
12 Orford Ness and Shingle Street

Grid reference [TM 450 490]

Orford Ness is one of the most interesting coastal landforms in Britain. It is a complex shingle feature comprising a storm beach, a ness and a spit, the longest in Europe.

The whole system is 10 miles (16 km) long, and extends from Aldeburgh as far as Shingle Street. The site has to be visited to be fully appreciated, though aerial photographs convey something of its strange beauty. Public access is carefully managed by the National Trust via ferry access from Orford. The whole site is part of the Alde-Ore SSSI. The site is important for its value for wildlife as well as geodiversity: it is one of the best examples of vegetated shingle habitat in Europe.

Orford Ness is the largest of the Suffolk nesses. Its origins are linked to a coastal spit which began developing in the Aldeburgh area about 7,000 years ago. The spit gradually extended southwards by longshore drift. By the 12th century it had reached the port of Orford, and had reached its present extent by the 18th century. The Ness has formed at the point where the Suffolk coast changes alignment, from roughly north/south to north-east/south-west. Instead of rounding the 'corner' of the coastline at this point, the developing spit continued building southwards, and the result is the cape or promontory we see today.

Extensive saltmarshes (the King's and Lantern Marshes) developed on the landward side of the barrier; some were reclaimed for grazing land in the early Middle Ages.

Each ridge marks a single storm event. The striped vegetation shows the way that storm waves breaking on a beach sort shingle. The smaller lighter pebbles are thrown into a ridge, and this finer material allows stripes of vegetation to develop over time. The smaller proportion of coarser, heavier, pebbles are thrown further and accumulate in the trough behind. This sorting explains why, contrary to expectations, the vegetation grows on the apparently more exposed ridges. The intimate geomorphology and ecology is very fragile; once the pebbles are mixed, by tramping feet or passing vehicles, the distinctive vegetation pattern and ridge structures are lost for ever.

The southern tip of the Orford spit lies at North Weir Point, near Shingle Street, where the River Alde estuary meets the sea. The landforms here are a beautiful illustration of coastal processes at work. The tip changes shape from year to year, according to variations in the supply of shingle and the effect of storms; sometimes it partly breaks up. The mouth of the estuary is a complex of shifting shoals and channels which are regularly rearranged by the tides. Sediment also builds up on the landward side of the estuary, where a small ness at Shingle Street is developing a spit of its own.

Figure

(Figure 34) Parallel shingle ridges known as 'fulls' mark successive growth stages of the Ness. These may be many hundreds of years old. The circular shape in the foreground is the remains of a 20th century military installation.

(Figure 35) The spit at Shingle Street ness at low tide, October 2013.

(Figure 36) The Stony Ditch, a tidal channel draining reclaimed saltmarshes on the lee side of Orford Ness. The distinctive shapes of Cold War 'pagodas' can be seen on the horizon, built for testing explosive detonators.



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