

DORSET LOCAL GEOLOGICAL SITES SURVEY

Site number G SZ07/11

Site name California Farm quarry, Swanage

Summary description

Lower Cretaceous, Purbeck Group, Lulworth and Durlston Formations

The two faces of the working quarry show strike and dip sections at right angles to each other. The uppermost beds are in the Middle Purbeck, Durlston Formation. At the top are the beds of the Freestone Vein, with the Grub, Roach, Thornback, Freestone, Laper and Downs Vein above the Soft Cinder and Hard Cinder Beds. Below the Cinder Member in the Lulworth Formation, the beds exposed in the Cherty Freshwater Member include the Button Bed, the Cap, the Five Bit (Vybit) and the New Vein. In this quarry the beds are dipping northwards.

Site description

Lower Cretaceous, Purbeck Group, Lulworth and Durlston Formations

A strike section on the northern side of this quarry exposes the Middle Purbeck. At the top are the weathered beds of the Freestone Vein, with the Grub (DB127 & DB126), Roach (DB125), Thornback (DB123), Freestone (DB121), Laper (DB114) and Downs Vein (DB 113) above the Soft Cinder and Hard Cinder Beds (DB 111). Below the Cinder Member the beds exposed in the Cherty Freshwater Member include the Button Bed, the Cap, the Five Bit (Vybit) and the New Vein. In this quarry the beds are dipping northwards, which can be seen clearly in the western face. [DB numbers refer to the beds which have been correlated with R.G. Clements section published in 1993.

In 2006, as part of the Purbeck Keystone Project P.C. Ensom studied the current section, and drew a lithostratigraphic section which has been published in the Dorset Proceedings. His measured section was at SZ01840 77378

As this is a working quarry, the visible face of the beds changes constantly, but it has been agreed that northern and western faces will be available for study, by appointment.