

---

## Chapter 5 The palaeontology of The Mona Complex

Organic remains have been found at six localities near Holyhead: Soldier's Point, cove beyond the Breakwater, western side; Coast, 400 yards east of Porth Namarch; High Moor, about three-eighths of a mile east of the South Stack; the South Stack itself; Hen-borth, north side; Coast, west-north-west of Gors-goch [Af. 791–2, 3662–98]. All the fossils are from the South Stack Series. Most of them are castings or 'pipes' of annelids, of the types referred by American authors to *Scolithus* and *Planolites*. The 'pipes' of *Scolithus* penetrate the grits at right angles to the bedding; those of *Planolites* lie along the bedding, usually at the partings between the grits and the seams of fine and now highly crystalline mica-schist. A remark of Dr. Peach<ref>Geological Structure of the North-West Highlands of Scotland', p. 372.</ref> that castings of this kind 'not only indicate the presence of such animals during the deposition of the beds [the passage refers to the Cambrian quartzites], but also of sufficient organic matter having been mixed with the sand where they occur to furnish nourishment to the worms', may be recalled here. Dr. Peach (who named these fossils), noting that two specimens from the foot of the cliff on the southern side of the South Stack were remarkably suggestive of organisms of the nature of *Archaeocyathus* or *Archaeoscyphia*, had them submitted to Dr. G. J. Hinde, who says, 'They are too far gone for positive determination, but I incline to agree with Dr. Peach's suggestion that they may belong to the same group as *Archaeocyathus*'.

All these fossils have suffered more or less deformation along the foliation-planes, but their state of preservation is remarkable when it is remembered that the finer beds, in contact with which many of them have been found, are now in the condition of beautifully crystalline and minutely corrugated mica-schist. *Scolithus* occurs chiefly in the massive beds of the Stack Moor part of the series, in some of which it is abundant; *Planolites* chiefly in the more thin-bedded Llwyn portion. The forms referred to *Archaeocyathus* are from the Llwyn division, but close to the Stack Moor beds. In view of the probable high antiquity of the rocks, the existence of these fossils is of great interest, but they are far from being sufficiently definite for purposes of correlation.

Castings of annelids have been found also in the Gwna grits at Bone Twni cove, Bodorgan. Others lie upon the bedding-planes of the Tyfry grits north of Ffynnon Sais, Llanddwyn. It has been seen that there are strong reasons (pp. 86–8) for supposing the jaspers of the Complex to be altered radiolarian cherts. Search has accordingly been made both in the nodular and bedded varieties, especially at Llanddwyn and Amlwch. Some small objects that may be organic were found at Llanddwyn [Af. 790], but they were undeterminable. Also, all slides of the jaspers containing anything that might possibly be an organism were submitted to Dr. Hinde, but with the same result. A jasper from Llanddwyn ([E10095](#)) [SH 391 630] with beautiful radiating structures about an inch in diameter, somewhat reminiscent of Walcot's *Atikokamia*, was compared by Dr. Hinde with a specimen of that form lately given by Dr. Horne to the Royal Scottish Museum, but he writes, 'The Mona Complex specimen appears to me inorganic. It is unlike any specimen of the *Archaeocyathus* group which has come under my notice up to the present'.

*Oldhamia*, too, has been looked for, especially in the purple phyllites, but a structure that had been referred to it proved to be of dynamic origin. Some bodies in the limestone of Bryn-maethlu resemble foraminifera, but no organic structure is to be seen under the microscope. Nor has anything been found in the oolitic limestones of the northern coast, yet it is difficult to believe that such rocks as these will prove to be totally barren.