

CITATION

TAYPORT – TENTSMUIR COAST SITE OF SPECIAL SCIENTIFIC INTEREST

Fife

Site code: 1523

NATIONAL GRID REFERENCE: NO 452293 to NO 502232

OS 1:50,000 SHEET NO: Landranger Series 59
1:25,000 SHEET NO: Explorer Series 371

AREA: 1261.29 hectares

NOTIFIED NATURAL FEATURES

Geological

Geomorphology: Coastal Geomorphology of Scotland

Biological

Coastlands: Mudflat
Sand dune

Vascular plants: Vascular plant assemblage

Birds: Bar-tailed godwit (*Limosa lapponica*), non-breeding
Common scoter (*Melanitta nigra*), non-breeding
Eider (*Somateria mollissima*), non-breeding
Goosander (*Mergus merganser*), non-breeding
Long-tailed duck (*Clangula hyemalis*), non-breeding
Pink-footed goose (*Anser brachyrhynchus*), non-breeding
Red-breasted merganser (*Mergus serrator*), non-breeding

Mammals: Common seal (*Phoca vitulina*)

Invertebrates: Beetle assemblage

DESCRIPTION

Tayport - Tentsmuir Coast Site of Special Scientific Interest (SSSI) is situated in the extreme north-east corner of Fife, and comprises a coastal strip extending from Tayport to Kinshaldy, approximately 10 km due north of St Andrews.

This is a key geomorphological site for the study of active beach and coastal processes, in particular those associated with coastal progradation (shoreline advance). It is exceptional in Scotland for the rate and amount of coastal accretion (sediment accumulation) since the time of the post-glacial sea-level high. This accretion is actively continuing and is due to the massive sediment load carried to the sea by the River Tay and built into extensive bar and spit systems. The interest of the site is significantly enhanced by the juxtaposition of three distinctive coastal environments: that of the north coast dominated by the dynamic processes of the Tay estuary; that of the Abertay sand bars and shoal banks which play a fundamental role

in the coastal accretion; and that of the coast to the south where open coast processes become progressively more dominant. The site has considerable potential for studies of the processes and development of coastal progradation and also of the interaction of vegetation with accretionary processes and landforms.

The site exhibits an extensive and relatively undisturbed area of intertidal sand and mudflats with some of the most extensive eelgrass *Zostera* spp beds in the Tay estuary. Three nationally scarce species of *Zostera* are present. These intertidal habitats show transitional developments into salt marsh communities, occurring both as distinct habitat units and smaller fragments dominated by common saltmarsh grass *Puccinellia maritima* and sea club-rush *Bolboschoenus maritimus*, grading into landward areas of saltmarsh rush *Juncus gerardii*. Rapidly accreting sand dunes continue the landward development and are predominantly lime-poor, but calcareous and more neutral dune substrates also exist. The dune system exhibits a complete sequence of dune and slack successional development from strandline, dominated by common couch-grass *Elytrigia repens*, through foredunes and yellow dunes with sand couch-grass *Elytrigia juncea*, marram grass *Ammophila arenaria* and lyme grass *Leymus arenarius*, to grey dunes, slacks and dune heath with scrub and deciduous woodland. Species here range from moss and lichen communities through richer areas with creeping willow *Salix repens*, coralroot orchid *Corallorhiza trifida* and seaside centaury *Centaureum littorale* to more acid situations with heather *Calluna vulgaris*, crowberry *Empetrum nigrum*, grey willow *Salix cinerea* and silver birch *Betula pendula*.

This diversity of habitats supports over 320 higher plant species and over 160 fungi, lichens, mosses and liverworts, several of which are recorded as nationally and regionally scarce, such as seaside centaury and coral root orchid together with Baltic rush *Juncus balticus* and dense-flowered fumitory *Fumaria densiflora*. Several of these species are distinctly “northern” and occur here at or near their southern limit in eastern Britain, contrasting markedly with the predominantly “southern” flora on sand dunes elsewhere in Fife. In contrast, species like the broad-leaved helleborine *Epipactis helleborine*, fern-grass *Catapodium rigidum* and sea-purslane *Atriplex portulacoides* occur here at their most extreme northern location.

The intertidal flats regularly support a large assemblage of wintering waterfowl including nationally important passage or wintering populations of pink-footed goose, eider, long-tailed duck, common scoter, red-breasted merganser, goosander and bar-tailed godwit in numbers in excess of 1% of their British populations. The site is particularly important for wintering eider, with peak numbers exceeding 8,300, some 11.45% of the British wintering population.

The outer sandflats provide for a nationally important pupping and moulting haul-out for approximately 150 common seals. Grey seals also use the area as a summer haul-out, in numbers averaging around 1,000, but not for breeding or moulting.

There are 30 rare or notable species of beetle found at Tayport–Tentsmuir Coast including *Leiodes ciliaris* and *Orthocerus clavicornis* as well as locally important species such as *Aegialia arenaria* and *Anomala dubia*, all of which contribute to an outstanding assemblage of invertebrates associated with sand dune systems including heath, scrub and pine. The sand dune invertebrate fauna is particularly rich and diverse, including 46 nationally rare or scarce species. Four of these are Red Data Book species, including the cousin German moth *Protolampra sobrina*.

NOTIFICATION HISTORY

Part notified under the 1949 Act: 1954 and 1962 as Tentsmuir Point NNR

Re-notified under the 1981 Act: 21 February 1984 as Tayport – Tentsmuir Coast SSSI with a 538 ha increase in area.

Re-notified under the 1981 Act: 1 February 1993 with a 4.8 ha increase in area.

Re-notified under the 1981 Act: 25 September 1999 with a 153.8 ha increase in area.

Notification reviewed under the 2004 Act: 13 October 2010

REMARKS

Measured area of site corrected (from 1202.11 ha).

Tayport – Tentsmuir Coast SSSI is part of Firth of Tay and Eden Estuary Special Area of Conservation (SAC) designated for the European habitats and species listed below and is part of Firth of Tay and Eden Estuary Special Protection Area (SPA) designated for the birds listed below.

Habitats: Estuaries
Intertidal mudflats and sandflats
Subtidal sandbanks

Species: Common seal (*Phoca vitulina*)

Birds: Bar-tailed godwit (*Limosa lapponica*), non-breeding
Common scoter (*Melanitta nigra*), non-breeding
Cormorant (*Phalacrocorax carbo*), non-breeding
Dunlin (*Calidris alpina alpina*), non-breeding
Eider (*Somateria mollissima*), non-breeding
Goldeneye (*Bucephala clangula*), non-breeding
Goosander (*Mergus merganser*), non-breeding
Grey plover (*Pluvialis squatarola*), non-breeding
Greylag goose (*Anser anser*), non-breeding
Icelandic Black tailed godwit (*Limosa limosa islandica*), non-breeding
Little tern (*Sternula albifrons*), breeding
Long-tailed duck (*Clangula hyemalis*), non-breeding
Marsh harrier (*Circus aeruginosus*), breeding
Oystercatcher (*Haematopus ostralegus*), non-breeding
Pink-footed goose (*Anser brachyrhynchus*), non-breeding
Red-breasted merganser (*Mergus serrator*), non-breeding
Redshank (*Tringa totanus*), non-breeding
Sanderling (*Calidris alba*), non-breeding
Shelduck (*Tadorna tadorna*), non-breeding
Velvet scoter (*Melanitta fusca*), non-breeding
Waterfowl assemblage, non-breeding