Huish Colliery Quarry, Bath and North-East Somerset

[ST 695 542]

Introduction

Huish Colliery Quarry sometimes also known as 'Branch Huish Quarry', 'Foxhole Quarry' or Writhlington Quarry', lies little more than 500 m south-east of Radstock and only 600 m due east of Kilmersdon Road Quarry (Figure 3.13). It is a key site in the stratigraphically complex Lias of the Radstock area. Most of the Hettangian and virtually all of the Sinemurian lithostratigraphical units typical of the local Lower Lias successions are absent here due to erosion prior to Lower Pliensbachian deposition. Instead Jamesoni Zone limestones rest directly on lowest Hettangian units of the Planorbis Zone.

This site is an essential part of the classic story of erosion and attenuation on the Lower Lias of the Radstock area, showing as it does the most extreme local example of a non-sequence involving the loss of almost two entire stages. A remarkable counterpart of this is the fact that the Lower Pliensbachian lithostratigraphical units just above the non-sequence are much better developed here than at other key sites, such as Bowldish Quarry and Kilmersdon Road Quarry. It was described for the first time, and in some detail, by Tawney (1875, 1878). Richardson (1910a) mentioned the site briefly and figured a photograph of the section under the name of 'Writhlington Quarry'. It was described briefly by Tutcher and Trueman (1925) as their 'site 13', by Savage (1977) and by Donovan and Kellaway (1984) as their 'site R55'.

Description

The lowest part of the section seen by Tawney (1875) comprised some 1.5 m (5 ft) of 'ordinary White Lias', cream-coloured limestone in many thin beds now assigned to the Langport Member of the Penarth Group. This is capped by the 0.6 m (2 ft)-thick Sun Bed, a cream-coloured limestone that splits into several beds; in more recent times this has formed the lowest part of the section visible (Figure 3.14). Above this Tawney (1875) recorded some 1.3 m (4 ft 3 in.) of 'Corn Grits' (Hettangian) comprising ten pale limestones separated by thin clay partings.

Donovan and Kellaway (1984) noted a similar thickness. From the presence of Psiloceras planorbis in the top few centimetres of the uppermost limestone it is evident that of the Hettangian Stage only the Planorbis Zone is represented at this site. This limestone is succeeded directly by the Armatum Bed and Jamesoni Limestone (Figure 3.19), and no intervening strata of Sinemurian age are preserved. Woodward (1876) ascribed these Lower Pliensbachian limestones exposed in a quarry behind Branch Huish Farm to the Inferior Oolite Group, but Tawney (1878) recovered fossils that confirmed that it was the Jamesoni Limestone. The Armatum Bed is about 0.45 m thick and contains abundant phosphatic nodules and derived fossils, including Echioceras (Tawney, 1875), in its lower part; the upper 0.10 m is a clay with scattered lumps of limestone. Above this Donovan and Kellaway (1984) recorded 1.5 m of limestone, with a 0.1 m-thick clay band about 0.3 m from the base. Tutcher and Trueman (1925) assigned the top 0.3 m (1 ft) to the Valdani Limestone and the remainder to the Jamesoni Limestone. Davidson (1876–1878) described the brachiopod Lobothyris radstockiensis from the Armatum Bed of this site, which he referred to as 'Huish Quarry'. The brachiopod was re-figured and described by Ager (1990). Up to 2.5 m (8 ft) of the overlying Striatum Clays was recorded in earlier accounts, though mistaken by Tawney (1875) for the Upper Lias clays. The Striatum Clays yielded Androgynoceras sparsicosta from the lowest 0.15 m, indicating the Maculatum Subzone. 'hitcher and Trueman (1925) observed that rubbly (Bajocian) Inferior Oolite limestones appeared to overlie this modest thickness of Striatum Clays, but recognized that these limestones might have slipped and concealed the true thickness of the clays.

For Interpretation and Conclusion see <u>Condensed facies of the Radstock Shelf</u> — General interpretation and General conclusion.

References



(Figure 3.13) Sketch map showing the southern limits of the Planorbis to Bucklandi zones in the Radstock district and the distribution of the Armatum Bed, Jamesoni Limestone and Valdani Limestone. The letters B, K and H correspond to the approximate locations of the three GCR sites of Bowidish Quarry; Kilmersdon Road Quarry and Huish Colliery Quarry. After Donovan and Kellaway (1984).



(Figure 3.14) Lithostratigraphy and correlation of the Radstock GCR sites After Donovan and Kellaway (1984).



(Figure 3.19) The limestone-dominated succession at Huish Colliery Quarry. The lower part of the face exposes limestones and thin mudstones of the Planorbis Zone, overlain by more massive bioclastic limestones of the Armatum Bed and Jamesoni Limestone in the upper part of the picture. (Photo: M.J. Simms.)