Because of lack of understanding of the zoological nature of machaeridians, their mode of life cannot be confidently reconstructed. It is likely that the plates formed a dorsal protective skeleton of a worm-shaped animal (Bengtson 1970:385–390), comparable to a scale-bearing annelid or a polyplacophoran, and so the machaeridians probably belonged to the vagrant epifauna. Their armour seems to have prevented efficient rapid movement. There is currently no evidence on the mode of feeding, although suspension-feeding can probably be ruled out.

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Hercolepas

STEFAN BENGTSON

A unique specimen of a peculiar problematical fossil, *Hercolepas signata* (Aurivillius), has been described from Högklint *d* at Vattenfallet (Aurivillius 1892:4–12, Figs. 1–8; see also Withers 1915:117–118, Fig. 3). Plates belonging to *Hercolepas* have now also been found in bituminous inter-reef deposits of the Halla Beds (upper Wenlock) of Hörsne 6. Originally described as a lepadomorph cirriped, *Hercolepas* must be considered to be of uncertain affinity. The homology suggested by Aurivillius of *Hercolepas* plates with the capitular plates of lepadomorphs, is not well founded (cf. Withers 1915:117), and the specimen is most certainly much less complete than Aurivillius supposed.

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