

FIRTH OF FORTH

Internationally important:	Slavonian Grebe, Pink-footed Goose, Shelduck, Knot, Bar-tailed Godwit, Redshank
Nationally important:	Red-throated Diver, Great Crested Grebe, Cormorant, Whooper Swan, Greylag Goose, Teal, Scaup, Eider, Long-tailed Duck, Common Scoter, Velvet Scoter, Goldeneye, Red-breasted Merganser, Oystercatcher, Ringed Plover, Golden Plover, Sanderling, Dunlin, Black-tailed Godwit, Curlew, Turnstone

Site description

The Firth is the largest estuary on the east coast of Scotland, extending seawards from Alloa out to Fife Ness and Dunbar. Edinburgh represents the largest city on the Firth, with other towns such as Alloa, Grangemouth and Kirkcaldy also present. The inner estuary has extensive intertidal mudflats with saltmarsh between Alloa and Grangemouth. The inner estuary banks are heavily urbanised and there has been severe industrial pollution in the past. The outer estuary eastwards of the Forth Bridge widens into a series of exposed bays. Here the intertidal flats are predominantly sandy and the shoreline varied, with rocky outcrops, sand-and-shingle flats, and mussel beds. Further eastwards are Aberlady and Gullane Bays, an extensive area of mudflat, saltmarsh and sand dune. Much of the estuary is designated as a Ramsar site and SPA. Aberlady Bay is a Local Nature Reserve, and the RSPB own two further reserves. Almost all types of possible human-related activities and disturbance occur, including onshore and offshore leisure, heavy industry, an offshore oil terminal and an oilrig repair site. Shooting, bait collecting and shell fishing are also disturbance factors.

Bird distribution

All eight common diver and grebe species were recorded. Most Great Crested Grebes were in Largo Bay and off Musselburgh, with Largo Bay also the favoured area for Red-necked, Black-necked and Slavonian Grebes. Cormorants were widely distributed over the firth, the only area without any sightings being the southern shore between Grangemouth and the Forth bridges. Shags were present in similar numbers to Cormorant, but were concentrated mainly at Auldhane and on Drum Sands. Grey Herons were thinly distributed throughout the firth with the most on the inner estuary. Mute Swans gathered at Musselburgh and at Cramond on the southern shore, whilst Whooper Swans were at Hedderwick Sands throughout. Pink-footed Geese were recorded in two areas, a small flock at Grangemouth and

more abundantly at Aberlady Bay. A flock of Greylag Geese were at Torry Bay in January. The Shelduck peak occurred in November, with birds widespread including Tynninghame, Aberlady Bay, Inverkeithing Harbour, Dalgety Bay and Grangemouth, where the largest flock was seen in November, perhaps including some birds finishing their moult.

Wigeon numbers fluctuated over the winter with a peak in November. Concentrations were widespread with Tyne Mouth (near Tynninghame), Auldhane, Gosford and Aberlady Bays, Torry Bay, Grangemouth and Alloa supporting the largest flocks. Teal favoured upstream areas, especially Ironmill Bay, Grangemouth, and east of the Kincardine Bridge up to Alloa. Mallard were widespread, with the largest flock of 285 birds at Scoughall Rocks near Tynninghame. Numbers of Eider increased as the winter progressed, peaking at 3,611 in February. Birds were fairly evenly distributed along both coasts in the outer estuary (Figure 61). Long-tailed Ducks were limited to two areas, Largo Bay and Musselburgh. Common Scoter were low in numbers but widespread, with most at Largo and Gullane Bays and off Methil. Velvet Scoter numbers increased over the winter to 418 in February, and showed a preference for Musselburgh and Largo Bay, being joined by two Surf Scoters in February at the latter site. Goldeneye and Red-breasted Merganser were generally dispersed along both coastlines, upriver as far as Alloa, although the largest concentrations occurred at Musselburgh and Largo Bay respectively. Small numbers of Goosander were found, with most noted around Leith. Pintail, Shoveler, Tufted Duck, Scaup, Ruddy Duck and Moorhen were also noted.

Oystercatchers were widespread, particularly east of the bridges, the greatest concentrations at Tyne Mouth, Aberlady Bay, Musselburgh and on Drum Sands. Ringed Plovers were widespread on the southern shore, although Largo Bay held the highest density of birds. Golden Plover numbers peaked in November but dropped to just 229 in

February, most birds on the flats near Grangemouth, and in Aberlady and Gosford Bays. Grey Plover numbers remained fairly constant, most birds occurring at Leith and Largo Bay. Lapwing numbers were the highest for three winters, although far below the Low Tide Count in 1992/93. However, the favoured areas remained the same as previously. Knot were distributed around much of the estuary, favouring areas where mudflats were extensive, such as at Kinneil. Since 1992/93 the peak low tide Sanderling count has more than doubled, most found at Kircaldy and Largo Bay. Purple Sandpipers were mainly on the outer sectors of the estuary. Dunlin increased over the winter, mostly found in the

south shore bays. Black-tailed Godwits have increased since the 1992/93 Low Tide Count with most around Grangemouth. Bar-tailed Godwit (Figure 61) and Curlew had similar distribution patterns, with the greatest densities occurring at Tynemouth, Aberlady Bay, Gosford Bay, Musselburgh, Drum Sands and Grangemouth. Redshank numbers remained fairly constant throughout, with over 3,000 counted in each month and an almost uninterrupted distribution around the whole coastline. Turnstone showed a fairly even distribution along both shores east of the bridges. Ruff, Jack Snipe, Snipe and Greenshank were also recorded.

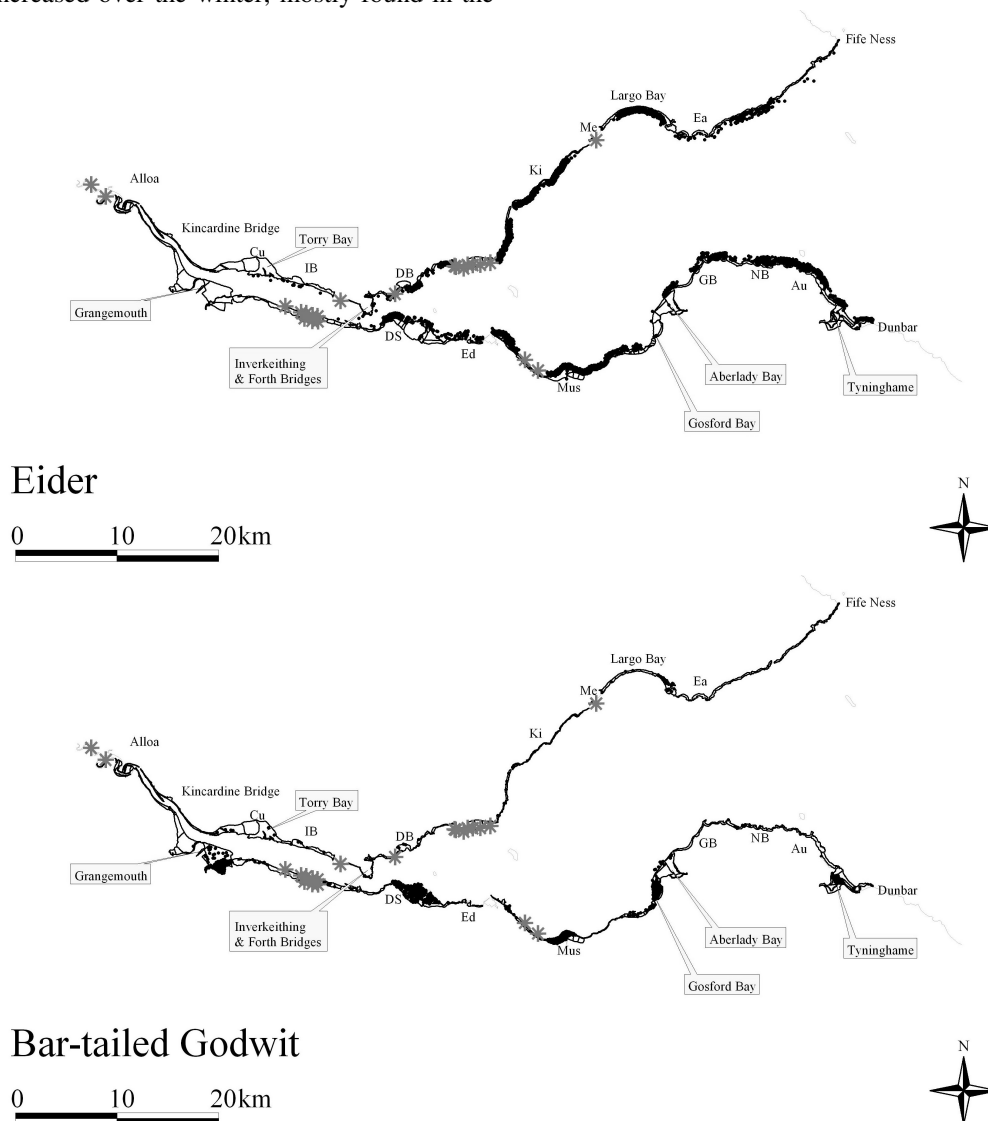


Figure 61. WeBS Low Tide Count distributions of Eider and Bar-tailed Godwit at the Firth of Forth, winter 2003/04 (Au=Auldhane, DB=Dalgety Bay, DS=Drum Sands, Ea=Earlsferry, Ed=Edinburgh, GB= Gullane Bay, IB=Ironmill Bay, Ki=Kirkcaldy, Me=Methil, Mus=Musselburgh, NB= North Berwick).