

Pin Mill Miscellany

GeoSuffolk Notes no 69 2022 RM.

Along the overgrown wooded river-cliff east of Pin Mill gravel, sand, and shelly Crag are often to be seen. The slope is very wet and swampy.....along the junction with the London Clay.

From 'The Geology of the Country around Ipswich, Hadleigh and Felixstowe', page 48, by W. Whitaker. Memoir of the Geological Survey, England and Wales, 1885.

In the small valley which leads down to Pin Mill a 'Crag Spring' was observed. This Spring never dries up in Summer or freezes in Winter, and there is a constant flow of good clear water. Several other examples were observed later at the base of the Pin Mill cliffs. At the Clamp House the party reached the shore. A cliff exposure showed Basement Bed of the Red Crag resting on the London Clay. On the beach the party picked up fossils derived from the London Clay cliffs. They were shown to be pieces of wood which had become impregnated with iron pyrites (Fools Gold). Lumps of limestone rock (Septaria or Roman Cement stone) were observed on the foreshore, and in the London Clay of the cliff.

From local newspaper: 'Wednesday 1st July 1959. Ipswich & District Natural History Society. Evening Ramble from Chelmondiston to Clamp House and Pinmill, led by Mr. F.W. Simpson.'

(TM 215381) Exposures of up to about 2 metres of very brown weathered London Clay were to be seen in the very overgrown, tumbled and slipped cliff to the east of the public house. Much cement stone was observed on the foreshore especially at the base of the cliff and to the far eastern end of the section. They may have been placed there to protect the toe of the cliff and to clear the beach to the west where many large.... houseboats are now situated. Much pyrite had accumulated in pockets on the beach. These were searched and yielded wood fragments. Red Crag sand was seen on the beach with occasional well preserved, deeply iron stained bivalves.

From Chelmondiston.....visited on 10 October 1976' in 'Further river exposures of London Clay in Suffolk and Essex' by William George and Stephen Vincent. Tertiary Research vol.1, part 2, pages 51-52: 1976.

Main base for the stone boats, as they were called, was the riverside hamlet of Pin MillIn 1845 Pin Mill had about thirty boats 'employed chiefly in getting stone on the rocks near Harwich for the manufacture of Roman Cement at the works in Ipswich and other places'Ten years later the number of boats working in the stone trade out of Pin Mill had increased to fifty.....Although there were said to be still thirty stone boats working from Pin Mill in 1879 by the 1890s the stone trade was but a memory. From 'The Stone Boats of Pin Mill' by Bob Malster. Priory Press no.144. (Friends of Ipswich Transport Museum).

The Cliff, Pinmill (219379 – 206379). This 1,400 yard length of wooded cliff has a fairly constant elevation of around 50 feet above sea level. It consists largely of Red Crag, with cappings of Pleistocene gravels and sands, overlying the London Clay. For about half its length the cliff foot is reached by high tides; the remainder is protected by saltings. The average inclination of the cliff varies from about 20° at its E. end to between 30 and 35° at its W., except in the vicinity of 21153795 where the cliff is cut into by a stream valley. These predominantly sandy slopes are relatively even and appear to be stable. For much of their length, however, their foot is occupied by a terrace-like feature with an elevation above the river of between 10 and 15 feet and a width of the order of 5 to 10 yards. In the steep river face of this feature are numerous exposures of London Clay, all of which contain 9 to 12 inch layers of cement-stone in the base of the cliff, back-tilted at angles of between 20 and 45°. This evidence

indicates that the terrace-like feature is in fact an 'undercliff' formed by very old rotational landslips, which involved base failure. The details of these various exposures are given.

Approx. location	Stratum exposed at base of cliff	Back-tilt (degrees)
218380	London Clay with cement-stone layer	22
21403805	"	23
20963802	"	47
20953802	Red Crag	-
209380	London Clay with cement-stone layer	20
208380	"	35

From 'A Survey of the Coastal Landscapes of Essex and South Suffolk' by J.N. Hutchinson. Building Research Station. 1965.