View Edge

[SO 4260 8075]

Introduction

This disused quarry complex is sited at the crest of the wooded scarp of View Edge, about 2.2 km SSW of Craven Arms and 150 m south-west of View Edge Farm on the minor road from Onibury to Rowton, Shropshire (Figure 5.37). The site falls within the SSSI named Stoke Wood and View Edge Quarries. The exposures belong to the Upper Bringewood Formation (Figure 5.38), which is equivalent to part of the Aymestry Limestone' (Murchison, 1839, see also Alexander, 1936) of former usage. This very fossiliferous, late Gorstian age formation (see Holland *et al.*, 1963) occurs widely in the central Welsh Borderland.

View Edge lies between the Silurian of the Craven Arms to Much Wenlock area that occurs along strike to the north-east (Shergold and Shirley, 1968) and the Silurian ground around Leintwardine (Whitaker, 1962) in the Downton Syncline to the south. The most recent accounts of the geology of View Edge are by Newell (1966), Greig *et al.* (1968) and Watkins and Aithie (1980). It is also one of the localities in the Silurian field guide of Siveter *et al.* (1989, locality 3.10).

The Aymestry Limestone facies extends diachronously into the overlying early Ludfordian Lower Leintwardine Formation and equivalents across much of its outcrop, both in the central Welsh Borderland and in Silurian inliers farther south (e.g. see Cherns, 1988). This facies forms the scarp that parallels Wenlock Edge and is also well developed at Leintwardine, Ludlow and Aymestrey itself in the Ludlow Anticline (Whitaker, 1962; Holland *et al.,* 1963; Shergold and Shirley, 1968; Lawson, 1973b).

Description

The beds dip south-east at about 4°. The exposure consists of 10–11 m of hard, richly fossiliferous, crudely tabular and cross-bedded limestone with occasional nodular and thin, discontinuous shale horizons (Figure 5.38). The carbonate is essentially a clean washed, grain-supported crinoidal biosparrudite with subsidiary coarse-grained biocalcarenites (Facies 6 of Watkins and Aithie, 1980).

Crinoids and brachiopods dominate the fauna (Figure 5.39). Minor associates include trilobites, gastropods, bryozoa, rugose and tabulate corals, bivalves, cephalopods, conodonts (see Rhodes, 1953; Rhodes and Newall, 1963; Schwab, 1969) and ostracods. Some of the larger favositid and heliolitid coral colonies approach 1 m in size. Also, as Murchison himself commented (1839, p. 203), 'In the View Edge... the limestone... is loaded with Pentameri...', that is, concentrations of the large pentamerid brachiopod *Kirkidium knightii*. In particular a 1 m thick bed, consisting of about 30–50% by volume of banks of disarticulated and rare whole shells of *Kirkidium*, is traceable for 230 m laterally (Watkins and Aithie, 1980). The heavier, convex pedicle valves outnumber the brachial valves by eight to one.

Other brachiopod species that are quite abundant in the section include *Atrypa reticularis*, *Isorthis clivosa*, *Leptostrophia filosa*, *Mesopholidostrophia laevigata* and *Strophonella euglypha*. The fossils at View Edge represent examples of the *Mesopholidostrophia laevigata* Association and the *K. knightii* Association of Watkins and Aithie (1980); epifaunal filter feeders are the main trophic category of these faunas and bioturbation is rarely evident. These two assemblages have virtually the same taxa, with the *K knightii* Association representing merely a temporary dominance of populations of *Kirkidium*.

Interpretation

The biosparrudites of View Edge accumulated in a narrow, relatively high energy zone at the eastern shelf edge of the Welsh Basin during mid-Ludlow times (Watkins and Aithie 1980, figs 14–16; see also Siveter *et al.*, 1989, fig. 10 and Bassett *et al.*, 1992, fig. S4b). They are a representation of one of three parallel, north-south linear, carbonate facies

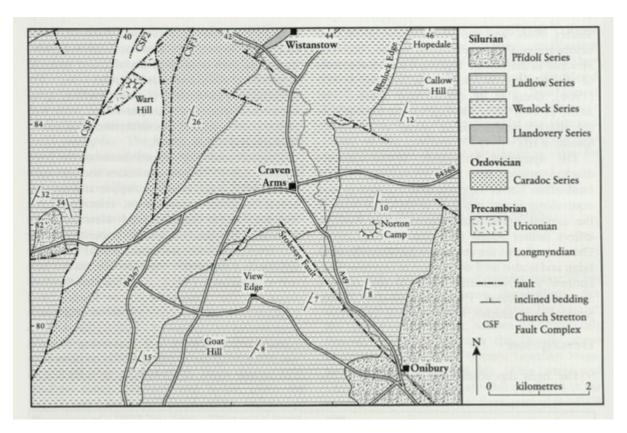
belts of the Upper Bringewood Formation (Watkins and Aithie, 1980). This particular belt, a bank area of low topographical relief, supported high species diversity, especially dense stands of crinoids and brachiopods. Winnowing out of the fine sediment from the populations of *Kirkidium* produced shell lag deposits at or close to the site where the brachiopods lived. In general the inner shelf area to the east witnessed lower energy conditions.

The various facies of the Bringewood Group are traceable to the south and south-east from Craven Arms. The Upper Bringewood carbonates of the Leintwardine and Aymestrey areas (GCR sites at Mocktree Quarries, Bow Bridge and Aymestrey Quarries) are a continuation of the north–south shelf edge zone, but in the Ludlow area (GCR sites at Sunnyhill, Goggin Road, Deer Park Road and Deepwood) they reflect a more sheltered, inner shelf environment (Watkins and Aithie, 1980; Cherns, 1988).

Conclusions

View Edge is significant as it contains excellent, highly fossiliferous exposures of rocks typical of a facies of the mid-Ludlow age Upper Bringewood Formation. These carbonates formed at a shelf edge of the Welsh Basin. They are noteworthy for the abundantly developed shell lags dominated by the brachiopod *Kirkidium*. This site is well known and features in many papers on the stratigraphy and palaeontology of the Ludlow Series; it should be preserved and accessible on account of its value for teaching and research.

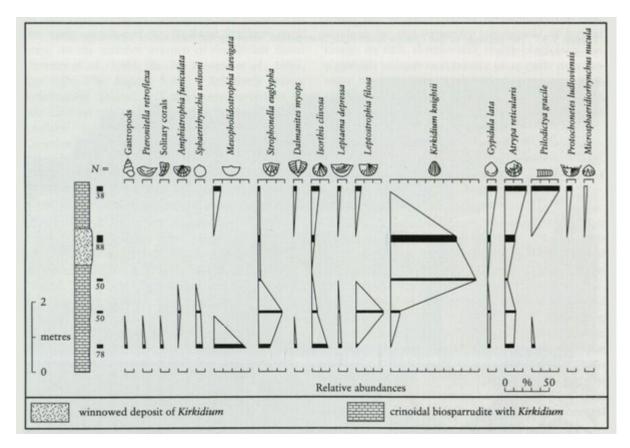
References



(Figure 5.37) The geology of the Craven Arms area, Shropshire, showing the location of View Edge (after Siveter et al., 1989).



(Figure 5.38) The quarries at View Edge, near Craven Arms, Shropshire: Upper Bringewood Formation carbonates containing abundant shell lags of the brachiopod Kirkidium knightii. (Photo: David J. Siveter.)



(Figure 5.39) Measured section showing lithologies and faunas of the Upper Bringewood Formation at View Edge (after Watkins and Aithie, 1980).