

BLACKWATER ESTUARY

Essex

Internationally important: Dark-bellied Brent Goose, Golden Plover, Grey Plover, Dunlin, Black-tailed Godwit, Redshank

Nationally important: Cormorant, Shelduck, Wigeon, Teal, Pintail, Goldeneye, Avocet, Knot, Curlew

Site description

The Blackwater Estuary is the largest estuary in Essex and forms part of the Mid-Essex Coast SPA Complex. The northern part is characterised by small channels running through large tracts of saltmarsh and grazing marsh. Old Hall Marshes, an extensive area of grazing marsh, managed by the RSPB, is found within this section of the estuary. Tollesbury Wick Marshes is managed by Essex Wildlife Trust, and is also important for wintering waterbirds. The main part of the Blackwater SPA is characterised by mudflats fringed by saltmarsh on the upper shores, with shingle, shell banks and offshore islands a feature of the tidal flats. The surrounding terrestrial habitats (the sea wall, ancient grazing marsh and its associated fleet and ditch systems, plus semi-improved grassland) are also of conservation interest. The site suffers from saltmarsh and mudflat erosion, which may contribute to the re-suspension of dormant pollutants. Recreational disturbance and dredging could also impact on birds using the estuary.

Bird distribution 2002/03

Counts were undertaken predominantly on the northern shore only. Little Grebe and Great Crested Grebe did not exceed 20 individuals. The former tended to shelter in Salcott Channel, whilst the latter were more concentrated in the main estuary, in the vicinity of Osea Island. Cormorant, Little Egret and Grey Heron were found in low numbers throughout the main estuary channel at low tide. Dark-bellied Brent Geese were found on the northern shore, especially to the north of Osea Island. Shelduck showed a similar distribution, perhaps reflecting their similar foraging habits, although the south side of Osea Island was also favoured. Wigeon and Teal also displayed associative distributions, and were found in high densities at two of the Blackwater's outer arms, Tollesbury Fleet and Salcott Channel, possibly as a result of directed management at the nearby nature reserves. These species were also located in lower densities in the inner and middle estuary, especially near Osea and Northey Islands. Mallard, Pintail and Goldeneye were scattered

throughout, with concentrations at Tollesbury and Salcott. Pintail showed similarly high densities at Goldhanger Creek and to the northeast of Northey Island. Red-breasted Merganser peaked at 32 in November, with a small congregation south of Osea Island.

The majority of Oystercatcher occurred around Osea Island, with a few also on the outer estuary. The outer reaches also contained some Avocet, numbers of which increased to a maximum of 151 in February. These birds were seen in greatest concentrations at Collier's Reach, whilst Ringed Plover were scattered throughout the estuary. The area around Old Hall Marshes supported high densities of Golden Plover, extending throughout Tollesbury Fleet and into the outer estuary. Large aggregations were also seen at Collier's Reach and the area north of Osea Island. Grey Plover were present in sizeable flocks; favouring the outer estuary, with concentrations in Salcott Creek, Tollesbury Fleet and the Tollesbury Wick Marshes area. Lower densities were recorded on sectors further upriver, which were considerably more densely populated in 1994/95. Lapwing peaked at 11,053 and the greatest concentrations were also seen in the northern creeks, especially on the islands situated in the channels. The areas west and north of Northey Island were also frequented. Substantial numbers of Knot and Dunlin were seen, with peak counts of 1,700 and 13,786 birds respectively. Goldhanger Creek was a popular area for foraging Knot, whilst Dunlin were ubiquitous. Bar-tailed Godwit were largely restricted to Goldhanger Creek and Tollesbury Fleet. Black-tailed Godwit were more heavily concentrated in Salcott Channel and around Northey Island. Movement into the former appears to be relatively recent. Curlew and Redshank and Turnstone were evenly distributed throughout, although the latter did show some aggregation on the outer estuary sectors, which are likely to be characterised by coarser sediments utilised by Turnstone prey.

Gulls were not recorded in high numbers, the November peak count of 829 Black-headed Gull representing the maximum. Apart from a peak of 140 Common Gull, no other gull species was ever counted in numbers greater than 32.

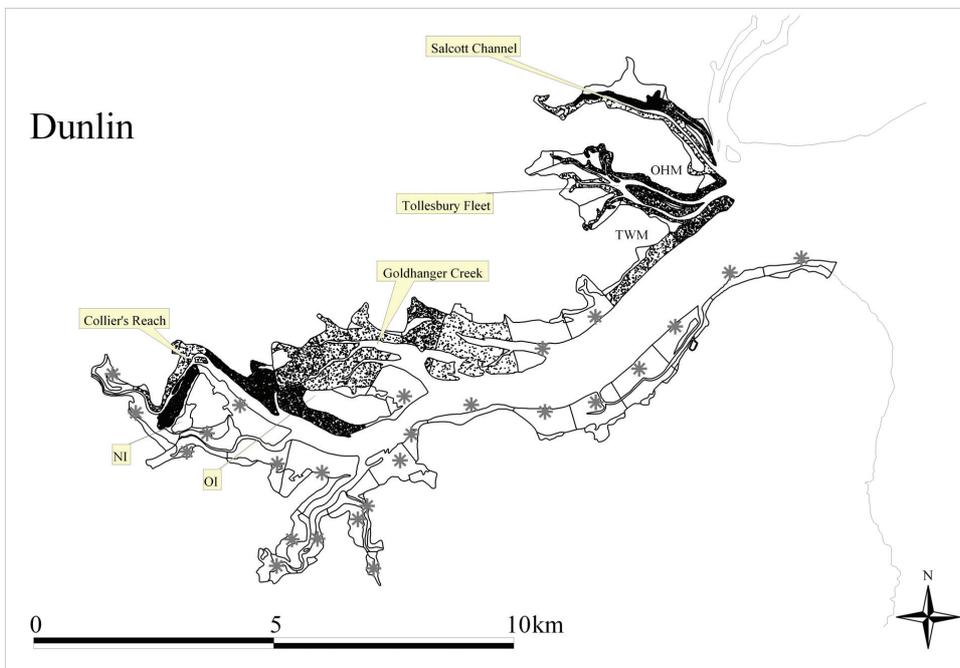
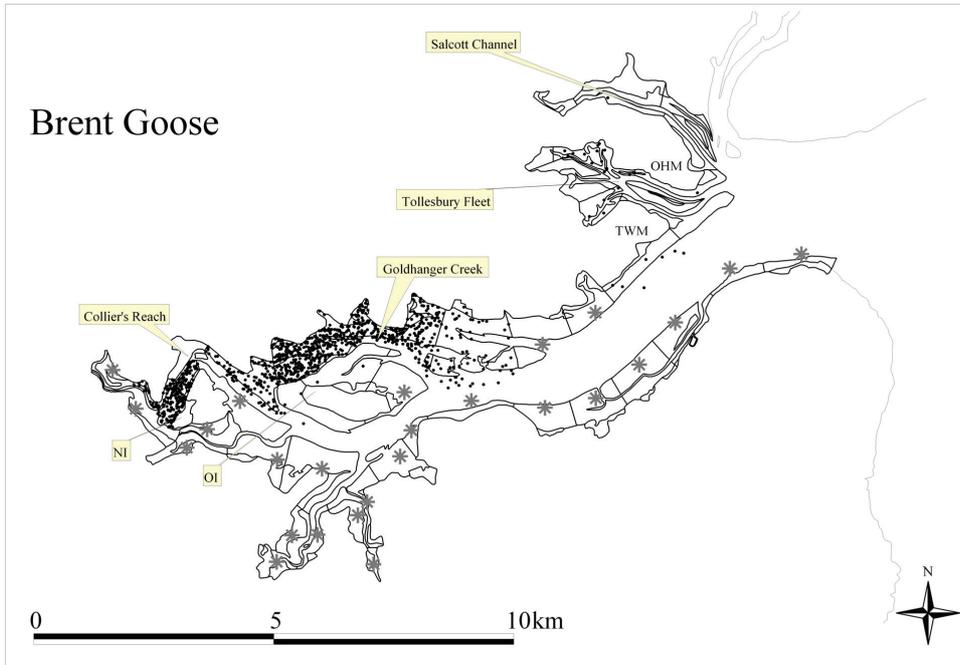


Figure 91. WeBS Low Tide Count distributions of Dark-bellied Brent Goose and Dunlin at Blackwater Estuary, winter 2002/03. (NI=Northey Island, OHM=Old Hall Marshes, OI=Osea Island, TWM=Tollesbury Wick Marshes)

BREYDON WATER

Norfolk

Internationally important: Pink-footed Goose, Wigeon, Shoveler, Golden Plover, Black-tailed Godwit, Redshank

Nationally important: Bewick's Swan, European White-fronted Goose, Teal, Pintail, Avocet

Site description

Breydon Water is a bar-built estuary separated from the North Sea by the spit of land on which Great Yarmouth sits. The estuary forms the lower reaches of the Yare and Waveney rivers, which drain much of central East Anglia. The rivers are tidal for many miles inland but only the estuary area from the confluence of the rivers is considered here. At high tide, Breydon Water forms a large lake but as the tide recedes, the only water that remains forms a narrow channel, well marked by buoys for the numerous leisure cruisers. There are small areas of saltmarsh, principally at the eastern end. To the north of the estuary stretches the huge expanse of the Halvergate Levels, Breydon Marshes and Berney Marshes. These form an extensive area of grazing marsh that has been subject to varying degrees of drainage in recent years. The main high tide roosts occur at the RSPB reserve at Berney Marshes (only accessible by boat, train or a very long walk) and in the eastern saltmarsh. The main conservation issues in the area involve boating, shooting and grazing marsh management. The river channel leading out through Great Yarmouth to the sea is highly industrialized (Davidson 1995).

Bird distribution 2002/03

This account is based on three months' data only, as no counts were made in December. Cormorant were confined to the main channel off Burgh Castle, with a mid-winter dip in numbers. Shelduck were thinly scattered throughout, although a small congregation was located adjacent to Reedham Marshes. As in previous winters, peak Shelduck numbers occurred in November (245 birds), before falling rapidly to 30 individuals by January. Shelduck Low Tide and Core Counts have both decreased over the past few years, from the high point of 2000/01, when around 500 individuals were noted by both surveys. The peak count of Wigeon exceeded the threshold of international importance with 16,000 individuals present in January. Greatest densities occurred on the mudflats bordering Halvergate and Reedham Marshes, with lesser concentrations towards the

eastern end of the estuary. Both Teal and Mallard were mostly found at the eastern end of the estuary, with both species recording their highest counts in January. Pintail numbers were at their highest in February, with the birds scattered within the eastern half. Shoveler frequented the mudflats around the Acle Mill.

The numbers of Avocet wintering at Breydon Water has increased dramatically in recent years; the peak count of 192 individuals in November represented a record Low Tide count. They were widely distributed within the central part of the estuary, on either side of the River Yare. Oystercatcher were also present in the central part of the estuary, although mainly north of the Yare. Small numbers of Ringed Plover were confined to the southern flats off Fisher's Marshes. Golden Plover were fairly mobile around the estuary, often moving to the surrounding marshes. This is reflected in the counts, when more than 8,000 Golden Plover were counted in November, only nine in January and none in February. These birds were concentrated in two main areas and virtually all were located north of the River Yare. Similarly, Lapwing occurred in large numbers on the surrounding marshes and numbers on the estuary were prone to large fluctuations. Again, the counts show that over 10,000 were recorded in November, with few in January and February. Unlike the previous species, Lapwing were widely distributed, both to the north and south of the River Yare and off Burgh Castle at the south-western end of the estuary. Both Grey Plover and Knot were only recorded in low numbers during the second half of the winter, with the majority to be found at the eastern end of the estuary. Dunlin numbers were at their highest at the end of the winter. Both Black-tailed Godwit and Curlew were widely scattered, although they generally avoided the mudflats in the north-east. Redshank numbers at low tide have increased over recent years, although peak Core Counts are relatively stable. They occurred in nationally important numbers in November when the peak of 1,497 was present. Generally widely distributed, some denser concentrations were along the south-eastern shoreline, along with the extreme south-western end off Burgh Castle.

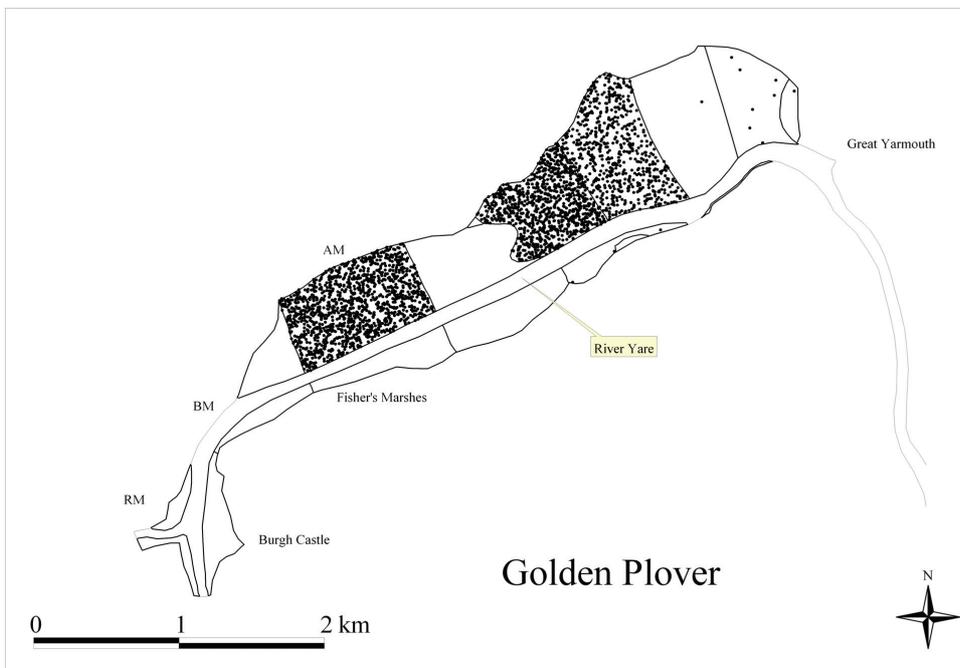
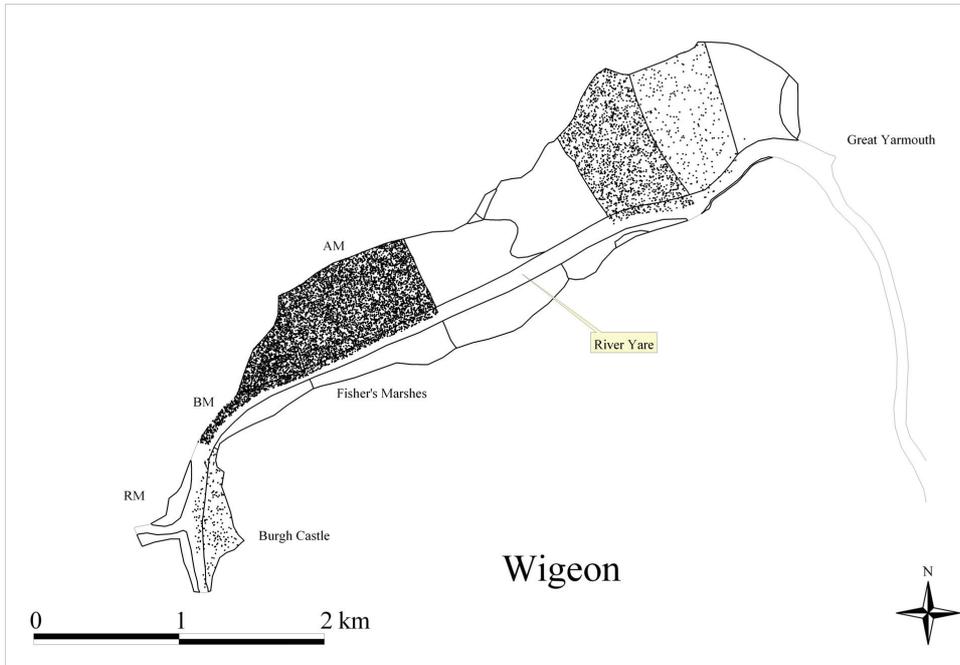


Figure 92. WeBS Low Tide Count distributions of Wigeon and Golden Plover at Breydon Water, winter 2002/03. (AM=Acle Mill, BM=Berney Marshes, RM=Reedham Marshes)

MORAY FIRTH

Highland

Internationally important: Redshank

Nationally important: Red-throated Diver, Whooper Swan, Greylag Goose, Wigeon, Teal, Pintail, Scaup, Long-tailed Duck, Common Scoter, Velvet Scoter, Goldeneye, Red-breasted Merganser, Oystercatcher, Bar-tailed Godwit, Curlew

Site description

The Moray Firth is a large estuary on the north-east coast of Scotland. The estuary comprises three main sections; the innermost Beaully Firth, the central inner Moray Firth and the outer Moray Firth shore, that extends eastwards from Fort George to encompass Whiteness Head, Nairn, Culbin Bar and Findhorn Bay. At low tide there are muddy intertidal flats exposed in the uppermost parts of the Beaully Firth, Munloch Bay and Findhorn Bay. There are sand flats in the central part of the Beaully Firth and along the outer shore around Whiteness Head, Culbin Bar and the outer parts of Findhorn Bay. There are also intertidal flats that are a mixture of shingle, mud and sand. Large beds of *Zostera* and *Ruppia* occur in Beaully Firth and saltmarsh has developed in several areas. There is widespread recreational use of the area, including boating, trial-biking, horse riding and walking. Much of the saltmarsh at Findhorn and Whiteness Head is grazed and fish-netting takes place at Findhorn, Ardersier (near Fort George) and Whiteness. Commercial cockling and bait-digging also occur, whilst wildfowling takes place over much of the estuary, particularly at Findhorn and Culbin. Industrial activity includes port facilities at Inverness and Whiteness and boat yards at Inverness and Findhorn. Fishing harbours are found at Nairn, Beaully and Charleston Ferry.

Bird distribution 2002/03

During 2002/03, only the Beaully Firth and Inner Moray Firth were covered. Red-throated Diver peaked in February, when most of the birds occurred between the A9 and Longman Bay. Up to 67 Slavonian Grebe were also concentrated off Longman Bay. Cormorant were generally distributed within the Beaully Firth and the inner Moray Firth. Mute Swan gradually increased during the course of the winter, mostly concentrated between Alturlie Point and Inverness. Pink-footed Geese were recorded from the inner reaches of the Beaully Firth to Alturlie Point, with a few also around Whiteness Head. The distribution of Greylag Goose was similar although they were absent from

Whiteness Head. Shelduck mostly occurred along the southern side of the inner zones, with only a few birds in the Beaully Firth. Numbers of Wigeon peaked in January with dense concentrations in the Beaully Firth as well as between Inverness and Fort George. Teal peaked at over 2,700 in November and their distribution was similar to Wigeon, although fewer birds were located in the Beaully Firth and towards Fort George. Mallard were widely distributed, whilst Pintail, reaching maximum numbers in December, were concentrated in Longman Bay. The peak Scaup count (553 in February) was higher than the mean five-year peak Core Count and apart from small numbers occurring at the mouth of the Caledonian Canal at Inverness, most frequented the estuary between Longman Point and east of Alturlie Point. Both Eider and Long-tailed Duck were present around Fort George and Whiteness Head, the latter also present around Inverness. The greatest densities of Goldeneye were in Longman Bay, although they were also scattered along the channels in the Beaully Firth and along the northern shore of the Inner Moray Firth. Red-breasted Merganser were scattered throughout, with the densest concentrations in Longman Bay.

Oystercatcher counts were relatively stable and were widely distributed, with denser concentrations in Longman Bay, around Alturlie Point and Whiteness Head. Lapwing numbers were generally low and displayed a widely scattered distribution, including the inner Beaully Firth. Low numbers of Knot were recorded with the favoured areas being Longman Bay and Whiteness Head. Dunlin frequented the southern side of the Inner Moray Firth and the inner part of the Beaully Firth. Bar-tailed Godwit were concentrated around Whiteness Head, Fort George and Longman Bay with smaller numbers in the Beaully Firth. The distribution of Curlew and Redshank was generally similar to that of the Bar-tailed Godwit, although in greater numbers within the Beaully Firth and fewer birds around Fort George and Whiteness Head.

The most abundant gull species was Herring Gull followed by Black-headed Gull (27,000 and 7,000 in February respectively).

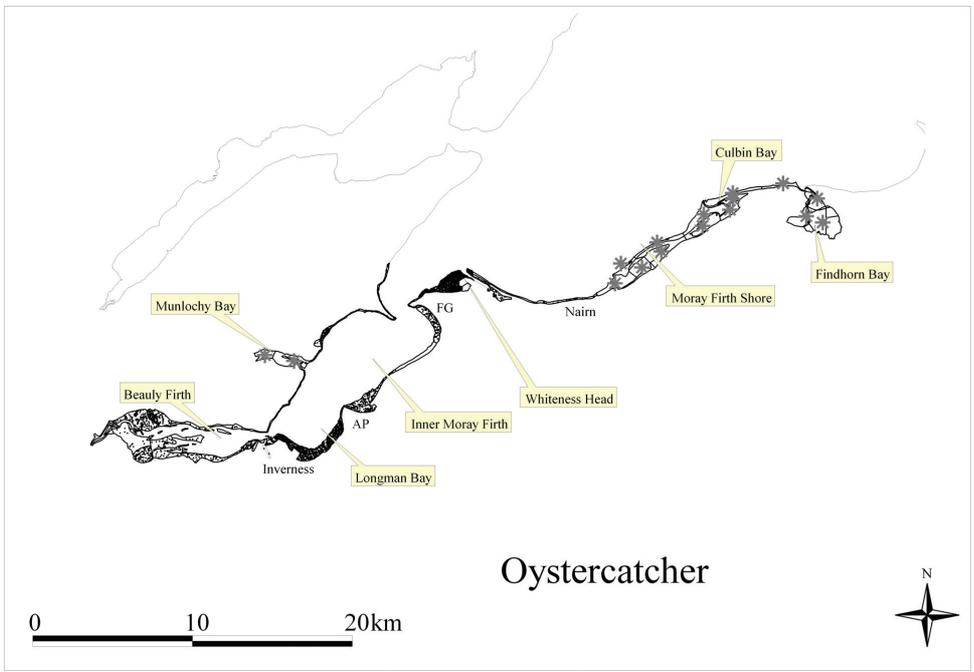
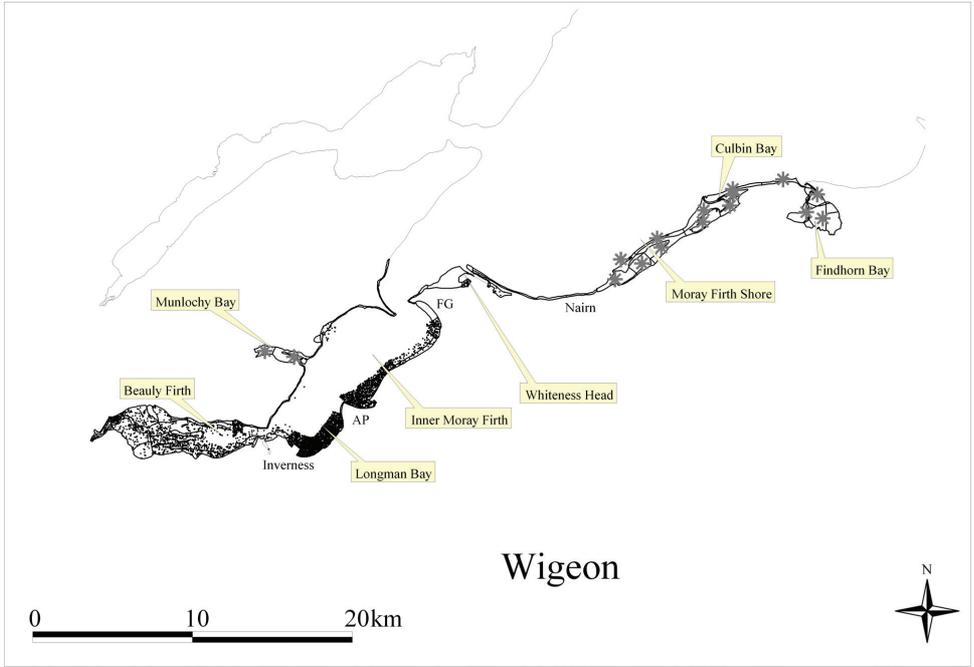


Figure 93. WeBS Low Tide Count distributions of Wigeon and Oystercatcher at Moray Firth , winter 2002/03. (AP=Alturlie Point, FG=Fort George)

PEGWELL BAY

Kent

Internationally important: None

Nationally important: Red-throated Diver, Great Crested Grebe, Golden Plover

Site description

Pegwell Bay is a small estuary at the mouth of the River Stour in east Kent. For much of the length, the Stour is narrow, although it broadens considerably at the mouth. The inner estuary substrates are composed of fine, muddy particles and the sediments become increasingly sandier as the estuary broadens into Sandwich Bay. There are narrow rocky outcrops in the north-eastern section, between the Pegwell and West Cliff areas of Ramsgate. Saltmarsh has developed around both banks of the River Stour. Along the western side, however, most saltmarsh has been lost via land-claim. Saltmarsh habitat along the eastern bank is more extensive. The shoreline to the south of the Stour is backed by a long stretch of bare shingle, behind which there are extensive dunes and sandy grassland. The dune system is growing rapidly northwards and diverting the channel of the Stour. There is relatively little industrial activity, with a power station and industrial wharf at Richborough, a chemical works further upriver at Great Stonar and a harbour at Ramsgate. Leisure activities are more abundant. These include sailing, wind-surfing and water-skiing, along with a marina at Ramsgate. Beach recreation is also widespread and wildfowling takes place on the grazing marshes.

Bird distribution 2002/03

Although absent during November and December, Red-throated Diver numbers increased rapidly to 96 birds by February, exceeding the threshold of national importance. They were generally located at the mouth of Pegwell Bay. Great Crested Grebe exhibited a similar pattern of occurrence; they were absent for the first half of the winter, followed by an influx during the second half. This species peaked in January, when 408 individuals were scattered along the coast. Up to 8 Little Egret frequented the saltmarsh behind Shell Ness and Pegwell Bay, whilst 26 European White-fronted Geese were recorded along the Stour between Sandwich and Shell Ness during February. Although small numbers of Dark-bellied Brent Geese were also found along the river, the majority occurred on the saltmarsh at Shell Ness

and on the flats off Pegwell Bay. Shelduck and Wigeon were both widely distributed throughout, although they occurred in the highest densities in Pegwell Bay and, for Shelduck, on the saltmarshes. Most Teal were recorded from the saltmarsh and meadows around the Stour, particularly around Shell Ness, whilst Mallard were more generally located on the Pegwell Bay flats. Shoveler numbers increased during the winter, up to a maximum of 58 individuals by February, all of which frequented the northern half of the estuary. A small flock of Eider were recorded off Ramsgate Harbour during the later winter period.

Oystercatcher and Golden Plover were both widely distributed, although they occurred in the greatest densities on the muddy flats of Pegwell Bay. Golden Plover also frequented the meadows and saltmarsh along the Stour. More than 7,200 Golden Plover were present in February, exceeding the level of national importance. Ringed Plover and Grey Plover were both present in substantial numbers in December, exceeding the threshold of national importance. Both these species were widely distributed throughout the area. Lapwing frequented Pegwell Bay along with the saltmarsh and meadows around the Stour. The February peak of over 10,000 Lapwing exceeded the maximum Core Count for 2002/03. Most Knot and Dunlin occurred in Pegwell Bay, north of the River Stour. Sanderling, however, were generally located on the coastline south of the river. Sanderling numbers exceeded the threshold of national importance during December. Substantial numbers of Snipe were present in the saltmarsh behind Shell Ness and around the edges of Pegwell Bay. The highest count was made in February when 92 individuals were present. Bar-tailed Godwit, Curlew and Redshank showed a similarly broad distribution, with the exception that the latter two species also occurred in the saltmarsh around the Stour. Up to 4 Spotted Redshank also wintered in the saltmarsh creeks. Turnstone were virtually confined to the northern side of Pegwell Bay between Ramsgate and Shellness.

Seven species of gull were recorded, of which Black-headed and Herring were the most abundant.

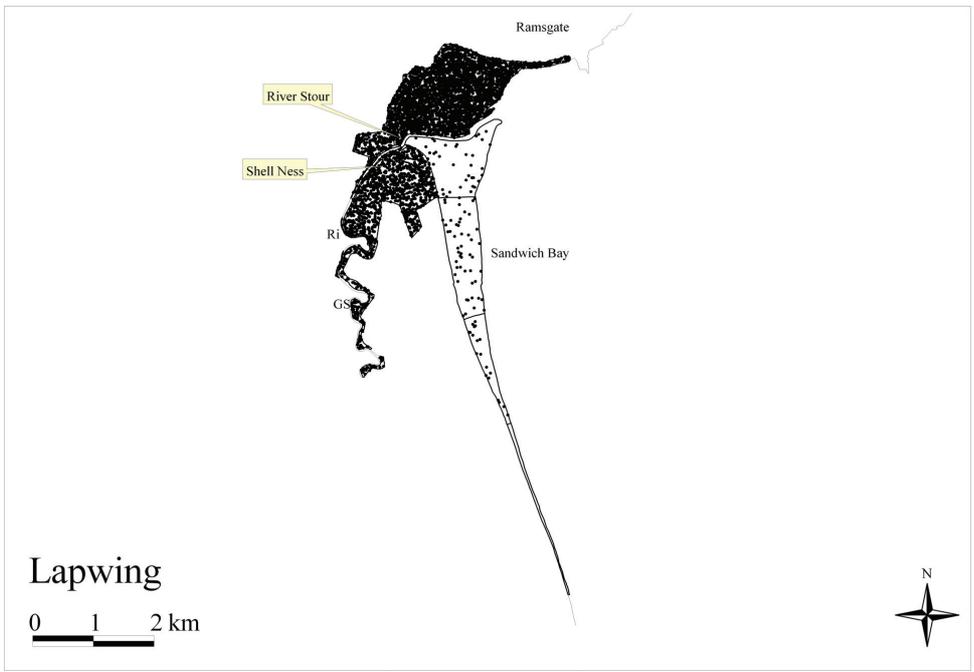
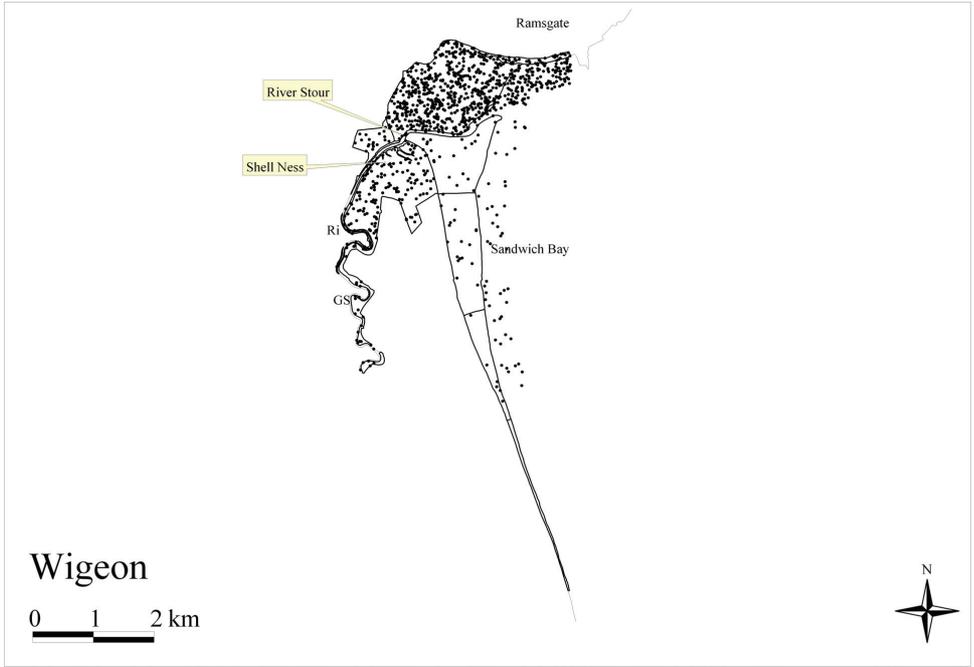


Figure 94. WeBS Low Tide Count distributions of Wigeon and Lapwing at Pegwell Bay, winter 2002/03. (GS=Great Stonar, Ri=Richborough)