

THE PALAEOLOGY OF THE BURTLE BEDS AT MIDDLEZOY, SOMERSET

C. O. HUNT AND G. CLARK

University of Sheffield

Introduction

This note documents molluscan and mammalian fossils from the Burtle Beds at Middlezoy, Somerset (ST37377265). The Burtle Beds are generally accepted to be of estuarine and nearshore marine origin and of interglacial, probably Ipswichian (120,000 years), age (Kidson, 1977; Kidson et al. 1987).

The fossils were recovered from foundation trenches which exposed about 1.2 m of plane-bedded and cross-bedded very shelly sands. The bedding of the sands was disrupted by cryoturbation, and the deposits were somewhat decalcified in places, to a depth of 0.7 m. The antler fragment was found *in situ* at a depth of 0.6 m; the other mammalian remains were found in spoil heaps. The mammalian remains and representative specimens of the mollusca are lodged in the Somerset County Museum.

The mollusca

Prestwich (1892), Jackson and Bulleid (1931), Bulleid and Jackson (1937, 1941), Kidson et al. (1978, 1981) and Gilbertson (1979) have previously recorded marine, estuarine and fresh water molluscan faunas of interglacial aspect from the Burtle Beds. The mollusca from Middlezoy include very abundant *Hydrobia ulvae* (Pennant), *Hydrobia ventrosa* (Montagu), *Cardium* (*Cerastoderma*) *edule* (L) and *Macoma balthica* (L), together with rare *Patella vulgata* (L), *Littorina littoralis* (L) *Littorina littorea* (L), *Ostrea edule* (L) and *Barnea candida* (L). The assemblage is dominated by species typical of intertidal sand-flats in estuaries, and several of the rarer taxa are generally found on rocky shores. All the species reported here have fairly broad climatic tolerances, but the fauna is similar to others reported from the Burtle Beds by Bulleid and Jackson (1937, 1941) and Kidson et al. (1978, 1981).

The mammalia

The first reliable reports of fossil mammals from the Burtle Beds were those of Jackson and Bulleid (1931) and later Bulleid and Jackson (1937, 1941), who reported an interglacial fauna including elephant, rhinoceros, hyaena, wolf, horse, auroch, fallow deer and red deer.

Three bones were recovered from Middlezoy. An antler fragment is attributable to fallow deer (*Dama* sp.). It is from a shed antler and consists of the burr (or coronet) and parts of the beam and brow-tine. The size of the burr is as follows: greatest diameter — 44.5 mm; least diameter — 32.5 mm; circumference — 125.0 mm. An almost complete femur belongs to a member of the Suidae (Pig family). Although both ends of

the bone are somewhat weathered, it is clear that the bone was unfused at both the proximal and distal epiphyses and is thus from a juvenile. The following measurements could be taken: smallest breadth of the diaphysis — 23.0 mm; smallest circumference of the diaphysis — 74.0 mm. The third specimen is a fragment from the caudal side of the blade of a left scapula. It could not be identified to species, although it was obviously from a large mammal.

The record of a species of Suidae is new for the Burtle Beds. The fauna, although restricted, is clearly of interglacial aspect, and is thus comparable to those previously reported from the Burtle Beds.

Conclusions

The fossils recorded here are similar to those recorded by previous authors. They suggest deposition during interglacial times on an estuarine tidal flat, close to the rocky shores of Middlezoy island.

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