



Squid 'ear bones' (statoliths) from the Jurassic succession of South-west England

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Squid 'ear bones' – or statoliths – are a part of the balancing organs of modern and probably most fossil squids. Over the course of the last 10 years fossil statoliths have been discovered in the Jurassic sediments of the Wessex Basin (South–west England). They are probably all related to teuthids, such as *Belemnotheutis antiquus* Pearce, of Callovian–Oxfordian age. Thus far, we have identified four possible 'species' of statolith that are in the process of being formally described, named and their potential relationships determined. The sediments from which these statoliths have been recorded also contain squid hooklets (onycites), otoliths (fish 'ear bones') and other microfossils (including foraminifera). All are, therefore, of marine origin. In the case of the Christian Malford and Ashton Keynes lagerstätte (of late Callovian age), the statoliths are associated with exceptional, soft-bodied preservation of squid and it may be possible to determine the parent animal of the recorded statoliths. A number of museum collections (Natural History Museum [London], Natural History Museum [Paris], Senckenberg [Frankfurt], Smithsonian Institution [Washington], etc.) are being investigated in order to trace the possible host animals for all of the recorded statoliths. Despite many thousands of samples of Cretaceous sediments being investigated for foraminifera over the past 40+ years, no statoliths have been recorded and none are known from the literature.