7.1 Assessment of Molluscs

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Introduction

7.1.1 As the site was situated on Folkestone and non-calcareous Beds, the archaeological deposits were not conducive to snail life or shell survival, and the area is generally poor for land snail preservation (cf Evans 1972). The research objectives of land-use and landscape in the later prehistoric to Saxon periods are not ones of general landscape type (i.e. woodland vs open country) that can be undertaken with moderate snail assemblage. They seek to determine the landscape type at 'high resolution' (i.e. type of land-use: arable, vs short-grazed, vs open trampled, vs long grassland), requiring sequences of well-preserved land snails.

Methodology

7.1.2 No samples were taken and processed specifically for land snails (cf. Evans 1972), however the presence of land snails was noted in the assessment of the bulk samples

Quantification and Provenance

7.1.3 During the processing of bulk soil samples for the recovery of charred plant remains and charcoals, snails were noted, and recorded in the flots. The presence of snails in these flots is assessed below. None of the shells (WA) were noted to be fresh- or brackish-water species.

7.1.4 Snails were not noted in any of the Neolithic flots. One sample from Early Bronze Age barrow ditch C4744 and one from Middle Bronze Age pit C3615 contained snails. Few Late Bronze Age/ Early Iron Age features contained shells, although pit C2805 consistently recorded the presence of snails. Preservation here may be due to micro-environmental conditions created by the pit fills (i.e. calcium phosphate input in the form of ash). The presence of snail shells in the samples from this pit is noteworthy. Only one Early to Middle Iron Age sample contained a few shells (less than 5) in the flot, whilst only ditch C2308 from the undiagnostic prehistoric category contained any shells.

7.1.5 Several Late Iron Age/ Romano-British samples (13) contained shells, however the contexts they were noted from (cremation C8; ditch C5; pit C1; and hollow C1) at this period, and the level of preservation make their presence of little significance. The preponderance of survival in cremation-related contexts is due the increased levels of calcium (bone) and calcium phosphate (burnt bone and ash).

7.1.6 Nine Anglo-Saxon graves and four other contemporaneous features contained some shell in the flots. Again low levels of preservation here are likely to be due to the higher calcium carbonate content created by bone (albeit often dissolved and poorly preserved).

Conservation

7.1.7 What little shell that survives is stable in dry condition in either dried flots or residues. They are suitable for long term storage, if necessary, in the current form.

Comparative Material

7.1.8 Due to the poor preservation of snails on non-calcareous geologies there are no comparative records in the immediate area. However, the chalkland of Kent and Sussex have provided detailed records of landscape change from the early post glacial and prehistoric periods in Kent, such as at Brook (Kerney *et al*. 1964) and Holywell Combe (Kerney *et al*. 1980), which provide a general environmental background. For the Neolithic the seminal paper by Thomas (1982) drawing on work from various Neolithic causewayed enclosures (various publications), and that of landscape blocks e.g. Caburn-Malling Down, East Sussex (Allen 1995a), show the potential for land snail analysis. This work provides some parallels for the Kent landscape. At Saltwood Tunnel, however, survival is not good enough to allow anything but specific and localised comment, rather than an integral interpretation of environment, environment change and land-use in the wider local landscape.

Potential for further work

7.1.9 Shell survival was so poor as to not facilitate any significant contribution. In periods post 2000 BC good preservation of shells is needed to facilitate detailed interpretation of land-use. Prior to this period where more general statements on woodland can be determined through poorer survival, either the contexts themselves are lacking or shells do not survive.

7.1.10 However snails from any earlier prehistoric features (e.g. particular features such as ditch C4744 and Middle Bronze Age pit C3615) will be of use in defining the nature of the earlier landscape at Saltwood, and broad evidence of local land-use. Snails from Late Bronze Age/ Early Iron Age pit C2805, where preservation is better, may aid in determining function and use of the feature (see molluscan remains from other Iron Age pits e.g. Balksbury, Hants; Allen 1995b).

Bibiography

Allen, M J, 1995a, 'The prehistoric land-use and human ecology of the Malling-Caburn Downs', *Sussex Archaeological Collections* **133**, 19-43

-- , 1995b, 'Land molluscs', in G J Wainwright and S M Davies, *Balksbury Camp, Hampshire; excavations 1973 and 1981* English Heritage Archaeological Report **4**, 92-100

Evans, J G, 1972, *Land Snails in Archaeology* (London)

Kerney, M P, Brown, E H and Chandler, T J, 1964, 'The Late-Glacial and Post-glacial history of the chalk escarpment near Brook, Kent', *Philosophical Transactions of the Royal Society* **B248**, 135-204 (London)

Kerney, M P, Preece, R C and Turner, C, 1980, 'Molluscan and plant biostratigraphy of some late Devensian and Flandrian deposits in Kent', *Philosophical Transactions of the Royal Society* **B291**, 1-43 (London)

Thomas, K D, 1982, 'Neolithic enclosures and woodland habitats on the South Downs, in Sussex, England', in M G Bell and S Limbrey (eds), *Archaeological Aspects of Woodland Ecology*, British Archaeological Reports Int Series **146**, 147-170 (Oxford)