REPORT

Charnian Fossils in the Outwoods

The Outwoods, near Loughborough, present a unique fauna of Precambrian fossils of Ediacaran age in the Charnwood Forest inlier. The fossils consist of multi-ringed ovoid discs of varied sizes and a number of rings, set in clusters of small bead-like microbial matting.

In the mid 1960s Bob King, accompanied by Trevor Ford, found a loose block containing a large multi-ringed ovoid disc (Fig. 1). This featured in *The Geology of the East Midlands* (1968) and is now in the Geology Department, University of Leicester (item 58115). It was named *Cyclomedusa davidi*. Trevor Ford then found three more discs on a nearby bedding plane, which has since been moulded and cast by BGS for their collection. Another large multi-ringed disc on a loose block was then found (Fig. 2), and is also in University of Leicester (item 96877/8/9). In 2007, Grazhdankin and Gerdes described similiar multi-ringed discs as microbial colonies 1-3mm thick, from the Yorga Formation, near the White Sea, NW Russia. Comparing these images with those of The Outwoods, it seems possible that the latter may be similar microbial colonies and not medusoids as was originally thought.

Figure 1. Cyclomedusa davidi.

Figure 2. *Ovoid multi-ringed disc.*

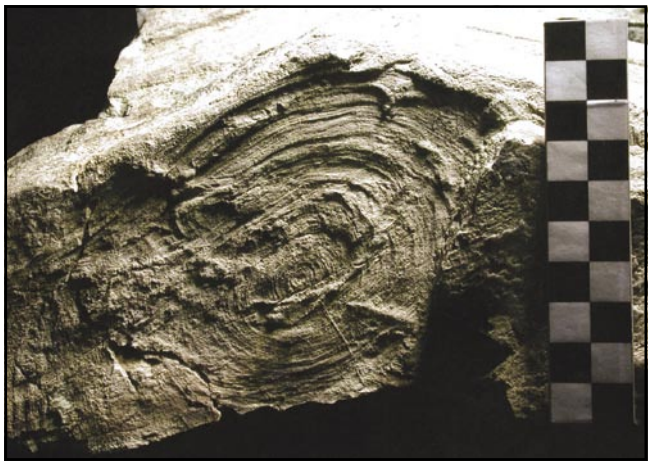

Figure 3. Pseudovendia charnwoodensis *from The Outwoods, with possible fronds to the left and a stem at the base,suggesting it is probably a frondose fossil, rather than an arthropod.*

Figure 4. *The newly found frond, stem and disc.*

In 1978 the author found another fossil on a loose block near to Bob King's original find (Fig. 3). This was named *Pseudovendia charnwoodensis* (Boynton and Ford, 1979) as it was thought to be a primitive arthropod showing similarities to *Vendia* in Northern Russia (Keller and Fedonkin, 1976). After discussion between members of the Charnia Resaerch Group,, it is now considered more likely to be part of a frond.

In March 2009 Phil Wilby, of the British Geological Survey, found a new fossil in The Outwoods very near to the main fossiliferous bedding plane. This was first thought to be another *Pseudovendia*, but, on close examination under oblique lighting and after computer enhancement, it appears to have a stem emerging on its left side, which was supported by a disc (Fig. 4). It could be a new *Charniodiscus* species, and awaits moulding and casting by BGS. This is the first specimen of this nature found in The Outwoods, which could yield some more important finds in the future; research continues.

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Bibliography

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