DORSET LOCAL GEOLOGICAL SITES SURVEY

Site number G SY59/14

Site name The Bell Stone, Eggardon Hill

Summary description

Lower Cretaceous, Upper Greensand.

The highest level of the Upper Greensand in West Dorset is well known for its thick development (several metres) of a coarse sandstone – the Eggardon Grit. This is the type locality. It has produced late Albian and lower Cenomanian ammonites in its upper levels, which are therefore about the same age as the lowest Chalk to the east (Isle of Wight). The specific RIGS designation is for the western outcrop known as the Bell Stone, as the remainder of the hill is SSSI.

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The main part of the west face of Eggardon Hill is an S.S.S.I. comprising Lower Chalk, Upper Greensand and Gault clay with landslips of these rocks over Fullers' Earth. The varied geology is reflected in a range of habitats including rich chalk, neutral and acid grassland communities, flushes and woodland. The R.I.G.S. is an extension of the S.S.S.I. to include the prominent outcrop of Upper Greensand on the north western end of the hill known as the Bell Stone. The type section of the Eggardon Grit therefore spans both designations. A section measured by Dorset Environmental Records Centre geologists in 1983 at the Bell Stone was as follows:

2.2 m	Eggardon Grit.	Hard grit, with yellow quartz.
> 2 m		Coarse quartz grit.
	Uneven erosion surface.	
1.1 m		Rubbly appearance: silicified nodules in sand.
c 3 m	Chert Beds.	Pinky grey massive chert, partly obscured.
> 4 m	Exogyra Beds.	Fossiliferous, glauconitic sandstone, with bivalves, gastropods, burrowed.
< 1 m	Foxmould.	Unconsolidated buff sand.
	Landslips obscuring Gault, over Fullers' Earth.	

Eggardon Hill provides the opportunity for integrated studies of the original sedimentary geology, the landslips resulting from the juxtaposition of porous hard rocks over impervious clays, and the varied flora which occur in these habitats.

References.

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