

COCHLICOPA NITENS (GALLENSTEIN) FROM EARLY HOLOCENE TUFA AT BOSSINGTON, HAMPSHIRE, UK

This communication is intended to clarify the occurrence of *Cochlicopa nitens* as an early post-glacial fossil within a tufa deposit in the valley of the River Test at Bossington, Hampshire, UK (NGR SU337308). Clarification is necessary because while the species was noted as present in bulk samples from site BWT 360n/60e in the authors PhD thesis¹ and subsequently recorded on the national map for the species², the occurrence was *not* noted in the definitive site report which only included those shells recovered from separate monolith sampling of the same deposits³. Given both the rarity of this species as a fossil find in Late-glacial and early postglacial deposits in the UK and the fact that details of all other occurrences have previously been published⁴ it is important that the occurrence at Bossington is also adequately described.

The tufa deposits at Bossington have been fully described by Davies and Griffiths³. Devensian river gravels are overlain by an early postglacial tufa/palaeosol complex radiocarbon dated to c. 9300-9100 yr BP before a longer phase of tufa deposition ending around 6000 yr BP. The *Cochlicopa nitens* specimens (n= 3 from a total of 3900 shells) were recovered from a bulk sample obtained from the lowermost part of the basal tufa/palaeosol complex in an assemblage comprising mainly *Lymnaea truncatula*, *Anisus leucostoma*, *Zonitoides nitidus*, *Carychium minimum*, *Cochlicopa lubrica*, *Punctum pygmaeum*, *Euconulus alderi*, *Vitrina pellucida* and *Vertigo pusilla*. *Vertigo moulinsiana* and *Discus ruderatus* were also present, with the presence of the latter and total absence of *Discus rotundatus* confirming a pre-c. 8600 yr BP date⁵. This bulk sample directly corresponds to the lowermost section (154-140cm, Site Molluscan Zones BNE-SMZ1-2 indicative of tussocky or lightly wooded marsh conditions) of

the published diagram (fig 6) based on separate, smaller, monolith samples taken from the site at the same time³ and which contained a more-or-less identical assemblage *except* that *C. nitens* was not represented, presumably because of its very low abundance generally in the deposits. The age of the deposits is in accordance with the other early postglacial occurrences of the species at Caerwys, North Wales (9-10,000 yr BP) and Castlethorpe, Lincolnshire (9500-9000 yr BP) as detailed by Preece⁴.

The height of the adult specimen was 6.9mm and the breadth 2.9mm, in accord with the range for the species given by Preece⁴ (figs 2 and 3, tables 1 and 2), the breadth in particular being greater than that usually encountered in *C. lubrica*. The specimens are currently held in the molluscan reference collection at The Quaternary Research Centre, Bath Spa University.

¹ DAVIES P 1992 *Sub-fossil Mollusca from Holocene over-bank alluvium and other wet-ground contexts in Wessex*. Unpublished, Cardiff University, p240.

² KERNEY MP 1999 *Atlas of the Land and Freshwater Molluscs of Britain and Ireland*. Harley Books, Colchester.

³ DAVIES P & GRIFFITHS HI 2005 *The Holocene* 15(1): 97-110, fig 6.

⁴ PREECE RC 1992 *J. Conchology* 34: 215-224.

⁵ PREECE RC & BRIDGLAND DR 1999 *Quaternary Science Reviews* 18: 1075-1125.

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