DORSET LOCAL GEOLOGICAL SITES SURVEY

Site number G SY49/13

Site name Broad Oak Road – west side of Old Warren Hill

Summary description

Jurassic, Middle, Downcliff Sands.

On the northern side of the fault which crosses Shute's Lane and runs eastwards on the northern side of the village, the road cuttings on Broad Oak Road show clear faces of brown or grey laminated sands with occasional small iron rich nodules.

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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).

The Down Cliff Sands can be seen in the left side of the cutting below Warren Hill. They are a darker colour than the Thorncombe Sands being brown or grey laminated sands with occasional small iron-rich nodules. This exposure is on the northern side of the northern fault that runs across Shute's Lane and Broad Oak Road.