The oysters

Patsy Jones

Introduction

Many oyster (*Ostrea edulis)* shells were recovered from 18 of the total trenches excavated on the site. On most sites oyster shells are simply weighed or roughly counted. However, at Marcham under the guidance and training of oyster specialist Jessica Winder, Lottery funded volunteers recorded the whole assemblage in scientific detail, recording many features of importance on every shell examined. It is hoped that this data, as fully published here in the Oyster Data Spreadsheets, will prove of increasing interest as more oyster assemblages receive this detailed analysis and more work is done on the various coastal locations of oyster supplies in the Roman period.

Apart from small edge fragments, all the oysters were counted including partial shells with hinges - which could be identified as left or right valves, allowing the minimum number of individuals (MNI) to be recorded. MNI calculations are based on whichever of the counts for left and right valves in a given context is the highest and that is then the given MNI. The left valves of oysters are deeper and concave and this is where the oyster itself is located. The right valves which act as lids for the oyster are much flatter and are therefore easy to distinguish from the left in the recording process. The statistics for left as opposed to right valves in each context can be used to indicate various types of activities.

The complete shells were assessed for a number of factors including, for example, the number of left as opposed to right valves based on surviving hinges, the infestation of different types of epibionts, the attachment of barnacles or other oysters or colouration of shell. All of the shells were moderately worn.

Distribution

Based on the minimum number of whole oysters (MNI) represented by the statistics (see the Table of MNI Oysters per trench and individual trench Oyster Spreadsheets, this website) the vast majority of the 2,414 oysters found across the whole site were found in the MF zone trenches. Approx. 2,265 were found in MF zone trenches (Figure 1), while only 93 were found in MFNA zone trenches and 56 found in MFP zone trenches. This concentration in the MF zone is easily explained by the fact that the MFP zone trenches were largely over prehistoric features, and consumption of shellfish was not known in Bronze Age and Iron Age Britain. Likewise, many of the larger MNA zone trenches were over prehistoric features or, where they were over Roman features, they were small and focused tightly on the structure of the Roman-British temple where any food offerings or feast left-overs would have been regularly cleared away.

Shell was recovered from Trenches MF 2, 3, 4, 8, 9, 12, 14, 15, 18, 21, 24, 25, 26, 29, 39 and 40. Three trenches had over 250 individuals in each one, namely MF 14, 18 and 39. The presence of larger numbers of oyster remains in the neighbouring Trenches MF 15 (119) and 18 (251) is understandable as these trenches were located at the entrance to the *temenos*

which surrounded the main Romano-British temple on the site. The presence of other finds like drinking vessels in this area suggests there was probably a building or buildings serving the visitors with food and drink. There were also probably stalls at the entrance selling all sorts of things to the temple visitors. The large quantities of oyster shells found in Trench 14 (365), situated just inside the *temenos* wall, may be explained by the presence of a large Roman midden in this area and the oysters were spread across many contexts in this trench. The high numbers in Trench 39 (341), which contained two Roman smithing hearths but no other structures, is more puzzling. There was a layer several shells deep over part of MF 39 which extended beyond the trench, and this was largely in a subsoil context, possibly just below a Roman destruction layer. This spread may represent a dump which was part of a destruction layer, possibly related to the large structure in nearby Trench 2. The oysters found in MF Trench 2 itself (148) were largely concentrated in the topsoil and subsoil above the Roman structure as well as some in a destruction layer within the building. Finally, a surprising number of oysters were found in MF Trench 24 (202), where a possible small shrine was located. High numbers of votive finds were however found in this trench, so perhaps the consumption and disposal of oysters was part of ritual activity in this area.

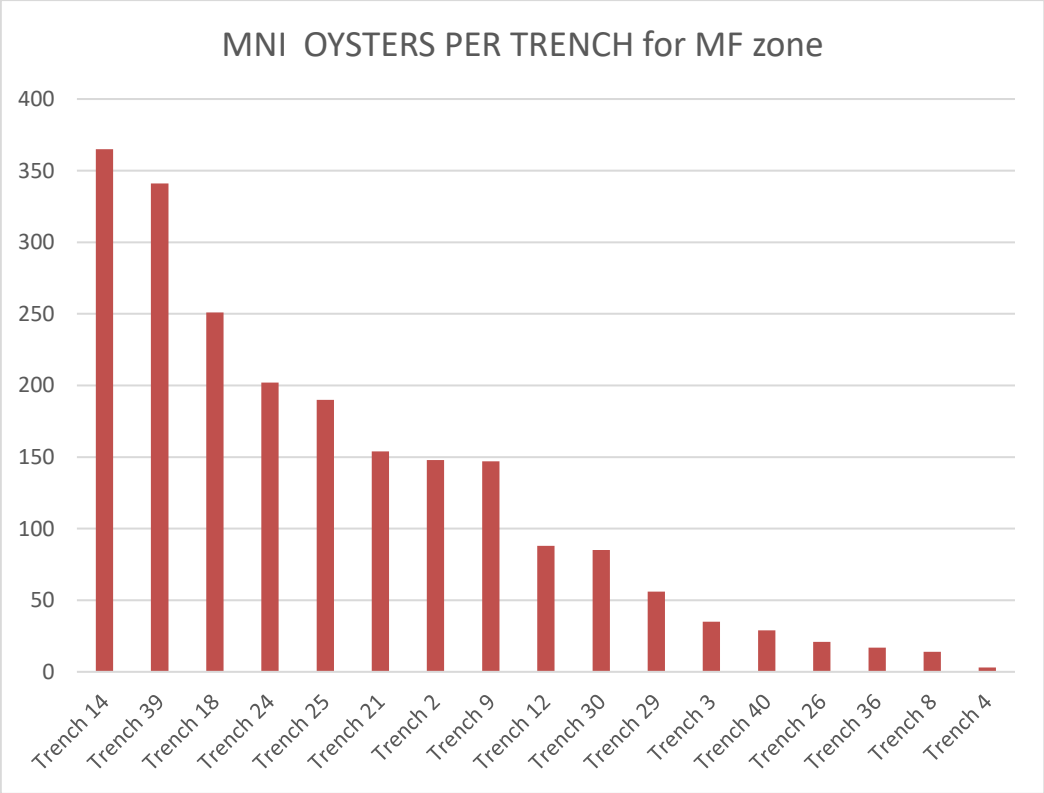


Figure 1. MNI Totals of oysters in the MF zone trenches

Origin

A range of infesting and attaching animals were evidenced in the Marcham oysters (Figure 2), which are collectively called epibionts. Many of these could have derived from various coastal locations. However, the presence of two rag worms, *Polydora ciliata* and *Polydora hoplura* can be used as an indicator of the geographical origin of the oysters. *Polydora ciliata*

has a wider distribution occurring along the east coast of England as well as the south coast, while *Polydora hoplura* enjoys the Channel water on the south coast and avoids the chillier North Sea.

In all of the MF trenches both of these infesting rag worms were found in the oysters, pointing more strongly to a south coast source. This suggests a main trade route coming up from the south into Oxfordshire

In the MFNA assemblage both *Polydora ciliata* and *Polydora hoplura* were found in trenches MFNA 2, 6 and 7 but MFNA 3 and 5 had neither. However, these were too small numbers to be significant.

Only one MFP trench had any assessable oysters and both worms were identified in MFP 2.

Epibionts found in Marcham oysters	**Characteristics of infesting epibiont**
Polydora ciliata	Small borings of marine worm
Polydora hoplura	Larger U-shaped borings of marine worm inside shell
Cliona celata tubes	Network of tiny borings from a sponge
Calcareous tubes	Calcareous tubes on outside of shell from marine worms
Barnacles	Barnacles attached to outside of shell
Bryozoa	Very fine holes, also called ‘seamats’, left by microscopic animals
Bore hole	Individual hole left by predatory gastropods
Sand tubes	Encrusting tube left on outside of shell by marine Sabellid worms

Figure 2. Infesting epibionts in the Marcham oysters

Bibliography

Winder, J.M. 2017. Oysters in archaeology. In Allen, M.J. (ed.) *Molluscs in Archaeology: methods approaches and applications* (Chapter 14). Oxford: Oxbow Books.

Winder, J. M. 2011. *Oyster shells from archaeological sites: a brief illustrated guide to basic processing.* Available at: https://oystersetcetera.wordpress.com/2011/03/29/oyster-shells-from-archaeological-sites-a-brief-illustrated-guide-to-basic-processing/

Winder, J.M. 1993. *A study of the variation in oyster shells from archaeological sites and a discussion of oyster exploitation*. University of Southampton, Department of Archaeology, Faculty of Arts, PhD.

Yonge, C. M. 1960. Oysters. *The New Naturalist*. London: Collins.