

Sub-fossil molluscan faunas associated with the crouched inhumation (S8002) from Context (12016), Trench 12, Chalk Pit Field North, Sedgeford, Norfolk.

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Introduction:

Early in the 2010 season a stand-alone feature was located along the eastern edge of Trench 12 (SH10 CNE T12 (12015)) that had no apparent relationship to the surrounding Anglo-Saxon archaeology. On excavation this feature proved to be a broadly oval grave cut (12016) containing a crouched inhumation (S8002). The burial comprised a flexed individual oriented north-west to south-east (with the head to the north-west): the excavators also found fragments of animal bone, a sherd of probable Beaker and a large cylindrical flint. In an effort to extract the maximum available information about the context of the burial the total fill of this feature was removed for archaeo-environmental processing. This report provides an analysis of the terrestrial snails retrieved from the flots and residues of these processed bulk sediment samples.

In addition to the molluscan faunas discussed below, during reconstruction of the cranium of skeleton S8002 soil adhering to the bone was removed and dry-sieved. This produced an assemblage of 18 complete shells and an assortment of shell fragments of the burrowing species *Cecilioides acicula* (Müller 1774). This species (known as the blind or agate snail) is subterranean and can occur at depths of two metres or more in unwooded calcareous environments (Kerney 1999: 168). It lives in crevices, rootlet holes and the cavities associated with ancient buried bones: an example of the latter being the concentrations of this species recently identified in two Hellenistic graves at Plinthine, Egypt (Georges and Charlier 2010; 1-6). *C. acicula* is thought to be a Romano-British or later introduction to the British Isles, and given its habitat preferences and deep burrowing is usually considered intrusive within archaeological deposits (Carrott *et al.* 2002, 5-6; Evans 1972, 80, 168 & 201; Kerney 1999: 18; Wessex Archaeology 2007, 13). Furthermore, on initial inspection the shells presented as shiny and translucent indicating that the organic periostracum (the pigmented outer surface layer) had not fully broken down and thus that the individuals had died within the past twelve months (Carter 1990a, 91; Evans 1972, 201). Given these factors the assemblage of *C. acicula* from the cranium of S8002 is likely intrusive and therefore of limited interpretive value.

Methodology:

305 litres of bulk sediment samples from the fill of the cut (12016) were processed on site using the 'manual washover' technique described by Cox (2004) and Riches (2004), and subsequently adapted by Jollans (Pers. Comm. 2010). The first 20 litres of material were processed to 1mm (with a 500 micron sieve being used to generate the lighter washover fraction or 'flot'); the following 40 litres were then processed to 3mm (and the flot again produced though the use of a 500 micron sieve). The remainder of the samples were 'wet-seived' to 3mm (Jollans, Pers. Comm. 2010).

A 50%+ random sample of the flots and residues produced by the on-site archaeo-environmental processing were examined for the remains of land snails. These were studied using a magnifying glass and

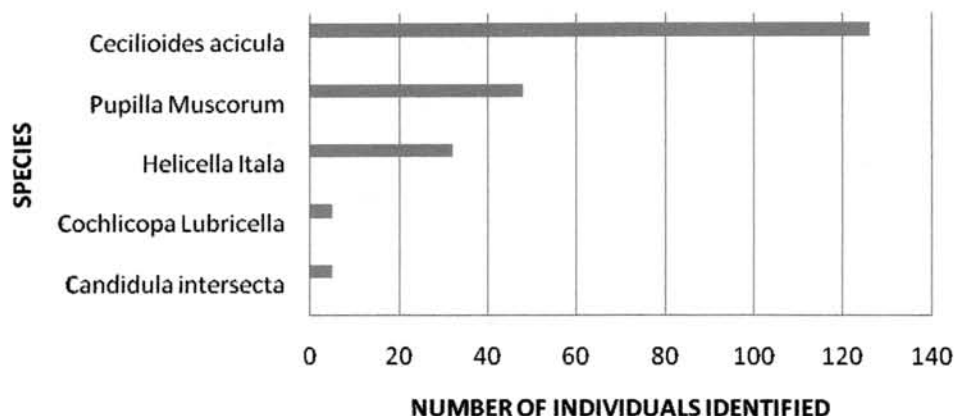
binocular microscope (at x25 and x30 magnification) and identified to species, where possible. Identification guides used were Cameron 2008; Kerney 1999 and Kerney and Cameron 1979.

Results:

The fill of **Context 12016** was fully processed and no unprocessed sediment samples remain. The soil matrix comprised a compact but friable orange brown sandy silt incorporating slightly angular chalk and flint nodules. In addition to a number of land snails, it contained numerous rootlets and other environmental samples which shall be the subject of a further report prepared by Lynn Jollans.

The majority of the snails derived from the 60 litres of sediment processed to 500 microns. The assemblage comprised *Candidula intersecta* (Poiret 1801), *Cecilioides acicula* (Müller 1774), *Cochlicopa Lubricella* (Porro 1838), *Helicella itala* and *Pupilla Muscorum* (Linné 1758). Table 1 highlights the total frequencies of each species identified from the 50%+ random sample of the total assemblage.

TABLE 1:
Frequency of sub-molluscan faunas retrieved from
Context 12016



Discussion:

The preliminary view of the excavator is that the creation of the grave cut, insertion of the body and refilling the grave was a single event that took place over a short space of time: a view that appears corroborated by the absence of multiple contexts within the feature (Cousins, Pers. Comm. 2010). This being the case, it is assumed that the fill of the grave removed for archaeo-environmental analysis constitutes a single sample and therefore the number of shells recovered exceeds the minimum proposed by Davies (2008, 5) per sample in order to generate a meaningful dataset of interpretive value.

Despite the large numbers of burrowing snail shells (*C. acicula*) these are, for the reasons outlined above, almost certainly intrusive and of no interpretive value. Further, the grave fill was not removed in spits and it is therefore not possible to determine the position in the deposit from which the specimens of *C. intersecta* were recovered. This is important since this snail is a likely introduction from southern Europe and is not known in sites from Britain before the medieval period (Kerney 1999, 179). Given that Saxon archaeology overlies context 12015 and that previous experimental work by Carter (1990b) has

demonstrated that soil processes can cause the downward movement of a shell within a soil horizon by as much as 5mm year⁻¹, it seems likely that the shells of *C. intersecta* are also intrusive and therefore should be omitted from any consideration of the environment at the time of the burial.

An insight into the late Neolithic – Early Bronze Age environment of Chalk Pit Field, Sedgeford, may be afforded by the other three species of snail *Cochlicopa lubricella*, *Helicella itala* and *Pupilla muscorum*. Each of these is a native species known from the late glacial period onwards (i.e. 15,000-10,000 BP) and often associated with dry calcareous (or sandy) grazed grasslands. *Helicella itala* is particularly important since fossil evidence shows that its ability to colonise a location can be suppressed by the growth of woodland or ploughing of the soil (Kerney 1999, 82, 103 & 182). The presence of this species within the fill of the grave would therefore suggest that at the time that feature 12015 was cut Chalk Pit Field formed a dry exposed grassland with little tree cover that was likely used for grazing purposes.

Retention and archiving:

All of the snail shell from 12016 should be retained and stored as part of the Sedgeford Site Archive.

Acknowledgements:

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