

Tarbat (TR98) The Shellfish

By Matilda Holmes. March 2012

Introduction

Shellfish were abundant in the middens of phase 4 associated with the lay settlement, and because of this a sampling programme was undertaken whereby a few shells were kept for identification, but the majority were weighed and discarded. Shells from earlier deposits (phases 1 and 2) relating to the early Christian monastery were all kept, and originated from a variety of features (Table 1). Because of the phase 4 sampling strategy, and bias introduced by the likelihood that only the biggest or most representative shells were kept back for identification, no measurements were taken on the phase 4 material.

Method

Shells were weighed and identified to family or species where possible (following Crothers 2003). Condition of the shells was recorded, as well as their completeness. Taphonomic processes affecting the assemblage were also noted, including burning, butchery, gnawing, perforations, encrustations and abrasion (Claassen 1998, 54-59). Measurements were taken following guidelines by Claassen (1998, 109-110), and bivalves were sided where possible.

Both hand-collected and sieved samples were recorded.

Taphonomy and Condition

Shells were in fair condition, although highly fragmentary. Encrustations and perforations caused by parasites were common on whelk shells, oysters and, less often, winkles (Table 2). A large number of shells (crab and winkle) from phase 4 deposits showed signs of burning, and one winkle shell, also from this phase bore numerous cut marks.

Phases 1 to 2: Early Christian Monastery (6-9th century)

Shellfish from this phase came from discreet features, with a concentration of whelks in and around pit F325 in intervention 14. Winkles were recorded further to the south, from features within intervention 24 associated with the vellum yard. Limpets, oysters and cockles were less commonly recorded (Table 3).

With the exception of two flat winkles (*Littorina obtusata* or *Littorina fabalis*), the rest were identified as the common or edible winkle (*Littorina littorea*), both of which species inhabit the middle and lower shore areas. Although it has been suggested that winkles were roasted to be used as lime in the vellum production process, there was no evidence of burning on the shells in this assemblage. However, this may not be surprising, as those winkles that had been roasted and crushed would not survive well in the archaeological record.

Although the use of dog whelks (*Nucella lapillus*) for the production of purple pigment has been documented as occurring in Anglo-Saxon Britain, little direct evidence has been forthcoming (Biggam 2006, 2). Unfortunately, despite their association with manuscript production at this site, the only whelk shell complete enough to be identified to species was that of the common whelk (*Buccinum undatum*), which are distinct from the dog whelk. Common whelks are found on the lower shore, and could be easily exploited.

Native British oysters (*Ostrea edulis*) were present, and could have been picked from freshwater, estuarine or marine beds. Cockles and limpets are also common finds on the middle and lower shoreline.

Phase 4: Medieval Lay Settlement (13-15th century)

As with the earlier period, winkles dominated the phase 4 assemblage by weight (Table 3), and given their small size compared to the other common shellfish, suggests the intensive exploitation of this species. Mussels and limpets were also recorded in significant numbers from the middens, along with a small number of crab claws and oyster shells. It is likely that these species formed part of the diet, and they could have been easily gathered from the shore.

Summary

The sheer quantity of shellfish remains in the phase 4 middens suggests intensive exploitation. Although it is possible that shellfish were exported from the site, it is most likely that the accumulations of shells derive from animals eaten by the inhabitants of the settlement.

Despite the results of isotope analysis on the human remains of the earlier phases 1 and 2 indicating that there was no intensive exploitation of shellfish for food, it is possible some were occasionally eaten, resulting in the significant deposit of winkles. There was no direct evidence for the use of shells for craft purposes – the winkles were not burnt or otherwise processed, and the whelks were not of the correct species to produce pigment.

Bibliography

- Biggam, C 2006 'Whelks and purple dye in Anglo-Saxon England'. *The Archaeomalacology Group Newsletter* **9**: 1-2
- Claassen, C 1998 *Shells*. Cambridge: Cambridge University Press
- Crothers, J 2003 'Rocky shore snails as material for projects (with a key for their identification)'. *Field Studies* **10**: 601-634