pairs of redshank were recorded breeding on the south shore at Alkborough flats (Tasker & Milsom 1979). Key breeding areas on the north shore are located in Welwick saltmarsh, the Easington Lagoon area, Whitton Sand and at Blacktoft Sands Nature Reserve. It is thought that eight pairs of redshank may have bred in this area during 2000 and 2001 (RSPB 2000 & 2001). Redshank also breed on all the saltmarshes south of Cleethorpes (G. Weaver pers. comm. 2002). Tetney Marshes support the largest population with 41 birds breeding in 2002 (Wellock 2003).

Non-breeding

During the non-breeding season, redshank is one of the most widespread species in the Humber Estuary. Redshanks are predominantly observed feeding on the mid to upper shore with a preference for muddy river channels and saltmarsh (N.D. Cutts pers. obs. 2001).

Roosting sites: Redshank roost in many places on the Humber Estuary. In the inner estuary, high tide roosts are found at Read's Island, Blacktoft Sands, Brough Haven and Whitton Sand. On the south shore major roosts are found from Killingholme Pits to the Grainthorpe area. Elsewhere, redshank roost on the north shore at Saltend and between Cherry Cobb and

Spurn, with these north shore roosts being generally smaller than those on the south shore, rarely exceeding 50 individuals (Tasker & Milsom 1979). Tasker & Milsom (1979) referred to regular roosts on fields on the north side of Spurn Bight, with roosts still observed today in the fields around Spurn. Also up to 200 birds roost in a grazing marsh beyond the sea wall at Kilnsea (L. Mander pers. obs. 2001). Birds can move up to 1km inland to roost, with up to 240 birds recorded around the Kimberley Clarke factory near Barton pits (Catley 2000).

Feeding sites: The low tide count programme in 1998/99 revealed between-month variations in the distribution of redshank with some reaches of the estuary appearing to be irregularly important for the species (Catley 2000). It was also possible to identify key sectors of importance throughout the winter season. For example, East Halton Skitter to Grimsby Dock Tower held an overall mean of 15% of the estuary population. The sectors around Cherry Cobb are also regarded as important throughout the season (Tasker & Milsom 1979). Spurn Bight is the stronghold for this species during the autumn with half of the Humber population present at low tide (Catley 2000). Other sites that host large numbers during autumn passage include the area around Read's Island, Cleethorpes to North Cotes Point and Sunk Island (Stone Creek to Patrington Channel) and Saltend, the latter site supporting around 9% of the Humber passage population during the spring (IECS 2001). During harsh winter conditions, many birds move inland to feed, as flooded grazing marshes can provide a complementary food resource and adjacent wet grassland may occasionally hold large numbers (Goss-Custard 1967; L. Mander pers. obs. 2001).

Seasonality

The general pattern throughout the year shows an autumn passage peak in September/October with fairly stable wintering populations, followed by a rapid increase in the number of redshank in April corresponding with the spring passage of what are presumed to be Icelandic birds (Prater 1981).

Historical changes and trends

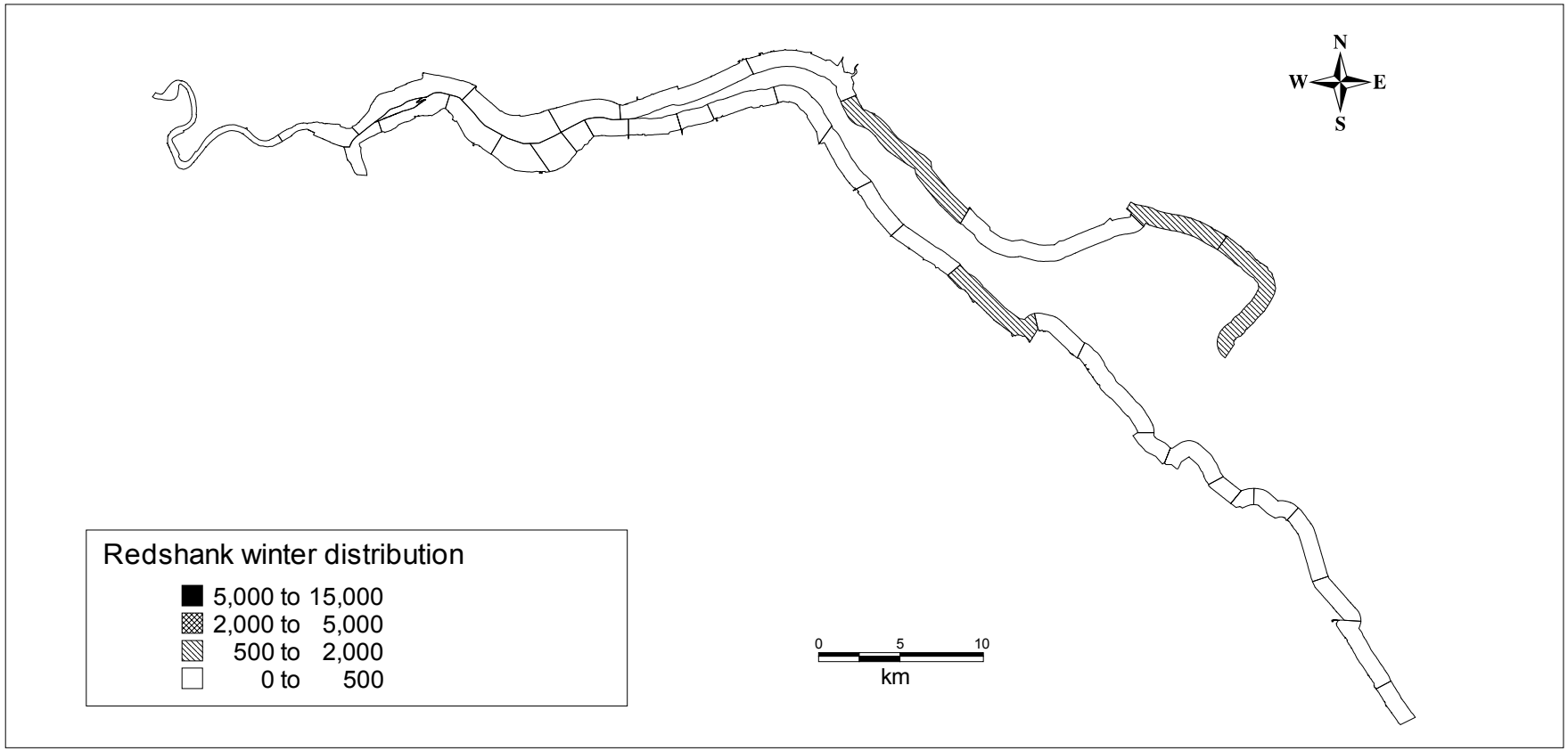
Over the period 1975/76 to 1986/7, Batten *et al* (1990) noted a 25% decrease in the numbers of redshank wintering in UK. Since then, populations have recovered and recent data suggest that the population is now stable (Musgrove *et al* 2001). Peak winter counts of redshank on the Humber Estuary have shown considerable variation over the years. Numbers have varied, from 1,919 in 1996/97 to 6,053 in 1998-99, but no change in distribution has occurred. However, Eco Surveys (1991) reported a change in the general pattern of usage on the south bank with an increase in the number of birds during the winter period, compared to previous years where numbers declined through the winter after an autumn peak (Tasker & Milsom 1979; Shepherd *et al* 1982; Eco Surveys 1991). Within the UK, redshank have shown a contraction of their breeding range with a further reduction in population size at a number of locations (Stroud *et al* 2001).

Conservation status

Protected under WCA 1981; Listed in Annex II/2 of EC Birds Directive (79/409/EEC); Appendix III of the Berne Convention; Species of European Conservation Concern (SPEC 2); UK Species of Medium Conservation Concern (Amber List).

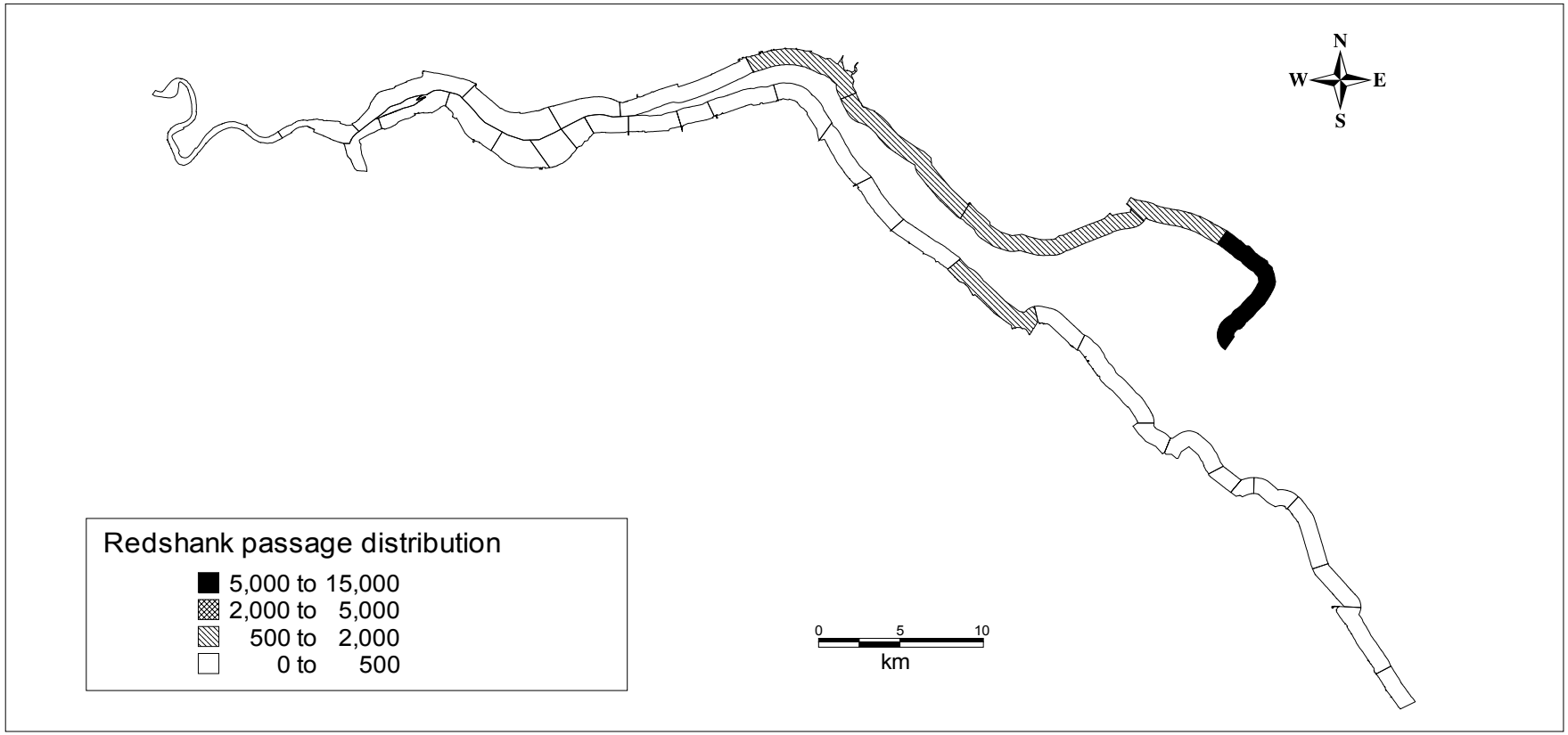
- 5 year winter peak mean of 4,632 (96/97-00/01); 5 year passage peak mean of 7,462 (autumn 96/97-00/01).
- 2000/01 maxima of 4,990 (winter) and 6,978 (autumn passage).

- 3.9% of GB population (winter); 6.2% of GB population (autumn passage); 2.4% of GB population (spring passage).
- 3.6% of biogeographic population (winter) 5.7% of biogeographic population (autumn passage) and 2.3% of biogeographic population (spring passage).



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	57.25	59.00	122.75	69.25	19.50	37.50	388.33	862.33	348.50	1,241.33	1,480.00			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	16.25	0.40	2.20	27.20	170.60	80.80	2.00	55.60	105.50	96.00	57.33	72.50	27.60	90.40
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	216.20	576.40	0.60	178.40	389.00	125.60	129.67	293.66	96.75	213.33	276.50	309.60	47.20	

5 year mean annual peak maxima for wintering redshank by sector, Source; Core WeBS counts 1996-2001.



North Bank Humber	NA1	NA2	NB	NC	ND	NE	NF	NG	NH	NJ	NK			
WeBS mean annual maxima	152.00	105.00	145.50	26.00	14.00	44.50	637.50	1,254.00	576.00	875.00	5,322.50			
Inner South Bank Humber	ISA	ISB3	ISB1	ISC	ISD	ISE1	ISE2	ISF1	ISF2	ISF3	ISG	ISH	ISI	ISJ
WeBS mean annual maxima	6.00	0.80	3.00	11.00	352.00	37.80	6.50	23.80	41.33	3.75	3.67	8.00	12.75	35.75
Outer South Bank Humber	ISK	MSA	MSB	MSC	MSD	MSE	MSF	OSA	OSB	OSC	OSD	OSE	OSF	
WeBS mean annual maxima	111.80	598.00	0.00	362.80	96.33	80.20	44.00	238.00	28.00	30.50	201.67	189.00	2.00	

5 year peak mean annual peak maxima for passage redshank by sector, Source; Core WeBS counts 1996-2001.

References

BATTEN, L.A., BIBBY, C.J., CLEMENT, P., ELLIOT, G.D. & PORTER, R.F., 1990. *Red data birds in Britain*. London: T. & A.D. Poyser.

*CATLEY, G., 2000. *Humber Estuary wetland bird survey. Twelve months of high and low tide counts September 1998 to August 1999.* Peterborough: *English Nature Research Reports*, No. 339.

CRAMP, S., 1998. *The complete birds of the Western Palaearctic.* CD-ROM. Oxford: Oxford University Press.

CUTTS, N.D., personal observation, 2001. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

*ECO SURVEYS, 1991. *Winter wildfowl and wader feeding area study along the Lincolnshire and South Humberside Coast.* Report to the National Rivers Authority.

GIBBONS, D.W., REID, J.B. & CHAPMAN, R.A., 1993. *The new atlas of breeding birds in Britain and Ireland: 1998-1991*. London: T. & A.D. Poyser.

GOSS-CUSTARD, J.D., 1967. The winter feeding ecology of the Redshank *Tringa totanus. Ibis*, **111**, pp. 338-355.

IECS, 2001. *Ornithological monitoring, Saltend: Summary Trend Report #10 April 2000 to June 2000.* Hull: Institute of Estuarine and Coastal Studies (IECS), University of Hull.

LACK, P., 1986. *The atlas of wintering birds in Britain and Ireland.* Calton: T. & A.D. Poyser.

MANDER, L., 2002. An assessment of the efficacy of compensatory wet grassland habitat for loss of intertidal habitat on the Humber Estuary. Unpublished M.Sc. Thesis. Hull: Department of Biological Sciences, University of Hull.

MANDER, L., personal observation, 2001. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

MUSGROVE, A.J., POLLITT, M.S., HALL, C., HEARN, R.D., HOLLOWAY, S.J. MARSHALL, P.E., ROBINSON, J.A. & CRANSWICK, P.A., 2001. *The wetland bird survey 1999-2000: Wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

PRATER, A.J., 1981. *Estuary birds of Britain and Ireland*. Calton: T. & A.D. Poyser.

RSPB, 2001. RSPB Blacktoft Sands Nature Reserve. *Ornithological Report 2000.* Royal Society for the Protection of Birds, UK.

RSPB, 2002. RSPB Blacktoft Sands Nature Reserve. *Ornithological Report 2001.* Royal Society for the Protection of Birds, UK.

SHEPHERD, I.G., HAYHOW, S.J. & RODEN, A., 1982. *Birds of Pyewipe mudflats*. Hull: Department of Zoology, University of Hull.

STROUD, D.A., CHAMBERS, D., COOK, S., BUXTON, N., FRASER, B., CLEMENT, P., LEWIS, P., MCLEAN, I., BAKER, H. & WHITEHEAD, S., eds. *The UK SPA network: its scope and contents. Volume 2 species accounts*. JNCC.

*TASKER, M. & MILSOM, T.P., 1979. *Birds of the Humber Estuary.* Hull: Department of Zoology, University of Hull.

WEAVER, G., personal communication, 2002. English Nature, The Maltings, Wharf Road, Grantham, Lincolnshire, NG31 6BH.

WELLOCK, S.D., 2003. *Tetney Marshes Nature Reserve 2002/03 Annual Report*. The Royal Society for the Protection of Birds.

Little tern *Sterna albifrons*

Key Sites: Easington Lagoons, Donna Nook.

EC Wild Birds Directive: Listed in Annex I.

Humber Population Status:

	Number	% of National Population	% of Biogeographic Population
Breeding	51 pairs	2.1% *	0.2%
Wintering	N/A	N/A	N/A
Passage		Insufficient data (National passage population not defined)	Insufficient data (Biogeographic passage population not defined)

* Threshold taken from Lloyd *et al.*, 1991, as cited in Stroud et al, 2001

Breeding status:

Year	1998	1999	2000	2001	2002	5 year mean
Numbers of pairs	44	54	53	44	60	51

(Numbers from Bell *et al* 2000, M.Coverdale, pers comm. 2002, Schmitt 2003, Wellock 2003)

Description

In Britain and Ireland the little tern is almost entirely a coastal breeder but elsewhere in its range it also breeds inland (Gibbons *et al* 1993). The species is normally found in small but conspicuous colonies on sand and shingle beaches. The western European population migrates to winter along the coasts of west Africa and probably also South Africa (Cramp 1985). Breeding first occurs at three years; the first summer is spent in the wintering grounds and the second summer at the wintering grounds or as a late visitor to the colony site. Initial breeding does not necessarily occur at the natal colony, although older birds are generally site faithful unless the habitat deteriorates or disturbance is high (Batten *et al* 1990). Food consists of small fish, crustaceans and invertebrates.

Distribution within the Humber

Breeding

Unvegetated sandy areas at the Easington Lagoons, Donna Nook and Tetney Marshes provide suitable breeding grounds for little tern. Easington Lagoons support a colony of national importance with 34 pairs in 2002 exceeding the 1% criterion while ten pairs bred at Donna Nook and 16 at Tetney Marshes in 2002.

Seasonality

Little terns begin to arrive in late April and numbers build up gradually in the next few weeks. The breeding ground is deserted by August and birds move out of the area in early September.

Historical changes and trends

British little tern colonies decreased during the latter part of the 19th Century, but then recovered in the beginning of the 20th Century reaching a peak in the 1920's and 1930's (Cramp 1985). The little tern population of the UK and Ireland fluctuated between 1969 and 1975 but then entered a long-term decline, punctuated by increases in 1988 and 1996 (Gregory *et al* 2002).

On the Humber Estuary, the little tern has historically bred along the coast south of Kilnsea (Chislett 1952). In 1912, the majority of breeding pairs (80 pairs) could be found to the north of Kilnsea at Easington Lagoons while a few pairs were breeding to the south of Kilnsea, on the Humber side at Spurn Point (Mather 1986). Breeding north of Kilnsea ceased after a while except for returns in occasional years and breeding occurred mainly in the Kilnsea/Spurn area. After WWII, the population decreased but 1977 saw the re-establishment of the colony at Easington Lagoons where five pairs nested (Bell & Degnan 2000). In 1989 the Heritage Coast Project took over responsibility for the protection scheme at Easington and thanks to the erection of an electric fence and regular wardening, the colony has increased since and in the year 2002, 34 pairs nested at Easington Lagoons (M. Coverdale pers. comm. 2002).

The colony at Donna Nook on the south bank of the Humber has decreased since the mid 1980's, with ten pairs breeding on the site in 2002 compared to 21 pairs in 1984.

In addition, little terns formerly bred in nationally important numbers on Tetney Marshes which comprise a range of intertidal and dune habitats including several small highly saline lagoons managed by the RSPB (Archer 2000). The establishment and rapid rise in numbers at Tetney in the 1980's was due to the construction of a surface track across the saltmarsh when the oil pipeline was laid from offshore to the Tetney storage tanks in the 1970's. This track provided ideal conditions for breeding for some years. However, over the course of time the track has mostly become vegetated, covered in silt or eroded away leading to the decline and almost complete disappearance of little terns from Tetney (G. Weaver pers. comm. 2002).

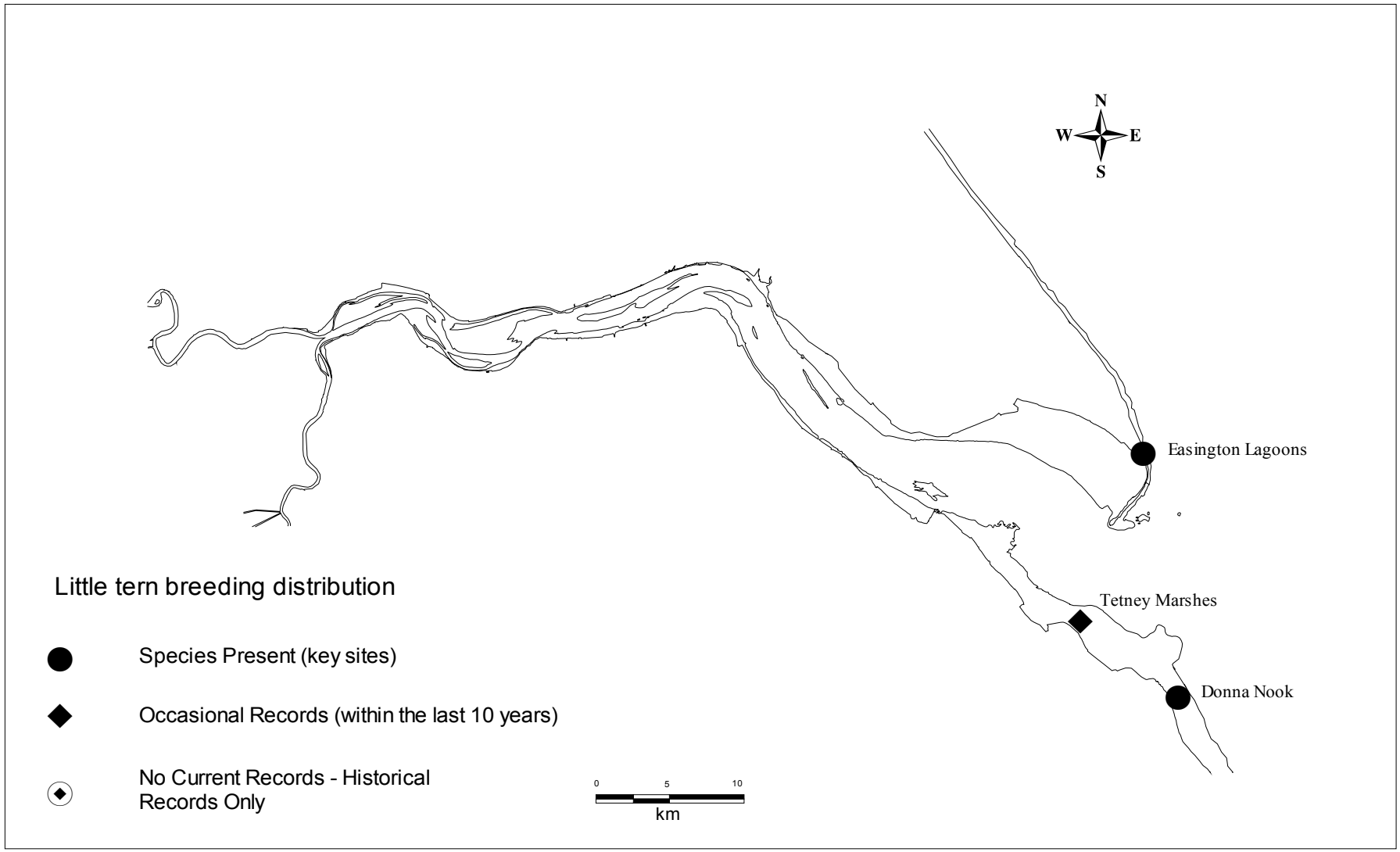
In the year 2002 16 pairs of little tern nested on Tetney Marshes following disturbance of the colony down the coast at Rimac. However, weather conditions led to the complete failure of the colony (Wellock 2003; Schmitt 2003).

Conservation status

The species is protected under Schedule 1 Part 1 of WCA 1981; Annex I of EC Birds Directive (79/409/EEC); Appendix II of the Berne Convention; Appendix II of the Bonn Convention; Species of European Conservation Concern (SPEC 3); UK Species of High Conservation Concern (Red List).

- 5 year mean of 51 breeding pairs (summer 1998-2002).
- 2002 maxima of 60 breeding pairs.
- Nationally important breeding population.

- 2.1% of GB population (breeding).
- 0.2 % of biogeographic breeding population.


N
W
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S
Easington Lagoons
Tetney Marshes
Donna Nook
Little tern breeding distribution
Species Present (key sites)
Occasional Records (within the last 10 years)
No Current Records - Historical Records Only
0
5
10
km

References

ARCHER, R., 2000. The Humber Estuary-an internationally important bird area. In: N.V. JONES & M. ELLIOT, eds., *Coastal Zone Topics: Process, Ecology & Management*. *Volume 4*. The Humber Estuary and adjoining Yorkshire and Lincolnshire Coasts. ECSA 2000.

BATTEN, L.A., BIBBY, C.J., CLEMENT, P., ELLIOT, G.D. & PORTER, R.F., 1991. *Red data birds in Britain*. London: T. & A.D. Poyser.

*BELL, N.A. & DEGNAN, L.J., eds., 2000. *Spurn wildlife No.9*. Spurn Bird Observatory Trust, UK.

*CATLEY, G., 2000. Humber Estuary wetland bird survey. Twelve months of high and low tide counts September 1998 to August 1999. Peterborough: *English Nature Research Reports*, No. 339.

CHISLETT, R., 1952. *Yorkshire birds*. London: A. Brown & Sons.

COVERDALE, M., personal communication, 2002. Spurn Bird Observatory, Kew Villa, Kilnsea, Hull, East Yorkshire, HU 120UG.

CRAMP, S., 1985. *Handbook of the birds of Europe, the Middle East and North Africa: the birds of the western Palaearctic, Volume 4*. Oxford: Oxford University Press.

GIBBONS, D.W., REID, J.B. & CHAPMAN, R.A., 1993. *The new atlas of breeding birds in Britain and Ireland: 1988–1991*. London: T. & A.D. Poyser.

GREGORY, R.D., WILKINSON, N.I., NOBLE, D.G., ROBINSON, J.A., BROWN, A.F., HUGHES, J., PROCTOR, D.A., GIBBONS, D.W. & GALBRAITH, C.A., 2001. The population status of birds in the United Kingdom, Channel Islands and Isle of Man: An analysis of conservation concern 2002-2007. *British Birds,* **95,** pp. 410-450.

LACK, P., 1986. *The atlas of wintering birds in Britain and Ireland*. Calton: T. & A.D. Poyser.

MATHER, J.R., 1986. *The birds of Yorkshire*. London: Croom Helm Ltd.

MUSGROVE, A., POLLIT, M., HALL, C., HEARN, R., HOLLOWAY, S., MARSHALL, P., ROBINSON, J. & CRANSWICK, P., 2001. *The wetland bird survey 1999-2000 wildfowl and wader counts*. Slimbridge: BTO/WWT/RSPB/JNCC.

SCHMITT, S., 2003. *Little terns in Britain and Ireland, 2002*. Little Tern Newsletter. The Royal Society for the Protection of Birds.

STROUD, D.A., CHAMBERS, D., COOK, S., BUXTON, N., FRASER, B., CLEMENT, P., LEWIS, P., MCLEAN, I., BAKER, H. & WHITEHEAD, S., eds., 2001. *The UK SPA network: its scope and contents. Volume 2 Species Accounts*. Peterborough: JNCC.

WEAVER, G., personal communication, 2001. English Nature, The Maltings, Wharf Road, Grantham, Lincolnshire, NG31 6BH.

WELLOCK, S.D., 2003. *Tetney Marshes Nature Reserve 2002/03 Annual Report*. The Royal Society for the Protection of Birds.

Short-eared owl *Asio flammeus*

Key Sites: Goxhill Haven to East Halton Skitter and Blacktoft Sands (Wintering), Spurn Head (Passage).

EC Wild Birds Directive: Listed in Annex I.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	Insufficient data	Insufficient data	Insufficient data
Wintering	Insufficient data	Insufficient data	Insufficient data
Passage	Insufficient data	Insufficient data	Insufficient data

Description

The short-eared owl is a medium-sized, diurnal and nocturnal owl breeding in northern Europe and North America. In the British Isles it is most abundant as a breeding species in upland areas of north Staffordshire and further north (Gibbons *et al* 1993). During the winter they move to coastal and inland marshes with concentrations occurring in coastal counties and close to estuaries (Lack 1986). They are normally solitary birds. However, during winter short-eared owls congregate in communal roosts amongst tall vegetation. The diet of this owl is dominated by *Microtus* voles but during the winter they hunt for birds in marshes, and along coastal areas these make up a large portion of their winter diet.

Distribution within the Humber

Non-breeding

Passage

On the Humber, passage is most notable around Spurn where up to four birds a day have been recorded in the autumn and a small coastal passage has been noted in the spring (Bell & Degnan 2001).

Wintering

Roosting sites: Short-eared owls utilise a series of communal roost areas along the Humber Estuary. Over the last 20 years concentrations of roosting birds have been observed on a number of sites, often adjacent to extensive marsh habitats, including Welwick Marsh, Brough Airfield, Trent Falls, the Grues/Skitterness, Patrington Haven, Read's Island to Whitton and Blacktoft Sands. However the reach between Goxhill Haven and East Halton Skitter appears to be the key site for the short-eared owl in recent years, with up to six birds regularly observed on the reach with up to 10 birds observed in 2001/2 (G. Catley pers. comm. 2002).

Feeding sites: The birds hunt along the estuary during the daytime, over rough grassland or marshy areas. Short-eared owls are known to be highly mobile during the winter travelling

several kilometres in search of food, and birds can be encountered along most of the reaches where rough grassland or marsh is present. Indeed along the reaches featuring more extensive marshland, such as Welwick, Skitterness, Kilnsea, and Brough Airfield, several birds can be observed hunting (N.D. Cutts pers. obs. 2002; L. Mander pers. obs. 2002).

Seasonality

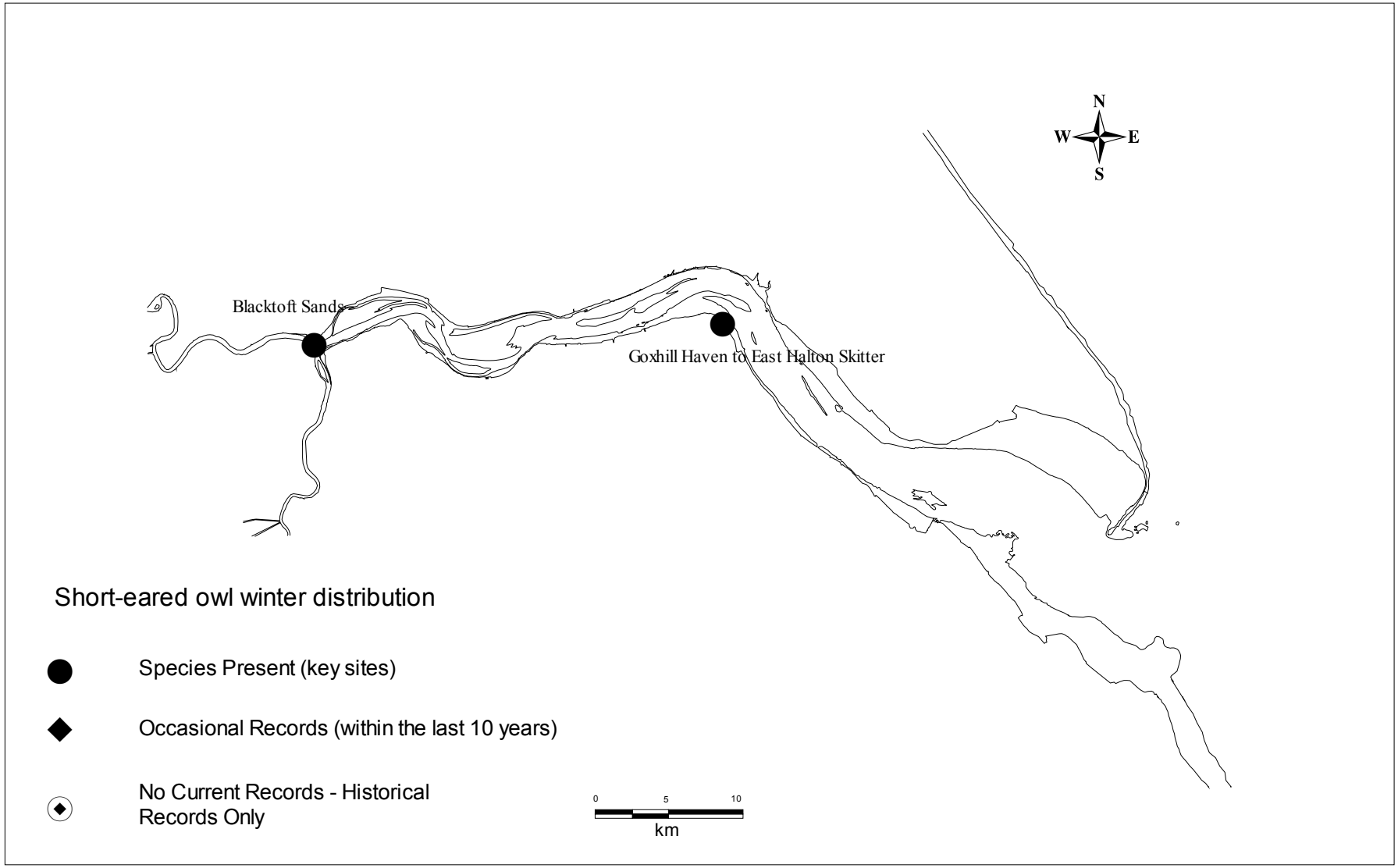
Autumn arrivals are generally recorded from mid September onwards with a peak occurring in October. Most wintering birds have departed by mid April, although some individuals remain until the beginning of summer.

Historical changes and trends

Roosting sites were reported from several locations along the north bank of the outer estuary in the late 1960's and early 1970's (Mather 1986). A relatively high level of usage was noted in the Wash during this period (Taylor *et al* 2000) but in recent years lower numbers have been recorded. In the Humber Estuary, the relative lack of data for the population as a whole makes it difficult to assess changes. However, there are good data for Blacktoft Sands which suggest that in recent decades numbers of wintering birds on the site have remained fairly stable (RSPB 1992 & 2002).

Conservation status

Protected under Schedule 1 of WCA 1981; Listed in Annex I of EC Birds Directive (79/409/EEC); Appendix II of the Berne Convention; Species of European Conservation Concern (SPEC 3); UK Species of Medium Conservation Concern (Amber List).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S
Blacktoft Sands
Goxhill Haven to East Halton Skitter
Short-eared owl winter distribution
Species Present (key sites)
Occasional Records (within the last 10 years)
No Current Records - Historical Records Only
0
5
10
km

References

BELL, N.A. & DEGNAN, L.J., eds., 2001. *Spurn wildlife No.10*. Spurn Bird Observatory Trust.

CATLEY, G., personal communication, 2002. 13 West Acridge, Barton-on-Humber, North Lincolnshire, DN18 5AJ, UK.

CUTTS, N.D., personal observation, 2002. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

GIBBONS, D.W., REID, J.B. & CHAPMAN, R.A., 1993. *The new atlas of breeding birds in Britain and Ireland: 1988–1991*. London: T. & A.D. Poyser.

LACK, P., 1986. *The atlas of wintering birds in Britain and Ireland.* Calton: T. & A.D. Poyser.

MANDER, L., personal observation, 2002. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

MATHER, J.R., 1986. *The birds of Yorkshire: An account of their historical and present status and distribution*. London: Croom Helm Ltd.

RSPB, 1992. RSPB Blacktoft Sands Nature Reserve. *Ornithological report for 1991.* Royal Society for the Protection of Birds, UK.

RSPB, 2002. RSPB Blacktoft Sands Nature Reserve. *Ornithological report for 2001.* Royal Society for the Protection of Birds, UK.

TAYLOR, M., ALLARD, P., SEAGO, M. & DORLING, D., 2000. *The birds of Norfolk.* Mountfield: Pica Press.

Kingfisher *Alcedo atthis*

Key Sites: The Barton to New Holland Clay Pits complex.

EC Wild Birds Directive: Listed in Annex I.

Humber Population Status:

	No. of individuals	% of National Population	% of Biogeographic Population
Breeding	Insufficient data	Insufficient data	Insufficient data
Wintering	Insufficient data	Insufficient data	Insufficient data
Passage	Insufficient data	Insufficient data	Insufficient data

Description

The kingfisher is an unmistakable bird because of its colourful plumage, with flashes of green-blue on its back and red-orange below. It is a fairly widespread but localised resident throughout most of England and Wales, although scarce in Scotland (Gibbons *et al* 1993). It usually occurs on clear flowing rivers and streams, but is also recorded at times on ponds, small ditches and even the sea shore, although summer territories require a bank of sandy or clay soil for nest-burrow excavation. The kingfisher is solitary and highly territorial by necessity, as individuals need to consume approximately 60% of their body weight in fish and aquatic insects each day.

Distribution within the Humber

Breeding & Non-breeding

The kingfisher is a scarce and vulnerable species around the Humber, however, the population is probably underestimated as this species tends to be elusive, and primarily found along water-courses. Kingfishers are recorded annually during the breeding season, particularly at the Barton to New Holland Clay Pits complex where four pairs bred in 2002 (G Catley pers. comm. 2003). On the north shore, two or more breeding pairs were present in 2001 at Welton Waters (BAOG 2002) and kingfishers are probably present along the majority of the estuary where suitable water bodies are available. During the autumn and winter months, kingfishers are often observed on the coast, especially at Spurn when birds are on the move, some of which may be immigrants. Single birds are also recorded during the summer in this area but no proof of breeding has been established. At Blacktoft Sands a single bird is generally recorded during the autumn and early winter (RSPB 2001 & 2002), and up to four individuals have been observed at Brough Haven during the late autumn (N.D. Cutts pers. obs. 2002).

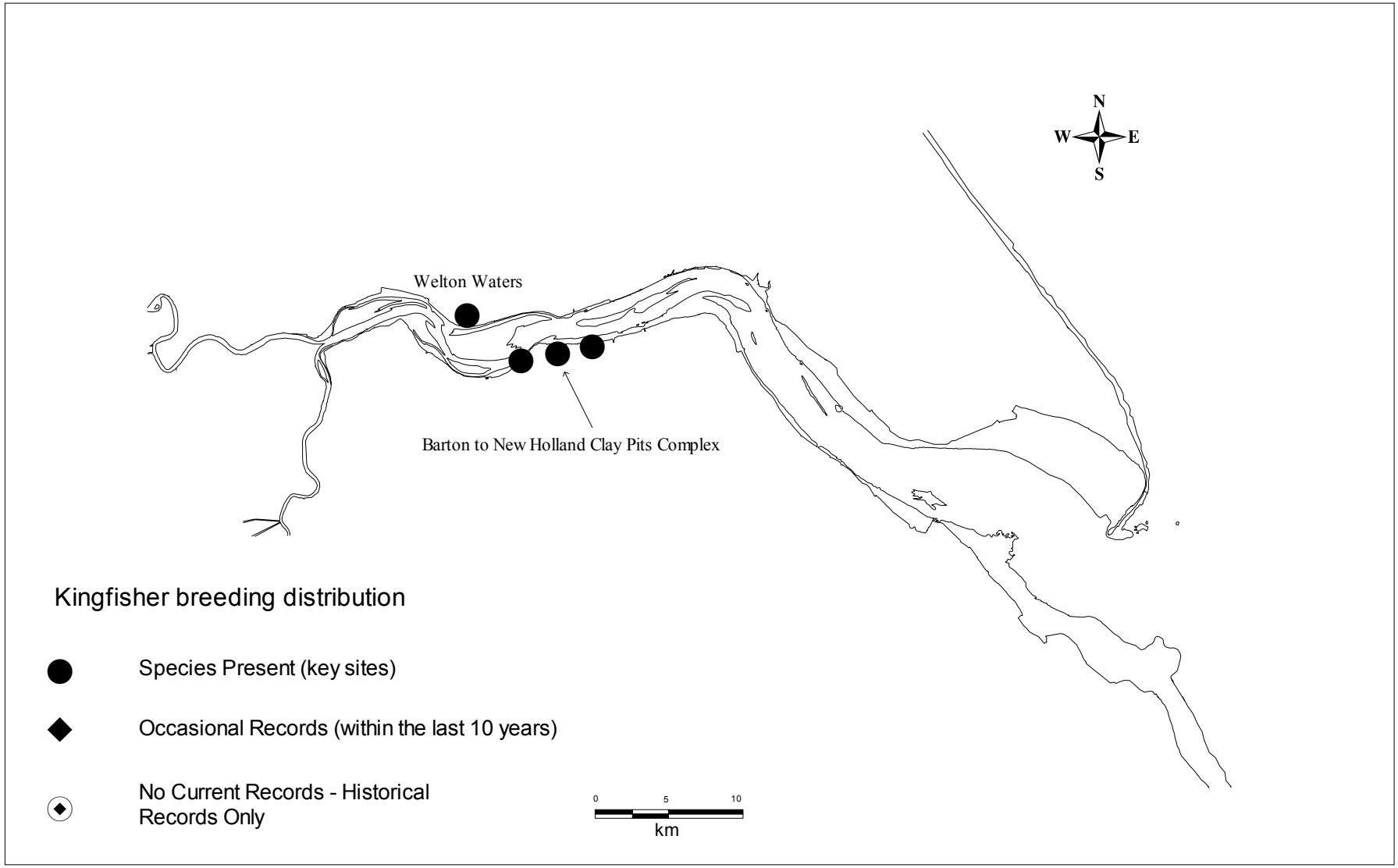
Historical changes and trends

The kingfisher has never been a common bird around the Humber and confirmed breeding records are scarce. The British population has declined since the mid 1970's, with harsh weather bringing high mortalities. In particular, the kingfisher is highly susceptible to prolonged freezing periods during winter, as they are unable to feed, and during hard winters

such as 1979 and 1982, the population can be significantly reduced (Gibbons *et al* 1993), whilst water pollution can indirectly effect the population, through a suppression in prey availability (Gibbons *et al* 1993).

Conservation status

Protected under Schedule 1 Part 1 of WCA 1981; Listed in Annex I of EC Birds Directive (79/409/EEC); Appendix II of the Berne Convention; UK Species of Medium Conservation Concern (Amber List).


N
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S
Welton Waters
Barton to New Holland Clay Pits Complex
Kingfisher breeding distribution
Species Present (key sites)
Occasional Records (within the last 10 years)
No Current Records - Historical Records Only
0
5
10
km

References

BAOG, 2002. *Brough birders data-counts for breeding birds*. Brough Airfield Ornithological Group, unpublished.

CATLEY, G., personal communication, 2003. 13 West Acridge, Barton-on-Humber, North Lincolnshire, DN18 5AJ, UK.

CUTTS, N.D., personal observation, 2002. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

GIBBONS, D.W., REID, J.B. & CHAPMAN, R.A., 1993. *The new atlas of breeding birds in Britain and Ireland: 1998-1991.* London: T. & A.D. Poyser.

RSPB, 2001. RSPB Blacktoft Sands Nature Reserve. *Ornithological Report 2000.* Royal Society for the Protection of Birds (RSPB), UK.

RSPB, 2002. RSPB Blacktoft Sands Nature Reserve. *Ornithological Report 2001.* Royal Society for the Protection of Birds (RSPB), UK.

Sand martin *Riparia riparia*

Key Sites: Blacktoft Sands and Barton to New Holland Clay Pits complex (roosting site); Easington and North Ferriby (breeding site).

EC Wild Birds Directive: Not listed.

Humber Population Status:

	% of National Population	% of Biogeographic Population
Breeding	Insufficient data	Insufficient data
Wintering	N/A	N/A
Passage	Insufficient data	Insufficient data

Breeding Status:

Year	1998	1999	2000	2001	2002	5 year mean
Numbers of pairs	No data available				60	N/A

(Numbers for 2002 from Collins pers. Comm., 2003 and Eades pers. Comm. 2002)

Description

The smallest of Britain's swallow family, the sand martin, is a summer visitor to Britain migrating from sub-Saharan Africa. This species has a widespread but patchy distribution in the British Isles, being absent from large areas of southern and eastern England (Gibbons *et al* 1993). Gregarious at all seasons, they excavate holes in sand banks, creating colonies varying in size from a few pairs to many hundreds. After the breeding season, juveniles disperse and form communal roosts in reedbeds. They predominantly eat insects, catching their prey in flight. Sand martins nest on sandy cliffs beside rivers, lakes and gravel pits but nowadays the majority prefer gravel pits and recently excavated sand quarries.

Distribution within the Humber

The sand martin is a scarce breeding bird around the Humber, although large numbers can be seen in post breeding dispersion in summer and during autumn passage. There is currently one colony at Beacon Lagoons (Easington) where approximately 20 pairs bred in 2002 (P. Collins pers. comm. 2003). Another colony is also located in the low cliff immediately to the west of North Ferriby with around 40 pairs using it in 2002 (R. Eades pers. comm. 2002). Further colonies are located away from the estuary, with flocks moving onto the estuary in the late summer to feed and roost in the reedbeds. For instance a colony (unknown size) is located at the Broomfleet Brick Pits, with flocks moving onto the upper Humber in the late summer (N.D. Cutts pers. obs. 2002).

The area from Broomfleet Island to Blacktoft Sands, featuring a large expanse of water and reedbed, provides a suitable roost for sand martins, with roosting and feeding flocks of over 1000 individuals regularly noted in the Faxfleet to Weighton Lock area during the late summer of 2002 (N.D. Cutts pers. obs. 2002). Each summer and autumn a large number

gather at Blacktoft Sands to roost; with the summer roost peaking at 1000 birds in June and July (RSPB 2001). Sand martins occur in similar numbers at the Barton to New Holland Clay Pits complex where they gather to roost in August (Catley 2001).

Seasonality

Sand martins are one of the earliest summer migrants to arrive in Britain and Ireland. More experienced adults tend to arrive earlier and obtain the best nest sites. After the breeding season, juveniles from early broods begin to disperse in late summer, to form communal roosts in reedbeds. Autumn passage starts in early to mid July and continues through to late September.

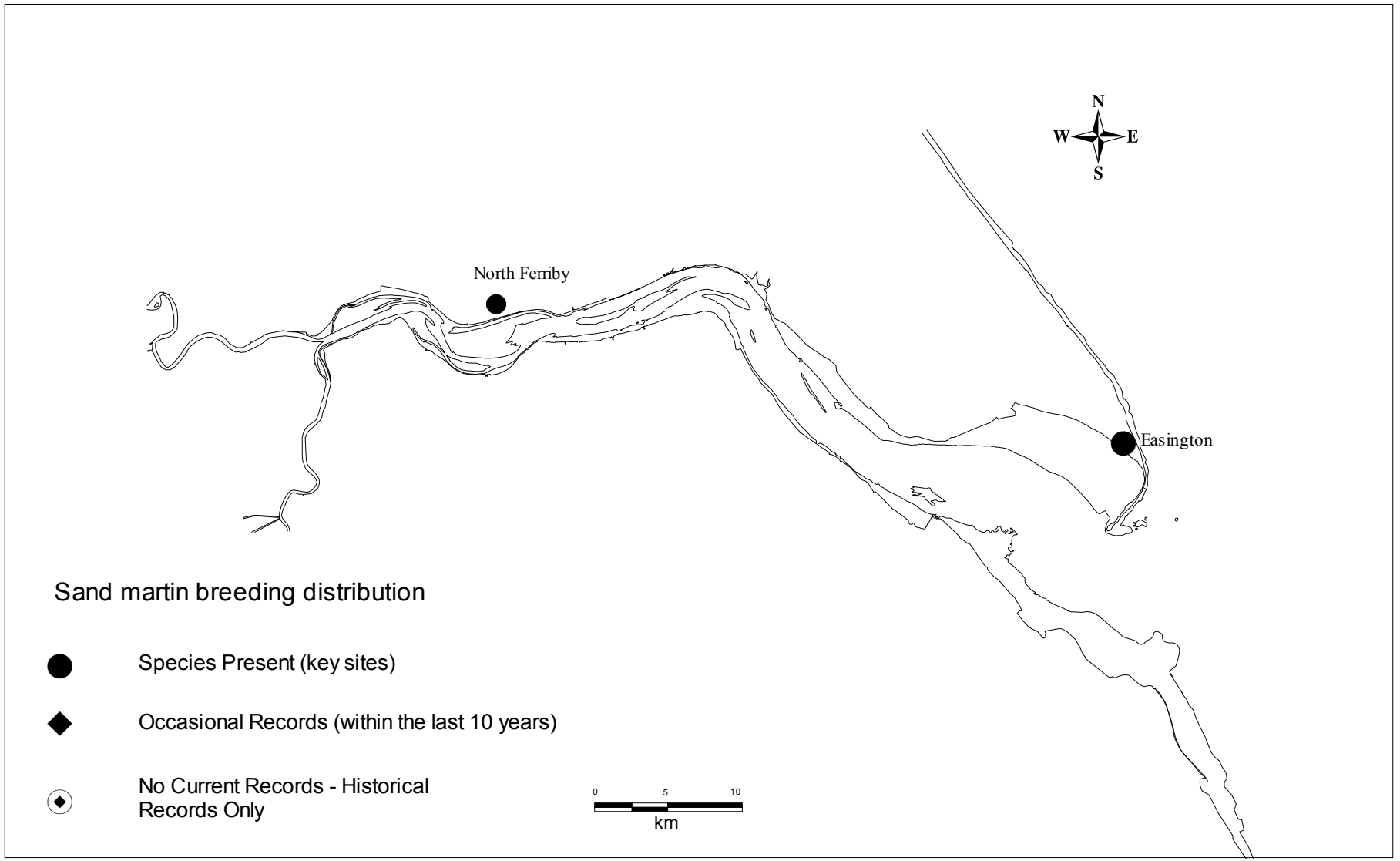
Historical changes and trends

Numbers are subject to wide fluctuations due to both the transitory nature of most breeding sites and the occurrence of drought in the wintering areas. Populations can fall following drought conditions in the Sahel region of Africa where the species winters, with populations crashing in 1968/69 and 1983/84 after drought conditions on their wintering grounds (Gibbons *et al* 1993). Since then populations have shown a marked but patchy recovery.

Conservation status

Protected under the WCA 1981; EC Birds Directive (79/409/EEC); Appendix II of the Berne Convention; UK Species of Medium Conservation Concern (Amber List).

- 2002 maxima of.60 pairs (summer).


N
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S
North Ferriby
Easington
Sand martin breeding distribution
Species Present (key sites)
Occasional Records (within the last 10 years)
No Current Records - Historical Records Only
0
5
10
km

References

CATLEY, G., 2001. *Waters Edge ornithological report 2001 [online]*. North Lincolnshire Council. Available: http://www.northlincs.gov.uk/watersedge/birds/report2001.htm [Accessed 23 October 2002].

COLLINS, P., personal communication, 2003. Spurn Bird Observatory Warden. Ken Villa Kilnsea, East Yorkshire, HU12 OUG, UK.

CUTTS, N.D., personal observation, 2002. Institute of Estuarine & Coastal Studies (IECS), University of Hull, Cottingham Road, Hull, HU6 7RX, UK.

EADES, R., personal communication, 2002.

GIBBONS, D.W., REID, J.B. & CHAPMAN, R.A., 1993. *The new atlas of breeding birds in Britain and Ireland: 1998-1991*. London: T. & A.D. Poyser.

RSPB, 2001. *RSPB Blacktoft Sands Nature Reserve*. Ornithological Report for 2000. Royal Society for the Protection of Birds, UK.

Cetti's warbler *Cettia cetti*

Key Sites: Suitable habitat at the Barton to New Holland Clay Pits complex & Blacktoft Sands.

EC Wild Birds Directive: Not listed.

Humber Population Status:

	% of National Population	% of Biogeographic Population
Breeding	0% (no records)	0% (no records)
Wintering	N/A	N/A
Passage	Insufficient data	Insufficient data

Description

Widespread and common in most of southern Europe and Turkey, this small passerine has spread north from the Mediterranean region to lowlands in north-west Europe during the last century. Since about 1971 breeding has occurred in several counties in southern England (Gibbons *et al* 1993). The species can be very difficult to see, although its loud explosive song makes it easy to locate. They are resident throughout the year feeding mainly on insect prey, even in winter. Resident Cetti's warblers can be badly hit during severe winters and a combination of heavy snow and low temperatures has interrupted the spread of the European population on several occasions. The Cetti's warbler is usually associated with tangled vegetation near water or with reedbeds containing alder and an undergrowth including bramble, nettle and willowherb.

Distribution within the Humber

Breeding

The absence of breeding records from ornithological reports and the breeding atlas (Gibbons *et al* 1993) suggests that this species is a rare migrant to the Humber, with no records of breeding birds in the estuary. Suitable breeding habitat however occurs around Blacktoft Sands Nature Reserve and the Barton to New Holland Clay Pits complex, where extensive reedbeds occur adjacent to wetland.

Seasonality

Birds are resident in England. In East Yorkshire, and in particular Hornsea Mere, occasional visitors are recorded, mainly during the autumn.

Historical changes and trends

At the start of the 20th century, the Cetti's warbler was almost confined to the Mediterranean in Europe. However this highly secretive warbler has made rapid northward advances through France, reaching the northern coast of Brittany and the Channel Isles in 1960, England (Hampshire and Sussex) and Germany in 1961, Belgium in 1962 and Holland in

1968. However, the species then suffered a population crash following the severe 1986/87 winter, almost disappearing from Europe as far south as the Camargue (Gibbons *et al* 1993).

In the UK, peak numbers of over 300 males were reached in 1990 after two mild winters, however such numbers are not of international significance, and although currently resident in the southern counties of the UK numbers are below what the available habitat could potentially support (Batten *et al* 1990).

In East Yorkshire, Cetti's warbler made its first appearance at Hornsea Mere in 1972 (Mather 1986) where migratory Cetti's warblers are now regularly seen. However around the Humber, one individual was seen in September 1982 at Blacktoft Sands (Mather 1986), but with no records of breeding.

Conservation status

Protected under Schedule 1 Part 1 of WCA 1981; Listed in Appendix 2 of Berne Convention.

Cetti's warbler *Cettia cetti*

No map as species is not recorded in the estuary

References

BATTEN, L.A., BIBBY, C.J., CLEMENT, P., ELLIOT, G.D. & PORTER, R.F., 1990. R*ed data birds in Britain*. London: T. & A.D. Poyser.

GIBBONS, D.W., REID, J.B. & CHAPMAN, R.A., 1993. *The new atlas of breeding birds in Britain and Ireland*: 1988-1991. London: T. & A. D. Poyser.

MATHER, J.R., 1986. *The birds of Yorkshire. An account of their historical and present status and distribution.* London: Croom Helm Ltd.

Bearded tit *Panurus biarmicus*

Key Sites: Blacktoft Sands, Faxfleet, Barton Clay Pits complex.

EC Wild Birds Directive: Not listed.

Humber Population Status:

	% of National Population	% of Biogeographic Population
Breeding	9.5%*	N/A
Wintering	Insufficient data	Insufficient data
Passage	Insufficient data	Insufficient data

* National population thresholds taken from Ogilvie, M.A., & the rare breeding birds panel, 2002

Breeding Status

Year	1998	1999	2000	2001	2002	5 year mean
Numbers of pairs	75	No data available	55	No data available	44	33.8**

(Breeding numbers from I. Higginson pers comm. 2003)

**NB: It should be noted that the 5 year mean, and the percentage national population derived from that figure are based on data for only three of those years, and thus underestimate the likely population size. A mean figure for the years '98, '99 and '02 only is 58 pairs which equates to 16.3 % of the national breeding population.

Description

In the UK, the bearded tit is mainly restricted to large reedbeds in eastern and southern England and is rarely seen inland. It is a local and largely resident species, with irruptive movements to and from the continent (mainly the Netherlands). Basic identification is from its relatively long tail and general tawny colouring, the males having the addition of a blue-grey head and black moustache. However the species is often not seen, but heard, its presence identified from the distinctive loud '*ping'* call. This species is highly productive with between 2-3 and occasionally four broods a year, and young hatched early have been known to breed in the same year. The juvenile is straw coloured and moults to its adult plumage in July - September.

The population size of this species fluctuates considerably, with irruptive dispersion in some years. Bearded tits are insectivorous in summer, when they gather midges from wetter areas, or wainscot moth larvae and pupae from reed stems and litter (Gibbons *et al* 1993).

Distribution within the Humber

The breeding range of the species is very restricted in the Humber, with activity centred around the Barton Clay Pits complex and the RSPB reserve at Blacktoft Sands, although breeding also takes place in the Faxfleet reedbeds on the opposite bank of the River Ouse to Blacktoft, and further up the River Ouse at Goole Hall on occasion (N.D. Cutts pers. comm.

2002 & Cutts in prep.). However it is unlikely that any breeding has occurred on the south bank east of the Humber Bridge in the last decade (G. Catley pers. comm. 2002).

It is understood that the status of the species is now extremely restricted on the Barton Clay Pits complex, with only around half a dozen breeding pairs recorded annually over the last 10 years, compared to the average of 15 or above pairs from the mid 1970's and 1980's (G. Catley pers. comm. 2002), the breeding population being currently about a third of its 1980's level.

Blacktoft Sands remains the stronghold for the species on the Humber, with over 100 pairs having been recorded breeding on the site in the late 1980's. However, the species is susceptible to poor weather at a local level, as it affects both over-wintering survival rates and breeding success, and numbers have fluctuated at the site. Despite this, the irruptive nature of the species means that suitable sites are usually recolonised relatively quickly after such crashes.

The reserve remains by far the most important site for the species on the Humber, but with the current population standing below half that of the late 1980's at around 30 pairs (I. Higginson pers. comm. 2003).

Other sites on the upper estuary support small breeding populations, probably on an irregular basis, depending on over-wintering mortality rates and last year's breeding success. These include the reedbeds between Faxfleet and Crabley, and at Goole Hall further up the River Ouse (Cutts in prep.), with both sites supporting a very small number of breeding pairs.

During the winter, there is an irruptive movement out into adjacent reedbeds and on occasion further a field, with over 100 birds often wintering in the upper Humber (RSPB 1992)

Seasonality

The long breeding season enables bearded tits to rear possibly the largest number of young of any British species (Gibbons *et al* 1993). After the autumn moult, they gather in flocks and may disperse widely. Most winter in or near reedbeds, although they can also be found in other damp grassy areas.

Numbers may therefore vary over the year at an estuary level, often with a larger over-wintering population than breeding, as a result of natural mortality rates.

Historical changes and trends

On the south bank, the bearded tit population appears to have declined markedly in the past 10 years, although inherent fluctuations are pronounced. After a peak of 35 pairs in the clay pits in 1983 the population fell to just four pairs in 1987 following a series of hard winters but reached 10 pairs again by 1990. However, interestingly, during the 1990's and in spite of generally mild winters, the largest recorded breeding population was of seven pairs in 1997 and in the last 2 years only four females have nested (G. Catley pers. comm. 2002).

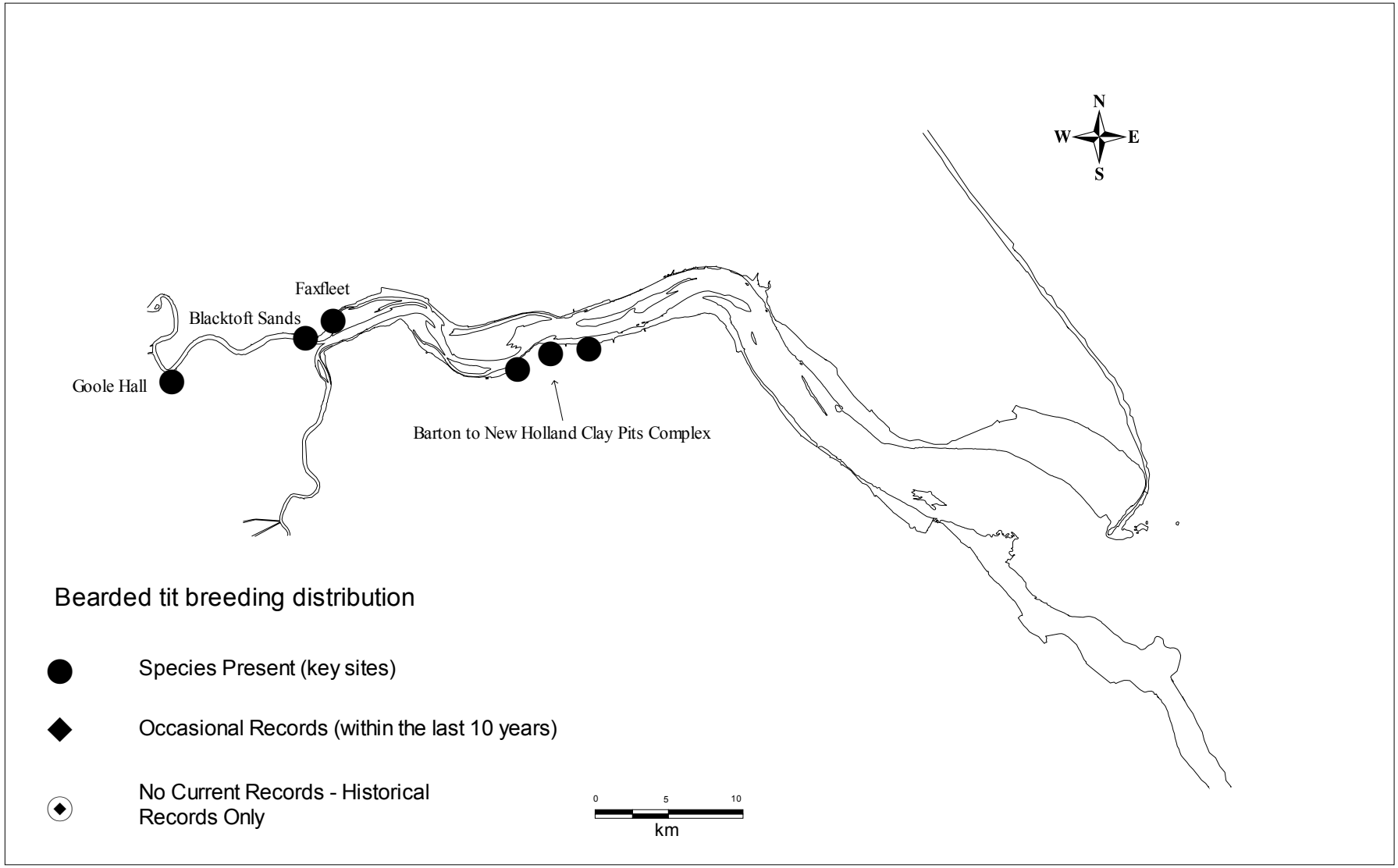
At Blacktoft, there appears to have been a decline from the high levels of the late 1980's when perhaps up to 120 pairs were breeding on the site, to 33 pairs in 2002 (RSPB/English

Nature in prep.). However again, there appears to have been fluctuations in numbers using the site over the years.

Conservation status

Protected under Schedule 1 Part 1 of WCA 1981; EC Birds Directive (79/409/EEC); UK Species of Medium Conservation Concern (Amber List).

The Humber breeding population of at least 44 pairs represents over 10% of the UK population. Given recent declines, it may be the case that the Humber, and in particular Blacktoft Sands, is of greater importance at a national level. However the UK population is very small in the context of the European population, which is estimated to be at least 250,000 pairs (Gibbons *et al* 1993).


N
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Faxfleet
Blacktoft Sands
Goole Hall
Barton to New Holland Clay Pits Complex
Bearded tit breeding distribution
Species Present (key sites)
Occasional Records (within the last 10 years)
No Current Records - Historical Records Only
0
5
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km

References

CATLEY, G., 2002. *Bearded tit.* Lincolnshire Bird Club, Accessed 03/10/02 http://www.lincsbirdclub.co.uk/rare_birds/bearded_tit.html

CATLEY, G., personal communication, 2002. 13 West Acridge, Barton-on-Humber, North Lincolnshire, DN18 5AJ.

CUTTS, N.D., in preparation. *Goole Hall ornithological monitoring, 1999-2001*. Report to Environment Agency, UK.

CUTTS, N.D., personal communication, 2002. Institute of Estuarine and Coastal Studies, University of Hull, Hull, HU6 7RX.

GIBBONS, D.W., REID, J.B. & CHAPMAN, R.A., 1993. *The new atlas of breeding birds in Britain and Ireland: 1988–1991*. London: T. & A.D. Poyser.

HIGGINSON, I., personal communication, 2003. RSPB Blacktoft Sands Nature Reserve, Hillcrest, High Street, Whitgift, Goole, East Yorkshire, DN14 8HL.

OGILVIE, M.A. & THE RARE BREEDING BIRDS PANEL, 2002. *Rare Breeding Birds in the United Kingdom in 2000*. British Birds 95 pp542-582.

RSPB, 2002. RSPB Blacktoft Sands Nature Reserve. *Ornithological Report 2001*. Royal Society for the Protection of Birds, UK.

*RSPB/ENGLISH NATURE., in preparation. National bearded tit census 2002. Royal Society for the Protection of Birds, UK.