
Glan Pibwr

[SN 4162 1794]–[SN 4189 1798]

Introduction

This section supplements the larger exposure at Allt Pen-y-Coed because it displays the lower part of the Pibwr Member, which is not exposed there; it furnishes the basal stratotype of the Pibwr Member of the Carmarthen Formation. Glan Pibwr has yielded the best-preserved trinucleid trilobites from this unit and the only graptoloid graptolites from the Carmarthen Formation.

The section was described briefly by Crosfield and Skeat (1896), who identified the common asaphid trilobite as '*Ogygia marginata*'; Stubblefield (1933) applied the name '*Ogygia marginata* Beds' for the Arenig mudstones at Glan Pibwr and elsewhere in the Carmarthen district. These were later formally described as the Pibwr Member of the Carmarthen Formation by Fortey and Owens (1978), and they synonymized *Ogygia marginata* with *Merlinia selwynii* (Salter), a species that occurs also in the early Arenig of North Wales. Glan Pibwr is effectively the type locality for Stubblefield's '*Ogygia marginata* Beds' and is the only permanent section in which the lower part of the Pibwr Member is exposed.

Description

Exposures occur on the floor of and along the side of an old lane to the south and south-west of Glan Pibwr Cottage (Figure 8.5). The base of the Pibwr Member is drawn at the lowest beds exposed in the lane [SN 4169 1798] (Fortey and Owens, 1978, p. 234), overlying 5–6 m of shales that are transitional in character from those of the underlying Bolahaul Member of the Ogof Hên Formation. The succeeding black mudstones typical of the remainder of the Pibwr Member are well-seen in the bank exposure at [SN 4162 1794]. The lowest beds have yielded asaphid trilobites (*Merlinia selwynii*, Figure 8.4) b, well-preserved trinucleid trilobites (*Myttonia cf. fearnsidesi* Whittington) and graptolites (*Phyllograptus cf. densus* Törnquist and *Pseudophyllograptus aff. angustifolius* (Hall)). The higher mudstones are rich in *Merlinia selwynii* and infaunal bivalves (nucluloids and '*Actinodonta*' aff. *naranjoana*), with occasional raphiophorid trilobites (*Ampyx cetsarum* Fortey and Owens, for which this is the type locality).

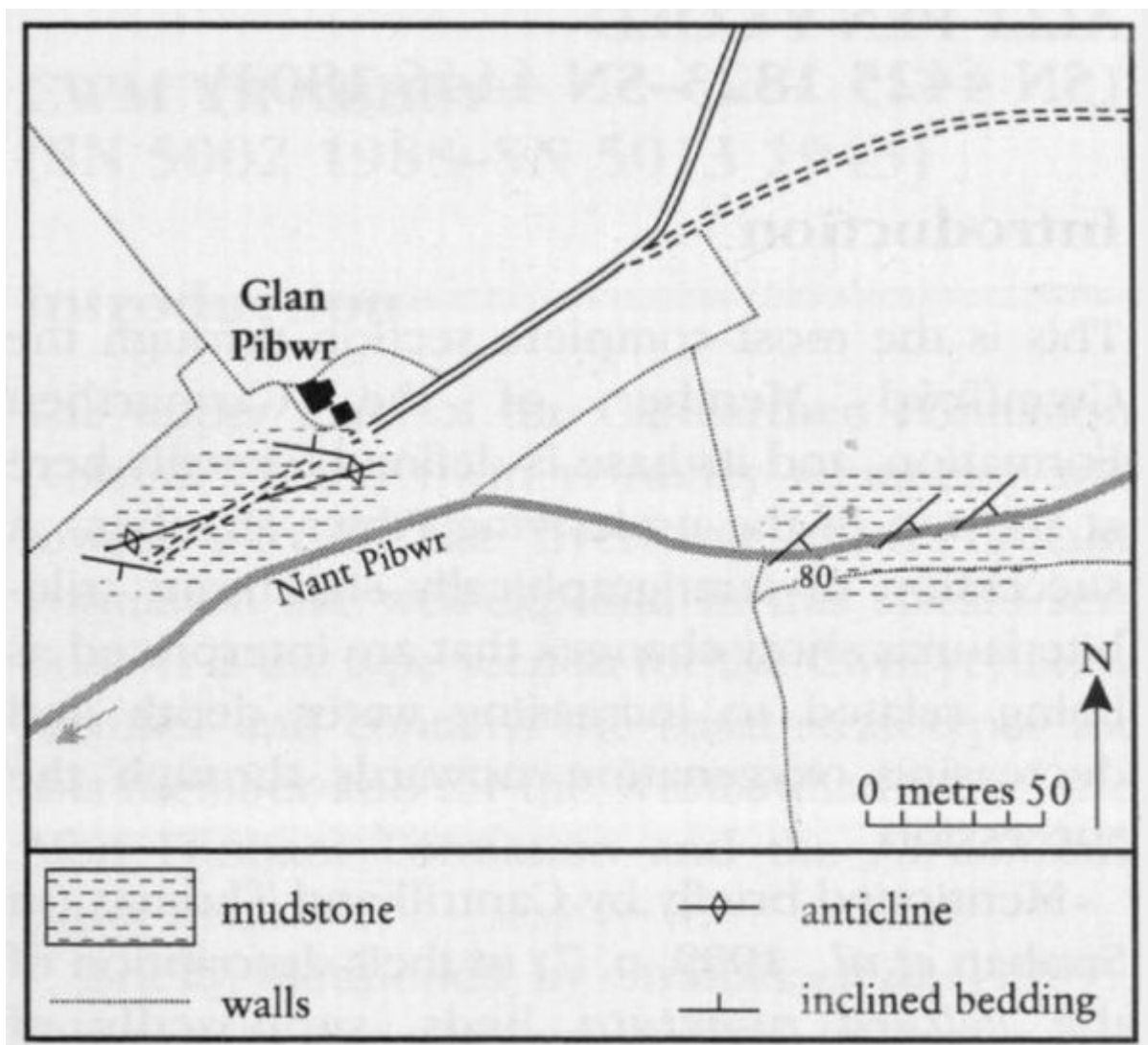
Interpretation

The Pibwr Member is interpreted by Fortey and Owens (1978) as an upwardly deepening sequence. The fauna, although locally abundant, is restricted in diversity, and there is a lack of surface-living sessile benthos such as characterizes the underlying Ogof Hên Formation. Instead, infaunal bivalves are frequent, especially in the lower part, attesting to a soft but not anaerobic substrate. The morphology of the trilobites is regarded as an adaptation to soft sediments. The trilobite association of the Pibwr Member was named the Raphiophorid community by Fortey and Owens (1978).

Conclusions

This locality is significant in affording exposures of the lowest division of the Arenig Carmarthen Formation and is the only one known from this part of the sequence to yield well-preserved trinucleid trilobites, graptoloid graptolites and infaunal bivalves. It also complements the Allt Pen-y-Coed site in having exposures of horizons lower in the Pibwr Member than any seen there.

[References](#)



(Figure 8.5) Location of exposures in the lower part of the Pibwr Member, after Fortey and Owens (1978, fig. 4). The base of the Pibwr Member and of the Carmarthen Formation are taken here.