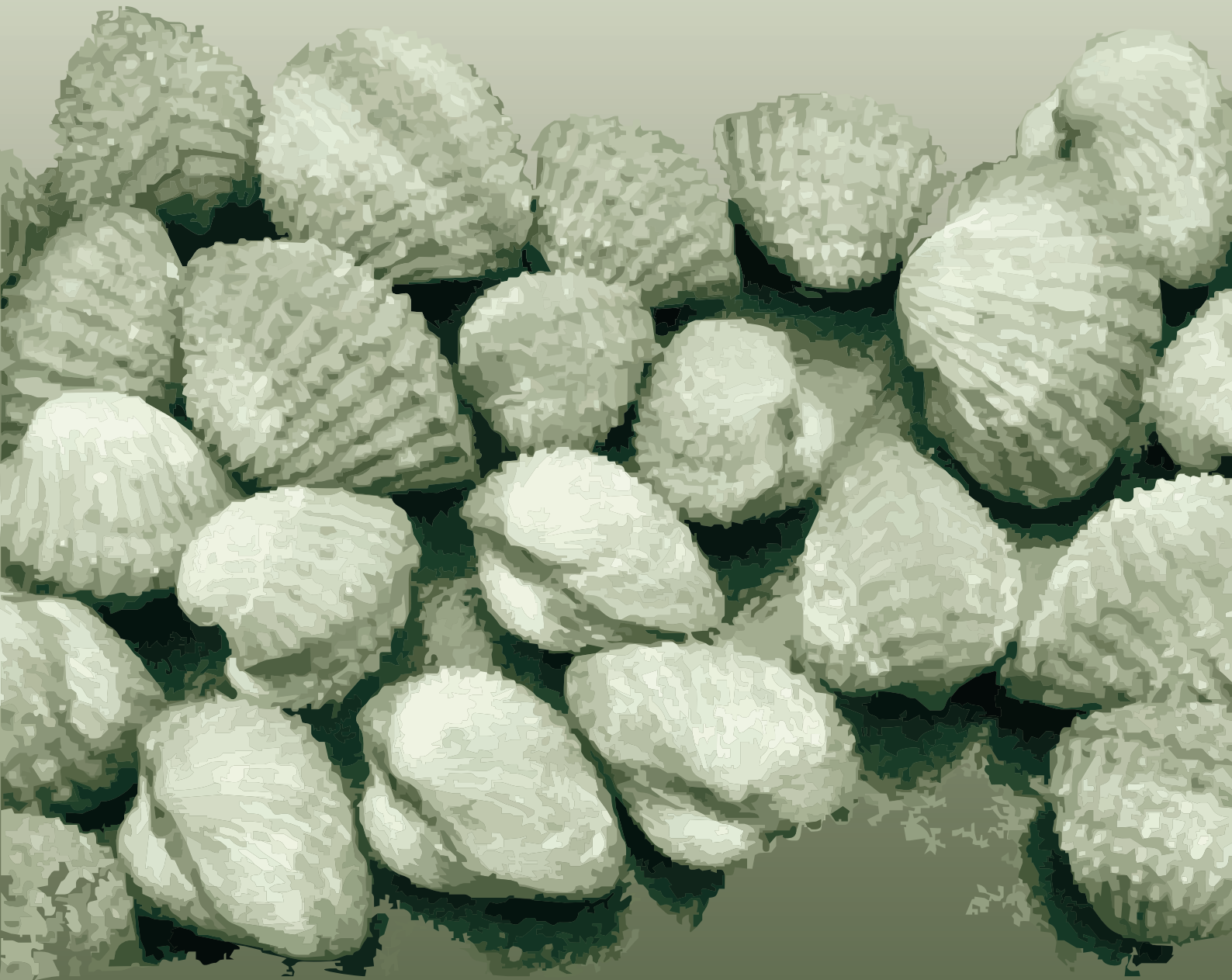


CHAPTER 33

Marine shell



by Sarah F Wyles

33 Marine shell

Sarah F Wyles

The marine shell assemblage consisted of 1,339 shells, representing 798 minimum numbers of individuals. These were retrieved from 209 deposits over four phases and from four of the sites at Stansted: namely the LTCP, MTCP, LBR and the FLB sites (see Table 33.1).

All the shell has been recorded by species and by context, with the oyster shell being sub-divided into left and right valves.

The predominant species of the assemblage was oyster (*Ostrea edulis*), forming 98% of the minimum number of individuals. The remaining 2% of the assemblage was comprised of bivalves, cockles (*Cerastoderma edule*), whelks (*Buccinum undatum*) and mussels (*Mytilus edulis*). There was no significant change in the occurrence of these other species by phase, but they were all recovered from either the LTCP or the MTCP sites.

Although the marine shell was retrieved from four sites, 64% of the assemblage came from the MTCP and 34% from the LTCP sites. The shell recovered from both the LBR and the FLB sites only represented 3% of the total assemblage (see Table 33.2).

The oyster shell from six phased deposits was analysed in more depth, three from the LTCP site and three from the MTCP site (see Table 33.3). The oysters were subdivided into measurable and unmeasurable left and right valves. Just over half the shells from the selected deposits were measurable, with a greater number of the unmeasurable shells being left valves (over 60%). The measurable valves were then measured and examined, both for traces of infestation and physical characteristics.

Early Romano-British

From the MTCP site, the shells from a pit (309169) and ditch (306045) of early Romano-British date were analysed in more depth. A higher percentage of shells were measurable from this period (62%), possibly due to the rapid disposal of the shell in the pit. The oysters were of a good average size again, with the majority of the shell having a maximum length of between 60 and 79 mm, and the only trace of mild infestation on 10% of them was also *Polydora ciliata*. Two-fifths of the shells were misshapen, possibly an indication of competition for space in a less well managed oyster bed. 80% of the misshapen shells were amongst those looked at in more detail. Notches and traces of opening were recorded on about 40% of the shells.

Late Romano-British

The oyster shell from a single ditch fill of late Romano-British date from the MTCP site was looked at in more detail (ditch 319319). Shells of small size were generally absent, indicating some form of selection before they were brought to site. Most of the shell had a maximum width of between 60 and 84 mm. 30% of the shells had traces of

a small amount of infestation by the polychaetic worm *Polydora ciliata*. This was the only indication of infestation observed. Over half of the shells were flaky, which could be a result of a slow rate of deposition of the shells.

Later medieval

The assemblage from a single later medieval midden deposit (467008) in the LTCP site was looked at in more detail. The shells were smaller than in the earlier periods but still indicated some sort of selection process. Most of the shell had a maximum width of between 45 and 64 mm. 30% of these shells showed signs of low level infestation by *Polydora ciliata*, while there were notches on two fifths of them.

Post-medieval

The shells from two post-medieval deposits, an occupation layer (472004) and a ditch fill (ditch 466020), in the LTCP site were studied in greater depth. The shells were again smaller than those of the Romano-British periods, with generally maximum lengths of between 40 and 64 mm. Traces of mild infestation by *Polydora ciliata* were observed on 16% of the shells. These shells were not in as good a condition as some of those from earlier phases, with around half of them being worn and a fifth of them flaky. This could be as a result of depositional processes. Notches were recorded on a fifth of them.

Conclusions

In general the oyster shells represent an augmentation and variety of the basic diet rather than a significant part of the diet. This is true for all phases and all sites where shell was recovered.

As there were no significant differences between the disposal of the 582 right oyster valves and the 600 left valves, no indications of areas of preparation or consumption can be detected in any of the sites. The proportion of unmeasurable to measurable shells is an indication of the degree of post-depositional damage and wear. As just under half of the shells from the selected deposits were unmeasurable and also, of the shells studied in more detail 37% were worn and 26% were flaky, it is probable that a significant amount of the shell was not disposed of rapidly.

There were few changes between the examined shells over time. There is an indication that the oyster beds, although still being managed, were relatively more cramped during the late Romano-British period. Also smaller shells (generally with maximum widths of less than 65mm) were exploited during the medieval and post-medieval periods. This could be a result of a slightly less rigorous selection procedure.

The oyster shells examined in more detail were mainly healthy with only low level traces of infestation on the shells by *Polydora ciliata*. (This polychaetic worm is widespread and is most prevalent on hard, sandy or clay grounds particularly in warm shallow water). The shells were slightly elongated, indicative of softer substrates.

It is likely that the shells came from an East coast source and that similar sources were exploited throughout the history of the sites.

Table 33.1: Marine shell by phase

No of Sites	Material Date	No of Deposits	Oyster MNI	Bivalve MNI	Cockle MNI	Whelk MNI	Mussel MNI	Total MNI
3	Early Romano-British	17	40	1	1	0	0	42
2	Late Romano-British	54	193	0	1	1	1	196
3	Med	11	36	0	0	0	0	36
1	Post-Med	37	194	1	1	1	2	199
4	Unphased	90	322	3	0	0	0	325
TOTAL		209	785	5	3	2	3	798

Table 33.2: Marine shell by site

Site	Material Date	No of Deposits	Oyster MNI	Bivalve MNI	Cockle MNI	Whelk MNI	Mussel MNI	Total MNI
LBR	Early Romano-British	2	3	0	0	0	0	3
LBR	Unphased	1	1	0	0	0	0	1
Sub total		3	4	0	0	0	0	4
FLB	Med	4	7	0	0	0	0	7
FLB	Unphased	4	11	0	0	0	0	11
Sub total		8	18	0	0	0	0	18
LTCP Phase II	Early Romano-British	3	2	0	1	0	0	3
LTCP Phase II	Late Romano-British	1	1	0	0	0	0	1
LTCP Area B	Med	2	24	0	0	0	0	24
LTCP Area B	Post-Med	37	194	1	1	1	2	199
LTCP Area B	Unphased	10	40	0	0	0	0	40
Sub total		53	261	1	2	1	2	267
MTCP	Early Romano-British	12	35	1	0	0	0	36
MTCP	Late Romano-British	53	192	0	1	1	1	195
MTCP	Med	5	5	0	0	0	0	5
MTCP	Unphased	75	270	3	0	0	0	273
Sub total		145	502	4	1	1	1	509
TOTAL		209	785	5	3	2	3	798

Table 33.3: Deposits analysed in more detail

Site	Period	Deposit	Feature	UMLV	MLV	UMRV	MRV	MNI	Max ave width	Max ave length	P. Ciliata	Thin	Thick	Heavy	Chambered	Chalky dep.	Worn	Flaky	Stain	Irreg shape	Notches
MTCP	early Romano-British	349053	Ditch 306045	8	9	8	3	17	63.7	62.5	1	7	0	0	0	1	4	4	1	3	8
MTCP	early Romano-British	309174	Pit 309169	7	13	2	16	20	69.7	61.3	3	7	0	0	2	6	7	0	4	5	10
MTCP	late Romano-British	319333	Ditch 319319	32	21	10	16	53	74.8	68.6	11	3	1	2	0	19	13	20	3	1	8
LTCP	MED	467008	Midden deposit	7	8	11	12	23	58.0	53.6	6	5	0	0	0	5	4	3	3	0	8
LTCP	PM	472004	Occupation layer	23	13	7	16	36	56.2	48.9	4	13	0	0	0	4	17	7	0	1	4
LTCP	PM	472007	Ditch 466020	5	11	12	14	26	60.9	53.5	5	8	1	1	0	4	12	5	2	1	6
TOTAL				82	75	50	77	175	63.9	58.1	30	43	2	3	2	39	57	39	13	11	44



*Framework
Archaeology*

London
BAA Stansted 