

DORSET LOCAL GEOLOGICAL SITES SURVEY

Site number G SY68/12

Site name Corton Farm quarry

Summary description

Jurassic, Portland Sand.

Good exposures of the Portland Sand occur in the road cutting, which is an SSSI, and in this small disused quarry just to the west. The section consists of several metres of dark shelly limestone with serpulid knots, bivalves *Exogyra*, *Thracia depressa*, and some larger bivalves and ammonites of the Exogyra Bed. Above is the Cast Bed, a dark silty dolomitic limestone with bivalve casts.

Site description

Jurassic, Portland Sand.

In April 2005 a group of geologists were asked by Natural England to keep a watching brief during the widening of the road cutting to Corton Farm, as this is an SSSI. Good exposures of the Portland Sand occur in the road cutting. The small disused quarry just to the west shows a similar section of the Portland Sand, though not so deep. Both sections consist of several metres of dark shelly limestone with serpulid knots, bivalves *Exogyra*, *Thracia depressa*, and some larger bivalves and ammonites of the Exogyra Bed. Above is the Cast Bed, a dark silty dolomitic limestone with bivalve casts. They described the section as containing dolomitic siltstone and sandstone with Calcite and secondary mineralisation. There was evidence of dendrite.

Specimens collected in April 2005 from the cutting include *Glaucolithites* sp (several apparently differing), *Myophorella* sp, *Nanogyra nana*, *Thracia depressa*, *Modiolus* sp, Serpulid worms, *Protocardia dissimilis*, *Musculus autissodoriensis* and frequent fragments of *Camponectes*.

They returned to the site after about four weeks during which period there had been sufficient weathering to give a good exposure of the finished work. Despite the very blustery conditions, Michael Houses' measuring rope was thrown over the new cutting, and measurements taken 17 and 30 metres from the edge of the road.

The new exposure was clearly seen; there appeared to be minor erosion surfaces between the main beds, as well as lower down the track what appears to be a repetition of the sequence due to the steep dip. The upper blue grey siltstone (which contains small clay clasts) appears at road level about 10metres further down the farm road.

At 17m from the road they measured Dark grey weathered broken sand stone to 500 mm
Dark blue siltstone, with clay clasts and mineralisation up to3.00m
Rubbly sandstone with casts, and showing an apparent erosion plane on its upper surface to.....1.00m
Broken , hard limestone with fossils including serpulid worm to.....1.00m

Further down the farm road, at 30m from the public road broadly the same section occurred, but due to the northward sloping dip with massive sandy limestone to.....2.00m
Followed by massive greeny-grey limestone to.....1.00m

Below the track follow dark grey siltstone and 3-4m limestone down to the farm.
Only the upper part of these measured sections are present in the quarry.

Published references

Arkell W.J. 1935: The Portland Beds of the Dorset mainland. Proceedings of the Geologists' Association, vol 46, pp 301-47, particularly 329-332.

Wilson V et al 1958: Geology of the Country around Bridport and Yeovil. Memoir of Geological Survey of Great Britain.