

DORSET LOCAL GEOLOGICAL SITES SURVEY

Site number G SY49/12

Site name Mill (Cemetery) Lane

Summary description

Jurassic, Middle Lias Thorncombe Sands and Junction Bed (Beacon Limestone).

Approaching from the west, on the northern side of the cutting the cream/pink limestone of the Junction Bed (Beacon Limestone) appears by the entrance to the farm. On the southern side the Thorncombiensis Bed of the Middle Lias is brown and rubbly in appearance. Below this and on both sides of the cutting the Thorncombe Sands are yellow/brown silt with two rows of calcareous siltstone doggers.

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The underlying geology is exposed along the nearby cliffs between Eype and Burton Bradstock and consists of a sequence of clays, sandstones and thin limestones of Lower and Middle Jurassic age. However, inland, the distribution of the rocks is complicated by faults. Between Quarry Hill, Chideock and Bridport two east-west trending faults have allowed a huge block of rocks to subside and this is why the landscape here is so different to the Marshwood Vale to the north. The southern fault runs south of Symondsbury across the southern face of Chideock Quarry Hill and roughly on the line of the main road; the northern one crosses Shute's Lane and Broad Oak road, leaving Symondsbury village in the downslip part of the "graben". The rock exposures along the sides of a group of sunken lanes running away from the village have been designated as Regionally Important Geological Sites (RIGS) because they cut through the different sands of the Middle and Upper Lias, as well as through the Beacon Limestone (Junction Bed).

At the top of Mill Lane a small normal fault displaces part of the Beacon Limestone, with its downthrow to the west. The Beacon Limestone appears just by the end of the wall on the right hand side of the farmhouse entrance. On the other side of the lane 20cm of oolitic material containing specimens of *Gibbirhynchia thorncombiensis* were assigned to the Thorncombiensis Bed. Above, the Marlstone Rock Bed is largely brown oolite, ironshot with some shell debris.

The dramatic holloway has been cut into 8m of the Thorncombe Sands. The doggers contain densely packed fossil clusters. Some cross bedding, and bioturbation can be seen at the base of some doggers.