

## CARMARTHEN BAY (GWENDRAETH & PEMBREY)

Carmarthenshire

**Internationally important:**

None

**Nationally important:**

Common Scoter, Oystercatcher, Golden Plover, Sanderling

### *Site description*

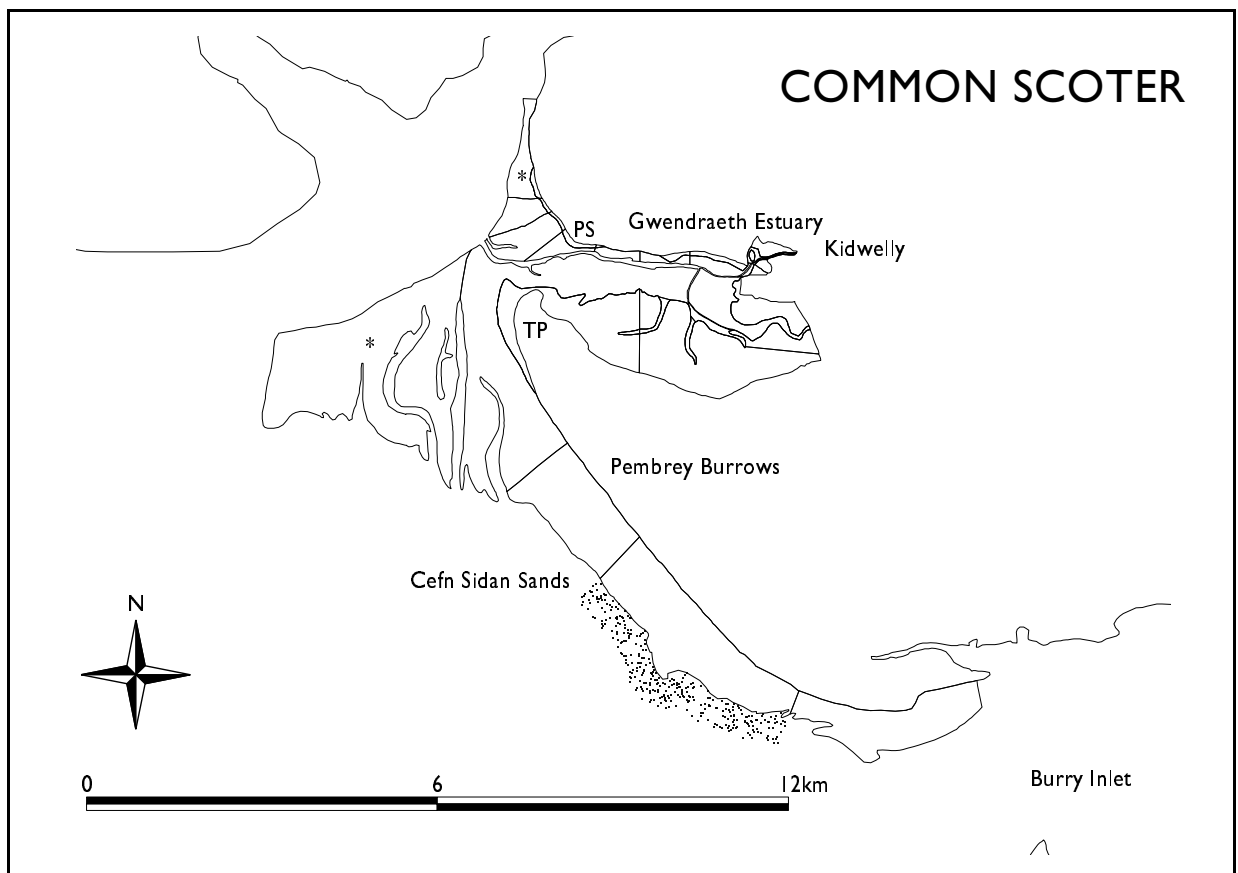
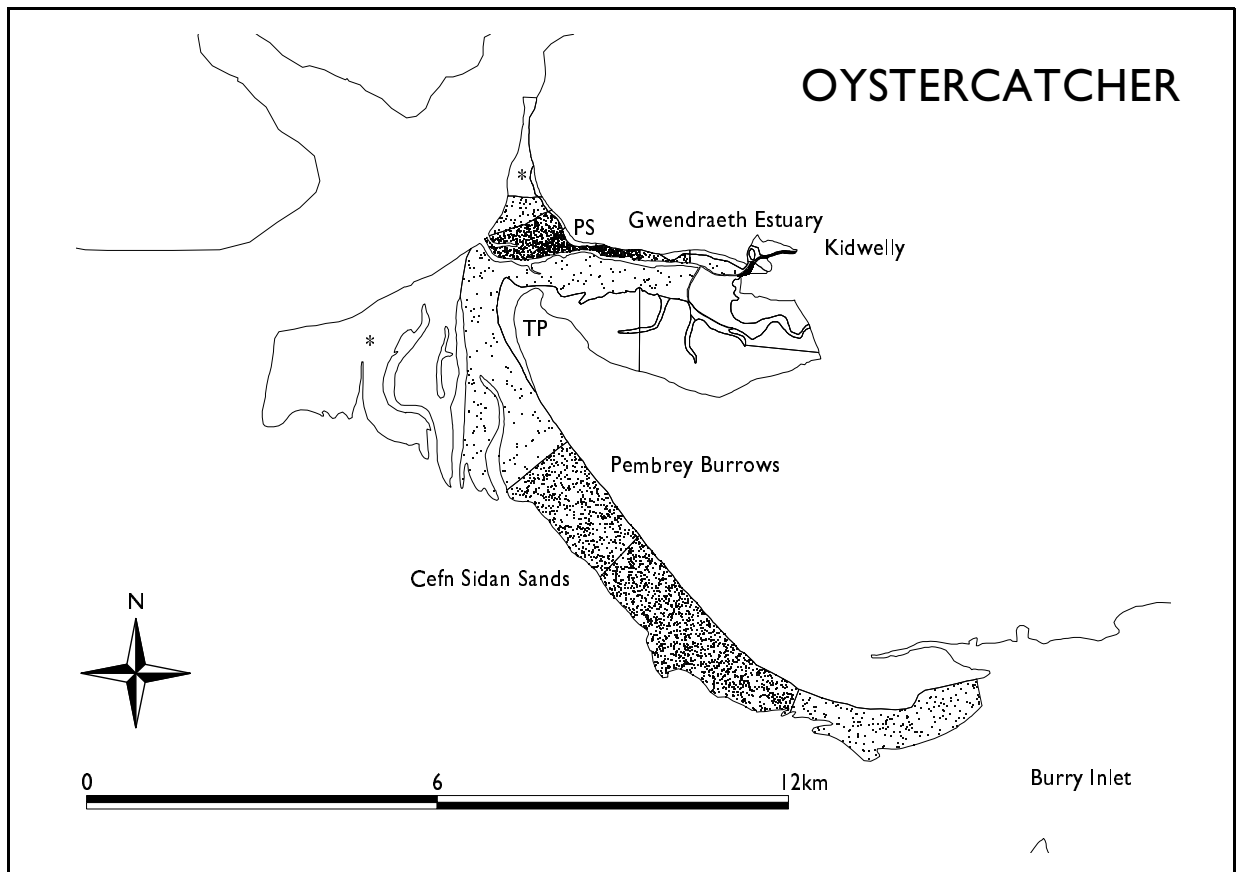
Carmarthen Bay stretches from Pendine in the west to the Burry Inlet in the east. The inner part of the bay is a broad, shallow estuary fed by the Rivers Taf, Tywi and Gwendraeth. The coverage achieved during the WeBS Low Tide Counts in 1999-2000 was only partial, comprising the estuary of the Gwendraeth river and the open coast south of Pembrey Burrows known as Cefn Sidan Sands. However, the more distant parts of Cefn Sidan Sands off Tywyn Point were excluded, along with Laugharne and Pendine Sands on the western side of the Bay and the inner parts of the Taf and Tywi estuaries. Most of the intertidal habitat in the estuary is mainly sandy, although along the upper reaches of the three rivers the substrate is predominately muddy. There are several areas of saltmarsh along the tributaries, with the most extensive area developed along the southern shore of the Gwendraeth. A well-developed dune system runs from Tywyn Point to the Burry Inlet, much of which has been planted with conifers. The estuary is relatively rural, with no heavy industry present along its shoreline. Carmarthen Bay is an important estuary for wintering waterbirds, and there may be some interchange between birds at the site and those on the Burry Inlet. Several parts of the estuary, including most of the area counted during 1999-2000, are designated as SSSIs (Buck 1993a).

### *Bird distribution*

Oystercatchers were noted throughout most of the counted parts of the estuary, with the greatest feeding concentrations along the north side of the River Gwendraeth, particularly off Pastoun Scar, and also on the more open shore habitat off Pembrey Burrows (Figure 72). The peak count was similar to recent Core Counts for the site, suggesting that most of the Carmarthen Bay population of this species feeds in this area. Most of the Lapwings recorded were concentrated on the mudflats off Kidwelly, in the north-eastern corner of the Gwendraeth estuary. Small numbers of Ringed Plover and Redshank also occurred solely along the northern side of the

Gwendraeth. The distribution of Curlew within the estuary was very similar to the previous two species, but with a few scattered individuals also along the southern side of the Gwendraeth; this species also avoided Cefn Sidan. Knot favoured the western parts of Cefn Sidan Sands, being only recorded during the early part of the winter. Low numbers of Dunlin frequented the Cefn Sidan shoreline, again showing a western bias, and were also present along the northern side of the Gwendraeth River. The bay as a whole is considered to support nationally important numbers of Sanderling and the peak low tide count of 437 compared well with recent peak Core Counts. The majority of the Sanderling were present along the Cefn Sidan Sands. Carmarthen Bay also nominally supports nationally important numbers of wintering Golden Plover, but the species was not recorded at all during the Low Tide Counts (and the peak Core Count was only nine), compared with counts of over 10,000 a few years ago.

The site is not important for large numbers of wildfowl with the single exception of Common Scoter, which are present in nationally important numbers. Recent counts have recorded over 20,000 Common Scoter offshore in the bay. Perhaps not surprisingly, however, this species was only recorded on a single occasion at low tide, when 1,000 were present off Cefn Sidan Sands. Shelduck, Pintail and Mallard all frequented the northern mudflats adjacent to the River Gwendraeth, with the first two species more concentrated towards Kidwelly. Cormorants were thinly distributed off Cefn Sidan Sands, somewhat more concentrated towards the eastern end. The most abundant species of gull was Common Gull, with nearly 3,000 birds present on the counted parts of the site in December. Herring, Great Black-backed, Black-headed and Lesser Black-backed Gulls were also present in decreasing order of abundance. In addition, Little and Great Crested Grebes, Little Egret, Grey Heron, Red-breasted Merganser, Grey Plover and Bar-tailed Godwit were all recorded in low numbers during the Low Tide Counts.



**Figure 72.** WeBS Low Tide Counts of Oystercatcher and Common Scoter at Carmarthen Bay (Gwendraeth/Pembrey), winter 1999-2000. (TP=Tywyn Point, PS=Pastoun Scar, \* = not counted)

## CROMARTY FIRTH

### Highland

**Internationally important:**

Pink-footed Goose, Greylag Goose, Knot, Bar-tailed Godwit

**Nationally important:**

Whooper Swan, Wigeon, Pintail, Scaup, Red-breasted Merganser, Curlew, Redshank, Common Gull

#### *Site description*

The Cromarty Firth is part of the complex of estuaries forming the Moray Basin, and boasts the largest area of intertidal mudflats in the area. The firth itself is made up of three principal bays; Alness, Udale and Nigg. The sediments in the firth are predominately muddy in the uppermost parts becoming progressively sandier towards the mouth; both Nigg and Udale Bays are mostly sand. Several areas of saltmarsh have developed, mostly where rivers enter the estuary. Much of the firth has SPA, Ramsar and SSSI status, and the RSPB have two reserves on the estuary at Nigg Bay and Udale Bay. There is much industrial activity around the firth, including an oil terminal and a fabrication yard producing oil rigs at Nigg as well as a dock complex at Invergordon. Some small fishing craft still make use of the estuary, whilst leisure activities include sailing and wind-surfing (Buck 1993c, Davidson 1996a).

#### *Bird distribution*

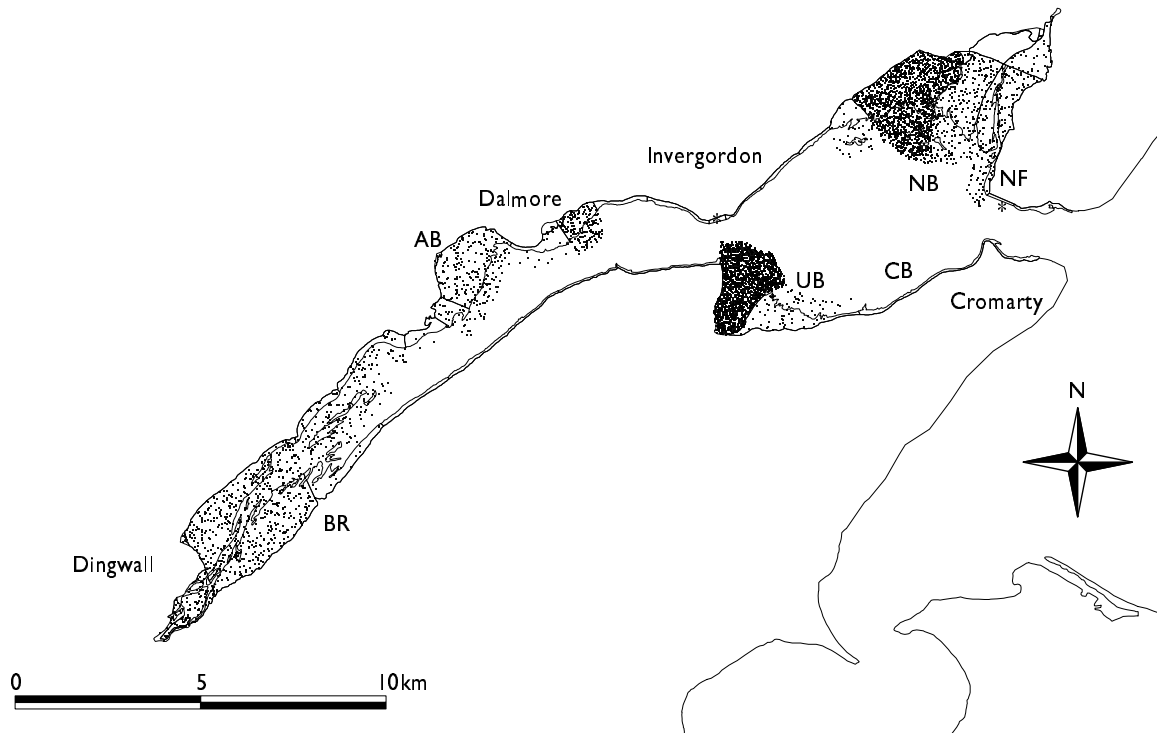
Most of the counts of Wigeon were below the national importance level but the exceptional November count of nearly 15,000 was in excess of any Core Count made at the site in recent winters. The greatest concentrations of Wigeon were in Nigg and Udale Bays (Figure 73), although birds were widespread in the inner estuary. Pintail were concentrated in the eastern half of Nigg Bay. Scaup favoured Cromarty Bay and the outer parts of Udale Bay, with numbers fairly comparable to peak Core Counts. Red-breasted Mergansers were mostly concentrated around Nigg, Udale and Cromarty Bays, with smaller numbers scattered in the inner parts of the estuary. Both Teal and Mallard frequented the inner half of the estuary, particularly upstream of Dalmore. Long-tailed Ducks frequented the outer firth, particularly off Nigg Ferry and parts of Nigg Bay. Conversely, Goldeneye were more scattered, with small concentrations off the Dalmore Distillery and around Nigg and Udale Bays. Shelduck and Mute Swans were virtually confined to the wider bays. Small numbers of Whooper Swans were also recorded around Nigg Bay. Over 700 Greylag and nearly 500 Pink-footed Geese were recorded in December, although the firth is principally of importance as an overnight

roost for these species. The former were mostly confined to the inner part of the estuary whilst the latter were virtually confined to Nigg Bay.

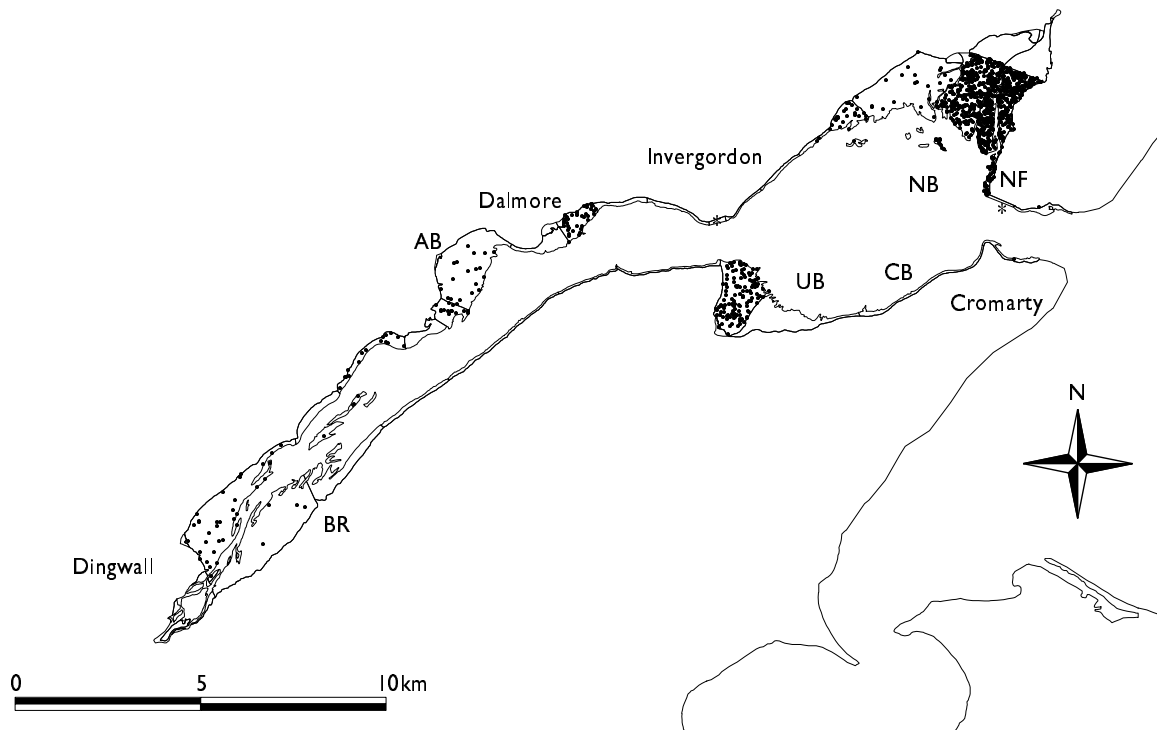
Internationally important numbers of Bar-tailed Godwit winter on the firth, with the peak of 1,852 birds in January exceeding the peak Core Count for the winter. At low tide the birds were concentrated in the eastern portion of Nigg Bay, the western portion of Udale Bay and on the flats to the east of Dalmore, with a scattering of birds also along the northern shoreline between Alness Bay and Dingwall (Figure 73). The greatest numbers of Oystercatcher were to be found in the eastern part of Nigg Bay, and the western side of Udale Bay. There were lesser concentrations from the Alness River westwards to beyond the Cromarty Bridge. The distribution of Knot was similar to Oystercatcher, with the greatest concentrations in eastern Nigg Bay and western Udale Bay, and in Alness Bay. However, it was absent from all other parts of the estuary. Curlew were found virtually throughout the Cromarty, with the greatest concentrations in Nigg and Udale Bays. Redshank are considered to occur in nationally important numbers based on Core Counts, but at low tide numbers exceeded the international importance threshold in three out of four months. Redshank were widely distributed within the firth, with the greatest concentrations in the western part of Udale Bay. Dunlin were only slightly less widespread, with the densest concentrations in western Udale Bay, eastern Nigg Bay and Alness Bay. Lapwing concentrations were centred on the flats below the Dalmore Distillery and the eastern half of Nigg Bay. Smaller numbers were scattered elsewhere along the northern shoreline, and upriver of the Cromarty Bridge. Small numbers of Ringed Plover were thinly scattered in the estuary, favouring the southern flats upriver from the Cromarty Bridge, whereas the few Golden Plover recorded were confined to the eastern flats in Nigg Bay.

Small numbers of Cormorant mostly occurred in the outer half of the estuary. Grey Herons were widely distributed but appeared to favour the eastern flats of Nigg Bay. Red-throated Diver, Slavonian and Little Grebe, Shag, Shoveler, Eider, Goosander, Snipe and Turnstone were also all recorded in small numbers.

## WIGEON



## BAR-TAILED GODWIT



**Figure 73.** WeBS Low Tide Counts of Wigeon and Bar-tailed Godwit at the Cromarty Firth, winter 1999-2000. (NF=Nigg Ferry, NB=Nigg Bay, CB=Cromarty Bay, UB=Udale Bay, AB=Alness Bay, BR=Cromarty Bridge, \* = not counted)

## FIRTH OF CLYDE

Dunbartonshire / Renfrewshire

**Internationally important:**

Redshank

**Nationally important:**

Red-throated Diver, Cormorant, Eider, Goldeneye, Red-breasted Merganser, Oystercatcher, Curlew

### *Site description*

The area covered for the low tide scheme is the inner Firth of Clyde, upstream of Greenock and Helensborough (although it should be noted that Core Counts on the Clyde refer to a larger area). The Clyde is narrow and canalised from its upper tidal reaches down to the Erskine Bridge, with very little sediment exposed at low tide. Below Erskine Bridge, the estuary begins to broaden, quite markedly so below Port Glasgow, with areas of sand and mud exposed on both north and south shores at low tide. There is a large mussel bed at Pillar Bank, and a scattering of *Zostera* beds. The small amount of saltmarsh present on the Clyde mostly occurs to the west of Dumbarton on the northern shore and to the east of Erskine on the southern shore. The estuary of the Clyde is heavily industrialised along much of its length, particularly at the eastern end from the Erskine Bridge to the City of Glasgow. Consequently, the river has suffered badly from high levels of industrial pollution over many years. Unsurprisingly, the worst affected stretches encompass Clydebank to Glasgow, reflecting the greatest concentration of heavy industries and population. However, the last decade or so has seen an improvement in pollution levels over the estuary as a whole, especially in downstream areas. The Inner Clyde (the same area as covered by these counts) is a designated SPA and Ramsar site (Buck 1993b).

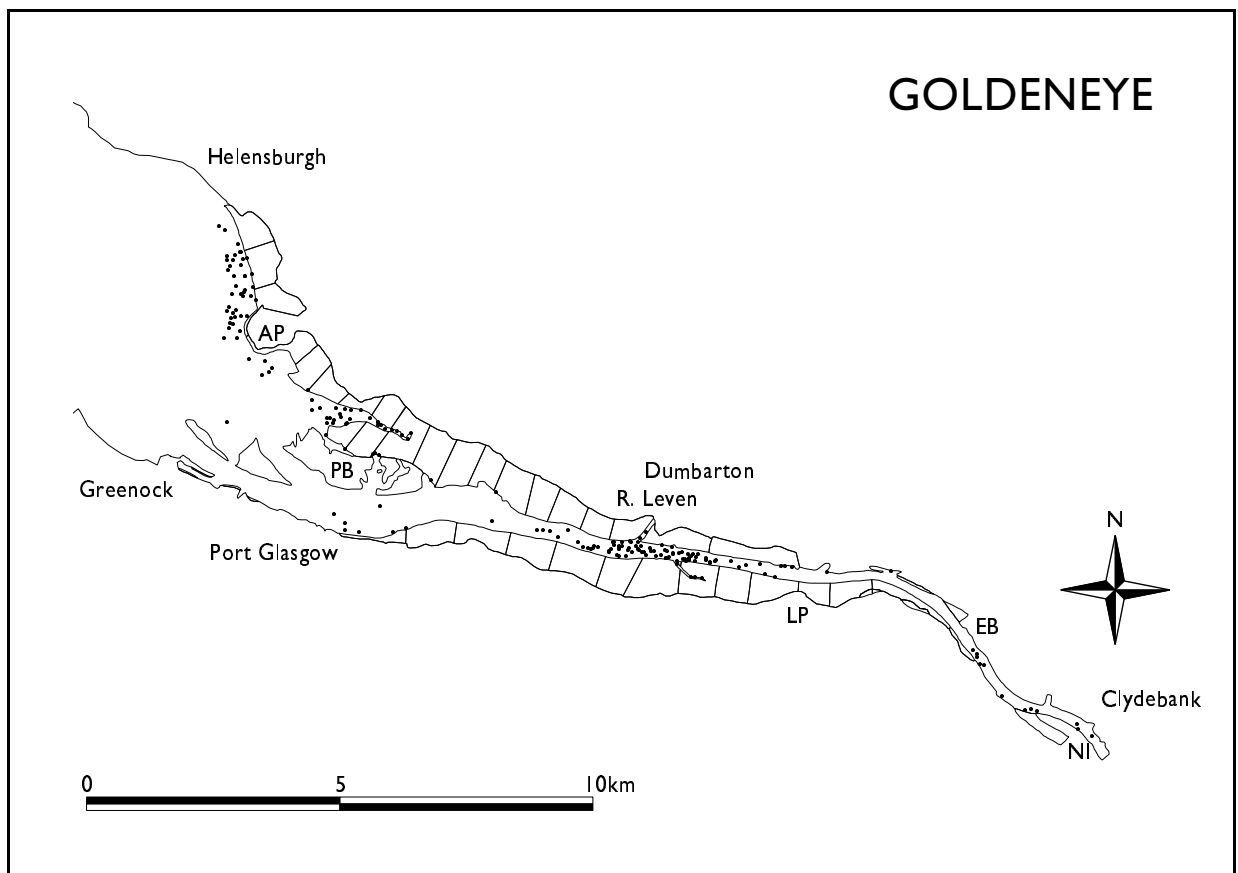
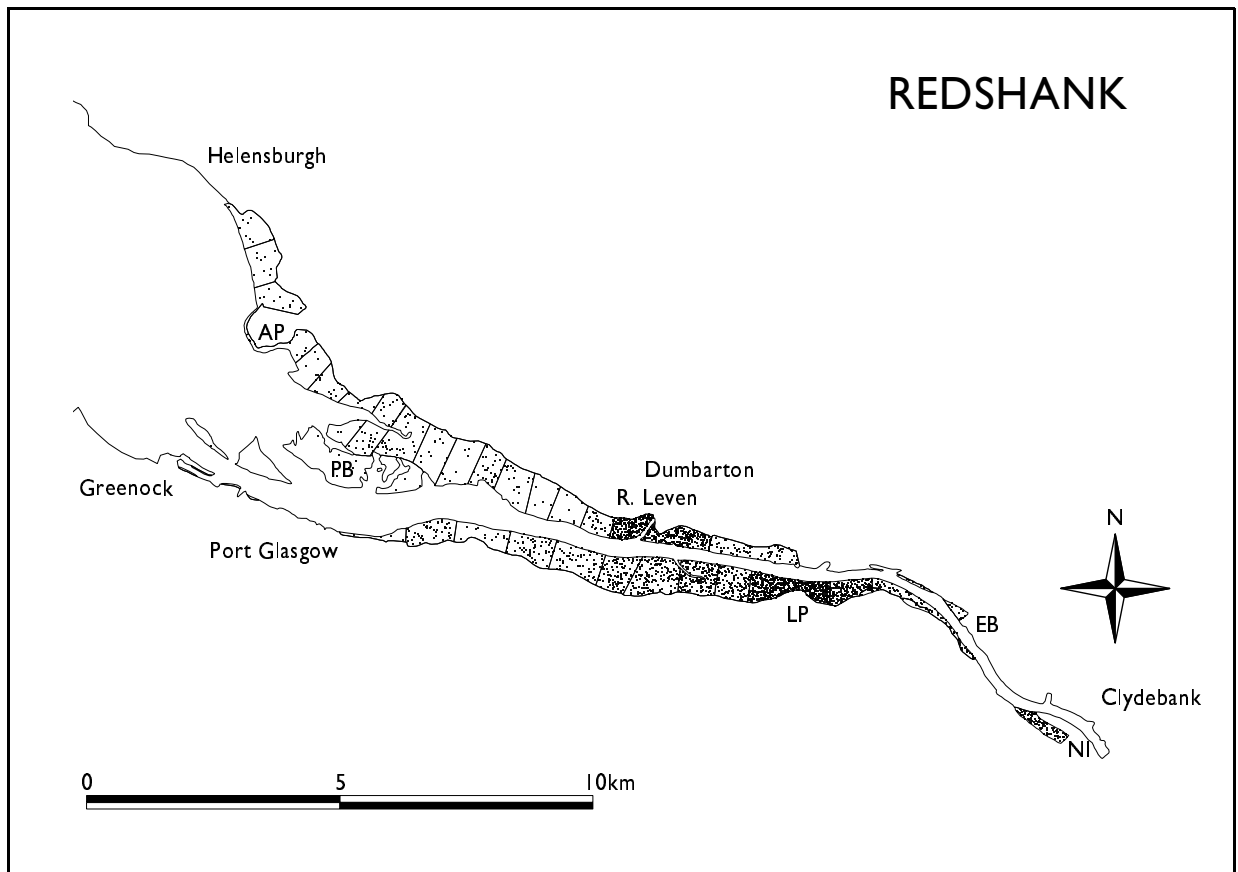
### *Bird distribution*

Redshank favoured the upper half of the estuary, with the greatest concentrations found either side of the confluence of the River Leven with the Clyde (adjacent to Dunbarton) and along on the mudflats to the west of the Erskine Bridge, with a smaller concentration frequenting the saltmarsh adjacent to Newshot Island (Figure 74). The peak Low Tide Count of 2,956 birds in November was higher than any recent Core Count at the site. Oystercatchers were found over virtually the entire firth from Erskine Bridge westwards, with the greatest concentrations around Cardross along the northern shore. Dunlin were concentrated on a relatively small area of the southern shore in the bay just east of Longhaugh Point, with a scattering of birds along the flats further to the west and on Pillar Bank along the north shore. Although Lapwing were scattered

over much of the firth, the greatest concentrations by far were recorded from the flats around Longhaugh Point. Curlew were distributed over virtually the entire estuary. Ringed Plover favoured the outer parts of the north shore. Up to 70 Snipe were noted, mostly from the saltmarsh by Newshot Island. Small numbers of Knot, Purple Sandpiper, Bar-tailed Godwit, Greenshank and Turnstone were also recorded.

The three species of duck supported by the Clyde in nationally important numbers were all noted in lower numbers at low tide than on recent Core Counts. Goldeneye favoured three main areas of the estuary; the confluence of the River Leven and the Clyde, the channel to the north of Pillar Bank and the shore to the north of Ardmore Point (Figure 74). Red-breasted Mergansers were distributed evenly around all parts of the site. Eiders frequented the outer half of the estuary, with particular concentrations around Helensburgh and Ardmore Point, and the peak count of 404 was only about 10% of the equivalent peak Core Count. However, these discrepancies would seem to be explained by the difference in the geographical extent of the Core and Low Tide Counts. Wigeon were generally distributed but Teal and Mallard favoured the central parts of the estuary, particularly the flats around Longhaugh Point and, in the case of Teal, the narrow inner channel off Clydebank. Shelduck congregated to the west of Longhaugh Point and off Ardmore Point. Up to 71 Scaup favoured the channels off Ardmore Point, Pillar Bank and near the confluence of the River Leven and Clyde. Small numbers of Gadwall, Pintail, Tufted Duck, Long-tailed Duck, Pink-footed Geese and Greylag Geese were also noted.

Cormorants were distributed generally throughout the estuary, with small concentrations off Ardmore Bank and around the confluence of the River Leven on both shores. The peak of 93 Grey Herons corresponded to a similarly high Core Count on the Clyde during this winter. Up to 11 Red-throated Divers and 57 Great Crested Grebes, along with the odd Little and Slavonian Grebe, were also recorded. Large numbers of gulls were also noted on the Clyde, with Black-headed the most abundant, followed by Common Gull and smaller numbers of Great Black-backed, Lesser Black-backed and Herring Gulls.



**Figure 74.** WeBS Low Tide Counts of Redshank and Goldeneye at the Firth of Clyde, winter 1999-2000. (AP=Ardmore Point, PB=Pillar Bank, EB=Erskine Bridge, NI=Newshot Island, LP=Longhaugh Point)

# NEWTOWN HARBOUR

## Isle of Wight

**Internationally important:**

None

**Nationally important:**

Dark-bellied Brent Goose, Black-tailed Godwit

### *Site description*

Newtown Harbour is situated on the north-west coast of the Isle of Wight, between Yarmouth and Cowes. The River Newtown and several tributaries form the largest estuary on the island. The mouth is relatively narrow and bounded on either side by shingle spits. Within the estuary, the intertidal flats comprise of combinations of mud, sand and shingle. Almost half of the saltmarsh habitat on the Isle of Wight occurs within the estuary. The majority of the saltmarsh communities in the estuary occur along the banks of the creeks (many known locally as "lakes"), well inland from the mouth. However, over recent years, new saltmarsh has begun to develop in the central parts of the estuary, behind the breached sea wall. The estuary is a SSSI and forms part of the Solent and Southampton Water SPA and Ramsar Site. The area is popular with tourists, particularly during the summer months. The only light industry on the estuary is a boat repair yard at Shalfleet. Some bait-digging also takes place within the area (Buck 1997, Davidson 1996b).

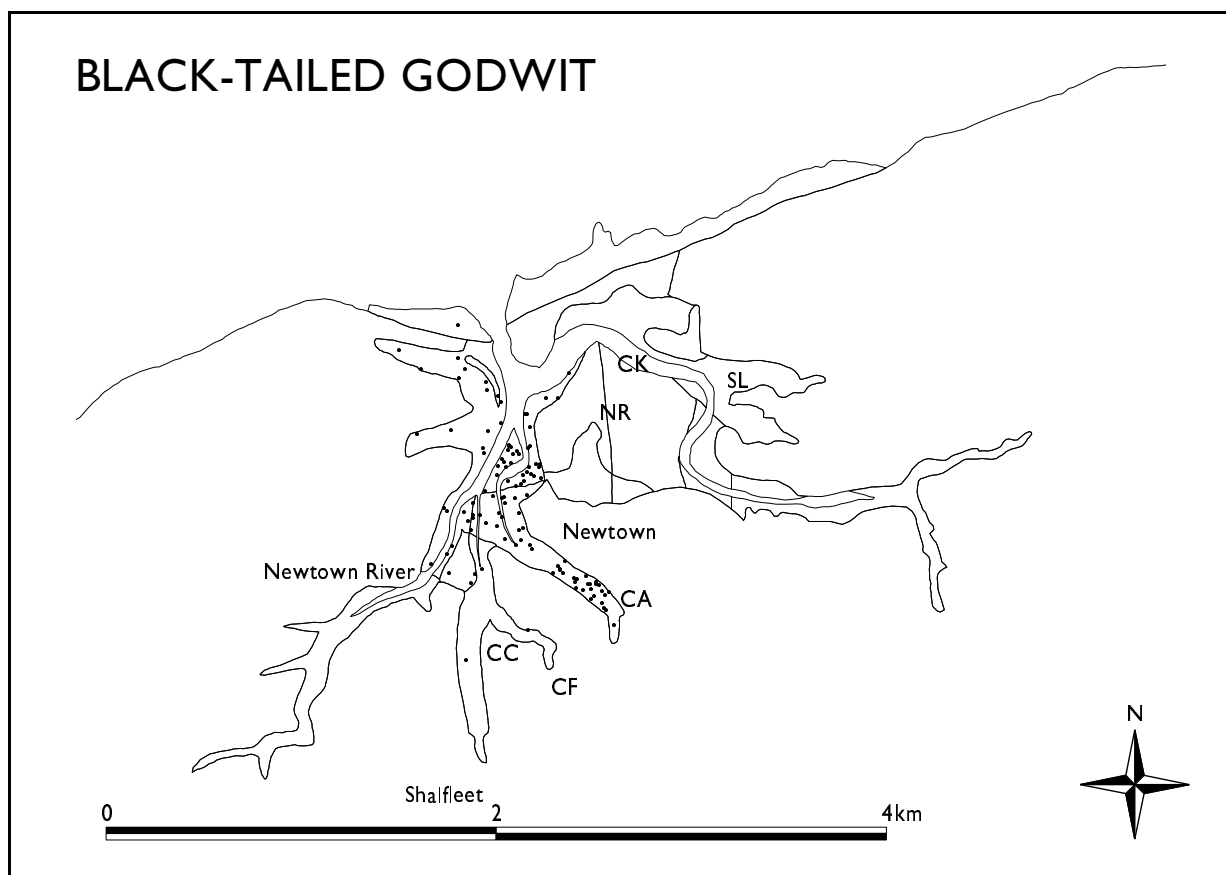
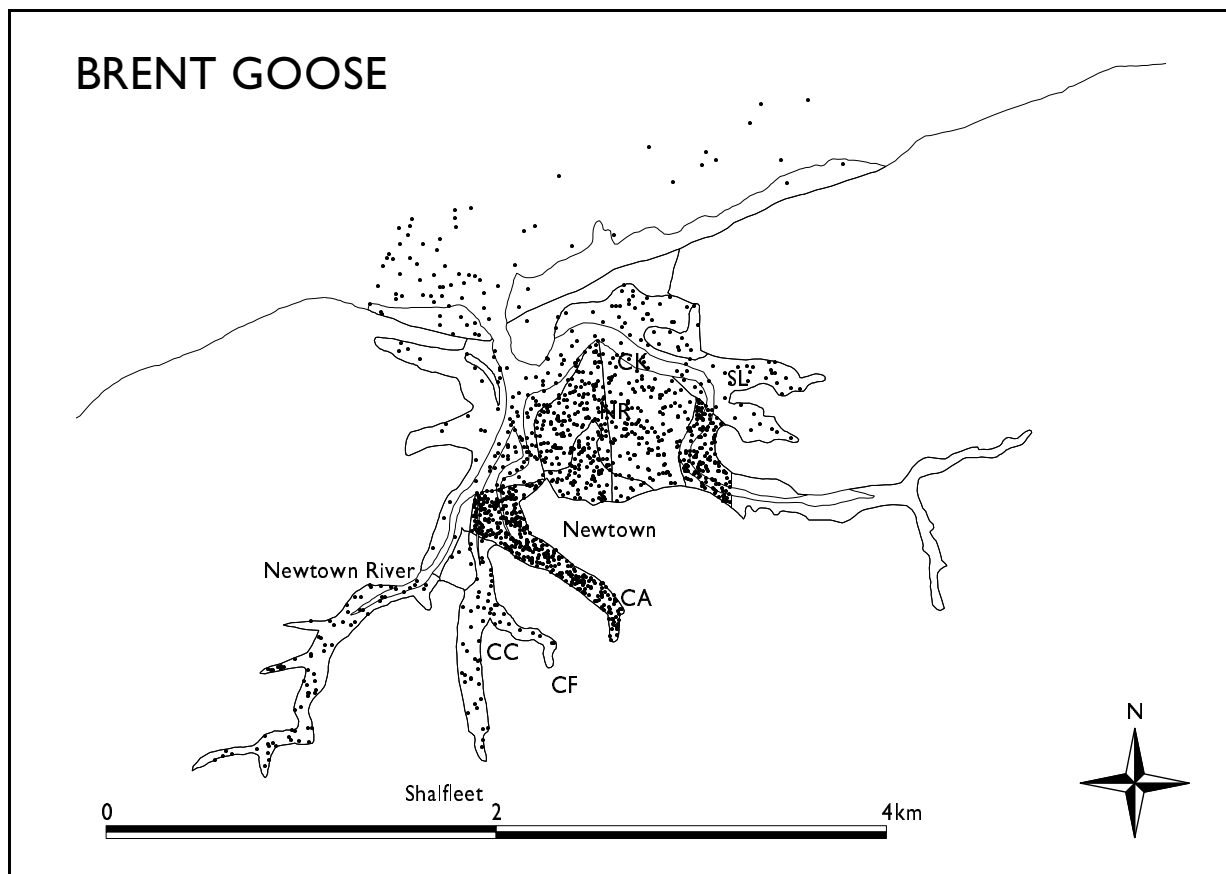
### *Bird distribution*

Brent Geese in the harbour peaked at 1,616 individuals during the February Low Tide Count, slightly lower than the comparable peak Core Count. The birds were widely distributed, but with some preference for the central parts of the estuary, the highest concentration being at Causeway Lake (Figure 75). Canada Geese frequented the flats adjacent to Clamerkin and Spur Lakes. Shelduck also favoured the nature reserve, with a few scattered elsewhere within the estuary. Wigeon and Teal were the two most abundant duck species, Teal approaching numbers of national importance with a maximum of 1,259 in December. Virtually all the Teal were confined to the creeks in the inner part of the estuary. The distribution of Wigeon was very similar to that of Teal, but the flats around Clamerkin Lake were also favoured. Small numbers of Mallard and Pintail frequented the lakes around Corf Camp and Causeway Lake respectively, with a very few individuals on the flats and saltmarsh enclosed by the sea wall. Goldeneye and Red-breasted Merganser frequented the main Newtown River and

tributaries such as Clamerkin Lake. Other wildfowl recorded included Mute Swan, Barnacle Goose and Shoveler.

The peak count of 218 Black-tailed Godwits was somewhat higher than recent Core Count maxima. Figure 75 shows that the godwits were confined to the flats adjacent to the main Newtown River channel and Causeway Lake. Oystercatcher were found from the middle flats of the estuary down to the river mouth. The majority of Ringed Plover were feeding on the reserve with virtually all the rest on the shoreline adjacent to the mouth of the estuary. Lapwing were widely distributed throughout the estuary, with the densest concentration within Causeway, Shalfleet and Corf Lakes and on the eastern flats of the enclosed nature reserve area. Golden Plover were concentrated on the enclosed flats and saltmarsh of the reserve, and the adjacent flats by the main Newtown River. The distribution of Grey Plover was similar. Both Knot and Dunlin favoured the central sections of the estuary, particularly the mudflats enclosed by the sea wall. Knot were only ever recorded from within the enclosed area, whereas Dunlin were also found on flats within Causeway Lake and at the junction with the main river Newtown channel, with a few around the mouth of the estuary. Both Curlew and Redshank appeared to favour the flats within the enclosed reserve area, whilst the former also congregated on the flats at the mouth of the estuary. The small numbers of Turnstone present avoided the inner part of the estuary, preferring the flats nearer the mouth. Other species of wader recorded in very low numbers were Jack Snipe, Woodcock, Bar-tailed Godwit, Spotted Redshank, Greenshank and Common Sandpiper.

Little, Great Crested and Slavonian Grebes were present, with six of the latter in February but Cormorants were relatively scarce, with only a maximum of ten birds noted. Little Egrets, peaking at 23, were considerably more numerous than Grey Heron. Of the four species of gull recorded, Black-headed was by far the most abundant and widespread, with smaller numbers of Herring and Great Black-backed Gulls nearer the estuary mouth. A couple of Mediterranean Gulls were present in February but Common and Lesser Black-backed Gulls were not recorded.



**Figure 75.** WeBS Low Tide Counts of Dark-bellied Brent Goose and Black-tailed Godwit at Newtown Harbour, winter 1999-2000. (CC=Corf Camp, CF=Corf Lake, CA=Causeway Lake, NR= nature reserve, CK=Clamerkin Lake, SL=Spur Lake)



## SOLWAY FIRTH

*Dumfries & Galloway / Cumbria*

<b>Internationally important:</b>	Whooper Swan, Pink-footed Goose, Barnacle Goose, Shelduck, Pintail, Oystercatcher, Knot, Dunlin, Bar-tailed Godwit, Curlew, Redshank
<b>Nationally important:</b>	Red-throated Diver, Great Crested Grebe, Cormorant, Scaup, Common Scoter, Goldeneye, Red-breasted Merganser, Ringed Plover, Golden Plover, Grey Plover, Sanderling, Black-tailed Godwit, Lesser Black-backed Gull, Herring Gull

### *Site description*

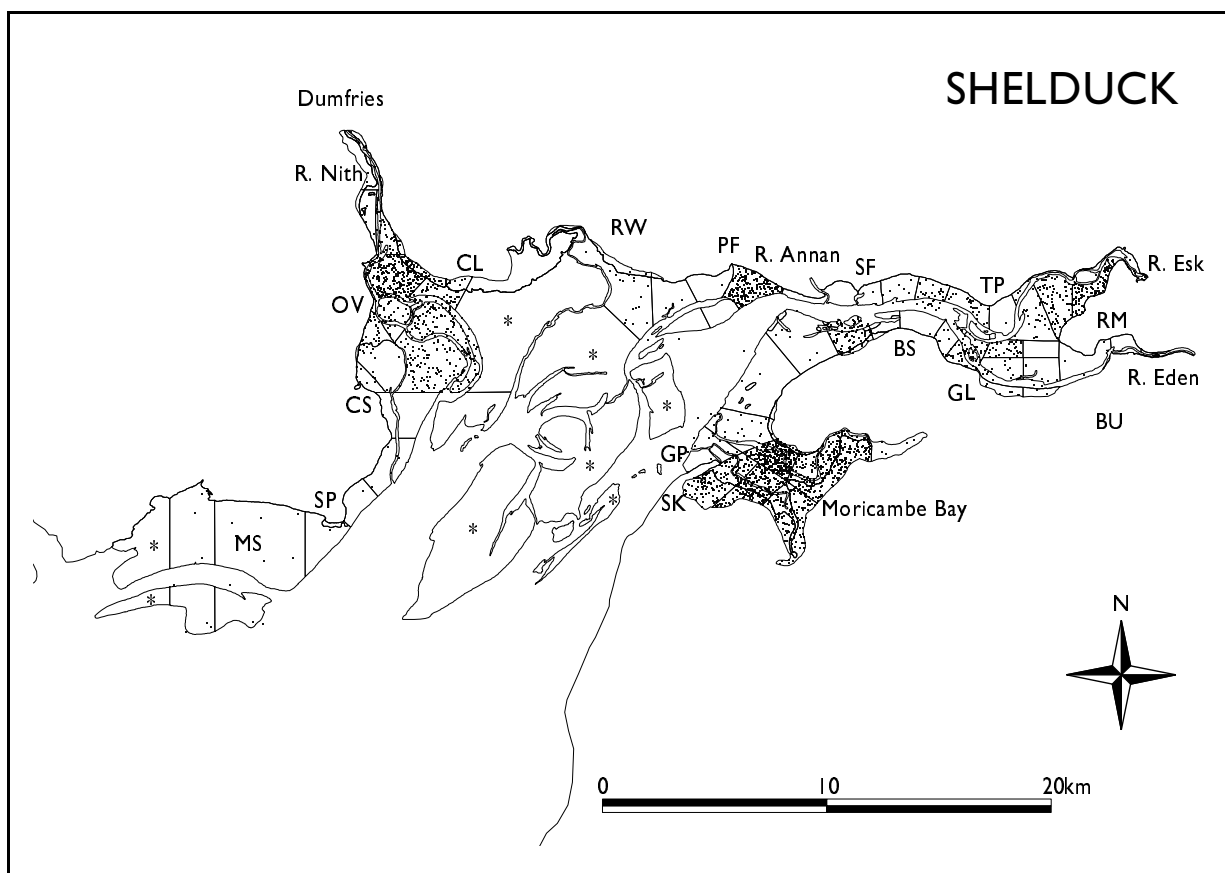
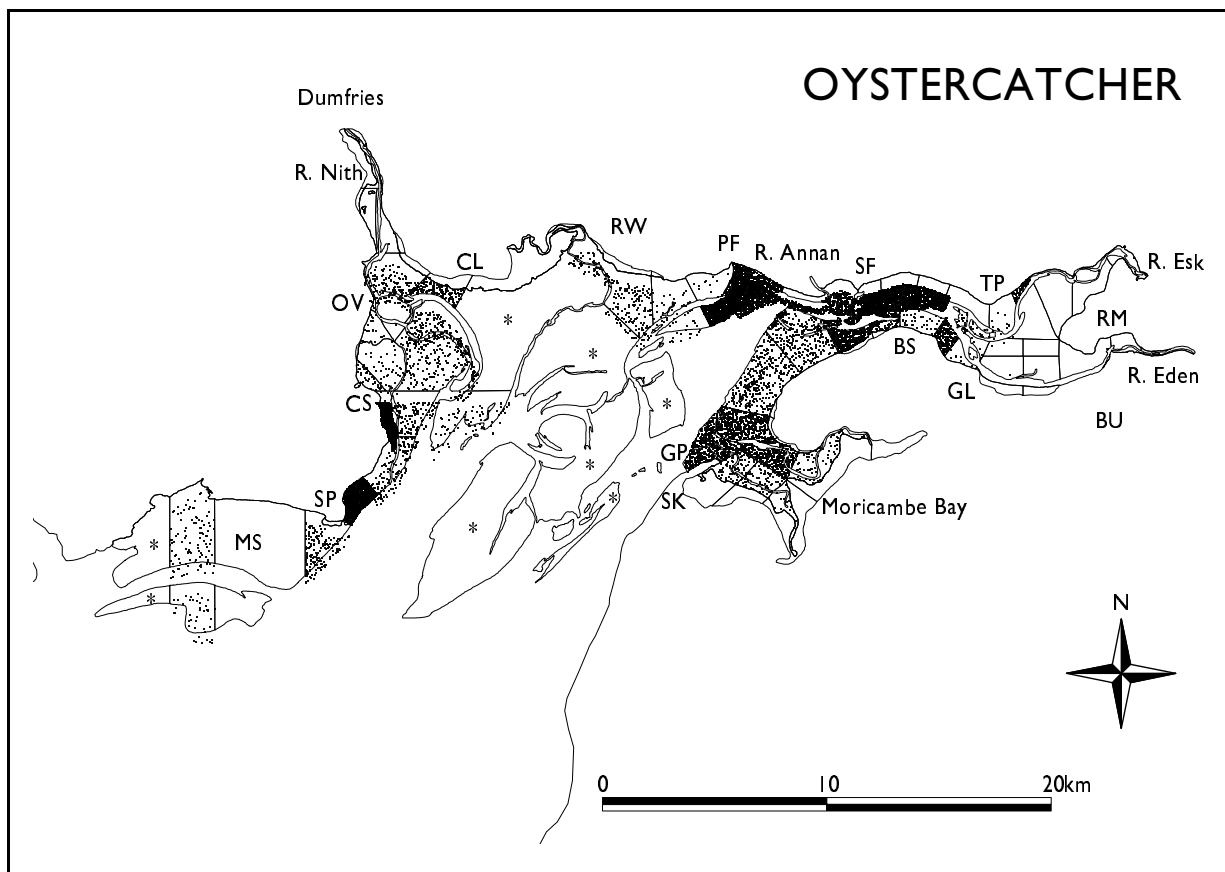
The Solway Firth, as considered by WeBS, comprises the coastline between Mersehead Sands on the Scottish coast to Workington in Cumbria. Building on the Low Tide Counts first carried out on the Solway during winter 1998-99, most of this area was covered during winter 1999-2000, the main exceptions being the south shore south of Grune Point and some of the more extensive central intertidal banks south of Caerlaverock. The principal inputs to the estuary are from the rivers Esk, Eden, Nith and Annan. The majority of the site is sandy in character with several isolated rocky scars, principally at the mouth of Moricambe Bay. Huge areas of saltmarsh are found along the south side of Moricambe, between Glasson and Burgh and along the Caerlaverock shoreline. However, Rockcliffe Marsh, the most extensive of the saltmarshes, was not covered by the survey. Most of the estuary is surrounded by low-lying farmland and there is little industry in the area. The main issues concerning waterbird conservation on the Solway concern exploitation of natural resources, such as shellfisheries (Davidson 1996c, C. Hartley pers. comm.)

### *Bird distribution*

The peak count of Oystercatcher at low tide was less than half of the equivalent Core Count. The species was widely distributed around the site with the greatest concentrations between Powfoot and Torduff and between Southernness and Carsethorn (Figure 76). It would appear that some of the uncounted parts of the sites, notably the distant central areas and the outer south shore, are of importance for this species, although the discrepancy may also be linked to birds being difficult to count on distant mussel scars. The greatest concentrations of Knot were to be found off Carsethorn and Grune Point, and those of Dunlin off Bowness-on-Solway, Torduff Point and Powfoot. Curlew were widespread with concentrations at the northern end of Moricambe Bay and along with the channel of the Nith. Conversely, Bar-tailed Godwit were confined to a few mudflats in the inner estuary, particularly off Powfoot, Bowness-on-Solway and the outer flats of Moricambe Bay. The peak count of this species

was low compared to recent peak Core Counts. The main concentrations of Redshank were between Torduff Point and Seafeld and also just north of Carsethorn. Lapwing were widely distributed with Moricambe Bay and the flats off Seafeld recording the greatest concentrations. Conversely, Ringed, Golden and Grey Plovers were much more restricted to the northern flats off Powfoot, Torduff Point, Southernness Point and in Moricambe Bay. Grey Plover also favoured the flats around Bowness-on-Solway. Very small numbers of Sanderling, Purple Sandpiper, Ruff, Snipe, Black-tailed Godwit, Greenshank and Common Sandpiper were also noted.

The peak site count of 6,000 Barnacle Geese was by far the largest recorded by the Low Tide Counts to date. The geese were concentrated on the flats along the River Nith. However, some areas habitually frequented by Barnacle Geese were excluded from the counts, with over 25,000 known to be present this winter. Small numbers of Pink-footed, Greylag and Canada Geese were also recorded. The greatest concentrations of Shelduck occurred along the Nith, off Powfoot and particularly within Moricambe Bay (Figure 76). Wigeon favoured Moricambe Bay, particularly the flats off Skinburness and also around the Nith and off Bowness-on-Solway. Most of the Pintail were found in the western side of Moricambe Bay, along the Nith off Overton and on the flats between Ruthwell and Powfoot. Although over 1,000 Pintail were noted, this was considerably lower than recent peak Core Counts and many birds are presumably present on adjacent non-tidal habitats such as Rockcliffe and Caerlaverock. Mallard and Teal showed a similar low tide distribution, but with the flats off Bowness-on-Solway also frequented. Peaks of 2,317 Scaup and 251 Great Crested Grebes compared well with recent Core Counts; virtually all of both these species were found in the main channel between Carsethorn and Southernness Point. Goldeneye and Red-breasted Merganser were widely distributed. Whooper Swans were mostly concentrated around the River Eden in the inner firth and the River Wampool at the eastern end of Moricambe Bay. Cormorants were concentrated off Grune Point. Additionally, small numbers of Red-throated Diver, Mute Swan, Shoveler and Goosander were also recorded.



**Figure 76.** WeBS Low Tide Counts of Oystercatcher and Shelduck at the Solway Firth, winter 1999-2000. (MS=Mersehead Sands, SP=Southerness Point, CS=Carsethorn, OV=Overton, CL=Caerlaverock, RW=Ruthwell, PF=Powfoot, SF=Seafield, TP=Torduff Point, RM=Rockcliffe Marsh, BU=Burgh by Sands, GL=Glasson, BS=Bowness-on-Solway, GP=Grune Point, SK=Skinburness, \* = not counted)