

CITATION

COUNTY: DEVON-CORNWALL SITE NAME: TAMAR-TAVY ESTUARY

DISTRICT: WEST DEVON, SOUTH HAMS, CARADON and PLYMOUTH CITY

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended

Local Planning Authority: WEST DEVON BOROUGH COUNCIL, SOUTH HAMS DISTRICT AND PLYMOUTH CITY COUNCIL, DEVON. CARADON DISTRICT COUNCIL, CORNWALL

National Grid Reference: SX 436711 and Area: 1422.33 (ha.) 3514.58 (ac.)
SX 474650 to SX 435591

Ordnance Survey Sheet 1:50,000: 201 1:10,000: SX 45 NW, SX 47 SW, SX 46 SW,
SE, NW, NE

Date Notified (Under 1949 Act): – Date of Last Revision: –

Date Notified (Under 1981 Act): 1991 Date of Last Revision: –

Other Information:

The site includes the previously notified Warleigh Point SSSI. The site is part of the Tamar Estuary system which includes the Lynher Estuary SSSI and St John's Lake SSSI, and has been proposed as a Special Protection Area (SPA) under the EC Council Directive on the Conservation of Wild Birds.

Description and Reasons for Notification:

The Tamar Estuary system is a large marine inlet on the English Channel coast into which discharges a series of rivers with an extensive catchment within Devon and Cornwall. It is of international importance for nature conservation, in particular as a wintering site for wildfowl and waders.

The Tamar-Tavy Estuary SSSI comprises the upper reaches of this system, from the Tamar Bridge upstream to the limits of the tidal influence in both rivers and the Kingsmill and Tamerton Lakes.

The site supports a nationally important wintering population of the uncommon Avocet *Recurvirostra avosetta*,* and encompasses a section of the River Tamar that is considered to be of national significance for its marine biological interest. The site includes estuarine habitats, with uncommon species, that are notable in their extent and also supports the only British population of a rare plant.

The site is underlain by slates and thin limestones of the upper Devonian covered, for the most part, by alluvium of silt, fine and coarse sands. In the lower, broader reaches of the rivers these sediments form extensive tidal mudflats bordered by saltmarsh communities, inundation grassland and, locally, a rocky shoreline. Freshwater marsh and fen habitats

occur in places behind this estuarine fringe and also upstream in the alluvial river valley in association with rush pasture and reedmarsh. These upper reaches of the Tamar have steep, well-wooded valley sides and riverbanks, with ancient woodland in places.

For several decades the mudflats and marshes between Clifton and the Tamar Bridge have attracted an increasing number of Avocet and now regularly support more than 20% of the British wintering population. Other passage or wintering wading birds for which the Tamar complex as a whole is nationally important also rely at times on feeding and roosting sites within the Tamar-Tavy Estuary SSSI. These include Black-tailed Godwit *Limosa limosa*, Redshank *Tringa totanus*, Dunlin *Calidris alpina* and Whimbrel *Numenius phaeopus*. Greenshank *Tringa nebularia*, Spotted Redshank *T. erythropus* and Green Sandpiper *T. ochropus* all uncommon wintering species in Britain, together with large numbers of Golden Plover *Pluvialis apricaria** are dependent on parts of the SSSI in winter.

The main input of freshwater into the estuary is from the Tamar River. It has a large catchment (c. 916 km²) and a great range of flow resulting in conditions of highly variable salinity along the transition from marine estuary to river. The sediment invertebrate communities between Weir Quay and Calstock are particularly well developed for estuarine conditions and represent well the change in composition and species richness associated with the variation in salinity: the moderately rich polychaete worm communities in the estuarine mud contrast with the river communities' low species number but high abundance. Similar trends can be seen in the inter-tidal and sub-tidal rock-based communities with furoid brown algae (seaweeds) gradually replaced by green algae. The River Tamar's rocky shore and sub-tidal habitats, unusual so far up an estuary, support communities that are considered to be the best examples of their type in tidal inlets in Southern Britain and the only known examples in South West Britain. Some of the species present are rarely recorded and the dense populations of the hydroid *Cordylophora lacustris* found in the sublittoral are of national importance. Also of interest is the occurrence near Calstock of the prawn *Palaemon longirostris* which has been recorded from only two other estuaries in Britain.

Areas of saltmarsh communities border the tidal mudflats and occur as far upstream as Cotehele Quay. These typically contain a strong grassy component of Common Saltmarsh-grass *Puccinellia maritima*, Red Fescue *Festuca rubra* and Sea Couch *Elymus pycnanthus*. Characteristic associates include Sea Purslane *Halimione portulacoides*, Sea Aster *Aster tripolium*, Sea Arrowgrass *Triglochin maritima*, English Scurvygrass *Cochlearia anglica* and Sea Club-rush *Scirpus maritimus*. Small beds of Common Cord-grass *Spartina anglica* have become established locally. Two nationally scarce species of grass are known from the site: Stiff Saltmarsh-grass *Puccinellia rupestris* and Bulbous Fox-tail *Alopecurus bulbosus*. Other plants of interest associated with the estuarine margins are the notable Beaked Tasselweed *Ruppia maritima* and Carrot Broomrape *Orobanche maritima* – a parasite of Wild Carrot *Daucus carota* – and Grass-leaved Orache *Atriplex littoralis* here at its only recorded site in Devon.

In parts of the upstream and predominately freshwater section of the estuary there are extensive bankside beds of Common Reed *Phragmites australis*. Stands of the Triangular Club-rush *Schoenoplectus triqueter*, listed as specially protected under the 1981 Wildlife

and Countryside Act, occur amongst the reeds at one locality. This is now the only known British Isles population.

Several areas of semi-natural woodland of ancient character are included in the site. Warleigh Point is a typical western oak wood and is one of the best examples in Devon of such woodland in a coastal location. Sessile Oak *Quercus petraea* dominates the canopy which includes Downy Birch *Betula pubescens*. Occasionally Wild Service Tree *Sorbus torminalis*, a species with a very local distribution in Devon, occurs in the understorey which comprises Hazel *Corylus avellana*, Rowan *Sorbus aucuparia* and Holly *Ilex aquifolium*. The diverse ground flora typically includes Ramsons *Allium ursinum*, Woodruff *Galium odoratum* and Wood Anemone *Anemone nemorosa*, all species associated with well established woodland, together with more localised species such as Hay-scented Buckler-fern *Dryopteris aemula*.

Otter *Lutra lutra* and Kingfisher *Alcedo atthis** are among the many animals dependent on the undisturbed stretches of river.

* These species are listed in Annex I (subject to special conservation measures) of the EC Council Directive on the Conservation of Wild Birds.