
14 Bawdsey

Grid reference

Bawdsey Bawdsey Bar [TM 332 374]

Bawdsey Cliff [TM 340 380]

The Deben estuary meets the sea at Bawdsey. Powerful longshore and estuarine currents come together, and the result is Bawdsey Bar, a coastal spit which shifts shape constantly according to fluctuations in water energy and sediment supply.

The shingle banks are almost entirely flint pebbles, but fragments of mineralised bones and teeth may sometimes be found in it, also rare 'boxstones'. These are pieces of brown sandstone often containing the cast of a fossil of Miocene age; the best place to see them is probably Ipswich Museum. As no Miocene beds have yet been found in Suffolk, the 'boxstones' probably represent the broken up remnants of such a bed incorporated into the basal strata of the Red Crag or Coralline Crag. Dark grey lumps of London Clay derived from elsewhere on the coast may also be found; they often contain round holes where bored by piddock shells.

Red Crag features in the cliffs east of Bawdsey Manor. This is the largest exposure of these beds in Britain, and it has been designated as a SSSI. Rusty coloured, fossil-rich sandstones can be seen in the upper half of the cliff, with their surface sculpted by wind, rain and sea spray. The beds show a slanting structure known as cross-bedding, indicating they were deposited as submarine dunes or sand-waves; their size suggests a water depth of 20 to 30 m (65 to 98 ft), and their orientation suggests a current flow direction towards the south-west, which is similar to the Suffolk coast today. The beds were deposited about 2.55 million years ago.

Figure

(Figure 40) Red Crag cliffs, showing cross-bedding structures. Introduced holm oak, tamarisk and silver ragwort give the cliffs a Mediterranean aspect.

(Figure 41) Bawdsey Bar at low tide, October 2013.



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Bawdsey Bar at low tide, October 2013.