

HERODIUM

Final Reports of the 1972–2010 Excavations
Directed by Ehud Netzer

Volume I

Herod's Tomb Precinct

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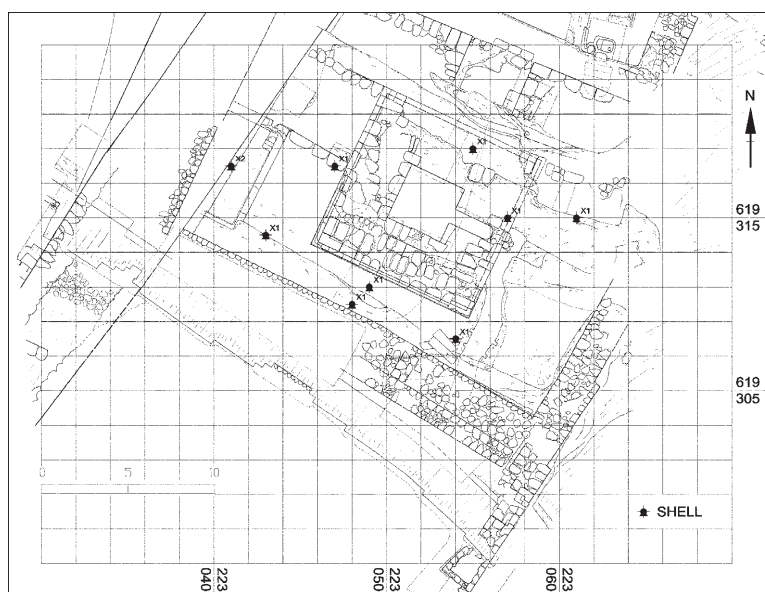
Color Plates

CHAPTER 17

THE MOLLUSCS

Inbar Ktalav

This report describes the shell assemblage recovered during the 2007–2011 excavation seasons at Herodium. Shells from three groups were found: land snails, freshwater shells, and marine shells. The samples came from two contexts, the area of Herod's tomb and the royal theater, in strata dated to Herod's reign (including the time of creation of the artificial conical mount prior to his death), and to the period from the First Jewish Revolt against the Romans (66–71 CE) up to the Bar-Kokhba Revolt (Plan 17.1).



Plan 17.I. Plan of the tomb precinct showing the locations where shells were revealed.

METHODS

The shells were retrieved by manual collection during the course of excavation. Shell remains were identified to species level.¹ The database was created using Microsoft Excel. It includes information on archaeological variables such as site, permit, area, locus, stratum, and context, and shell variables such as species, state of preservation (complete, broken, and fragment), processing or holes, and geographic

distribution. For quantification, the Number of Identifiable Specimens (NISP) was used. In describing the shells, a broken one refers to a shell (or valve) of which more than half is preserved. A fragment refers to a shell of which less than half remains.

RESULTS

Twenty-seven shells were retrieved from 23 loci and identified to species level. Fourteen are of Mediterranean origin, six came from the Red Sea, three are freshwater bivalves from the Nile River, one is a local freshwater gastropod, and one is a local land snail. The following table lists the species found, their origin, context, and their quantity in the sample.

STAIRWAY

One broken shell of *Hexaplex trunculus* (L.A12046–10157) was found on the surface during the excavation of the stairway.

THE AREA OF HEROD'S TOMB

The stratigraphy in this area dates from Herod's reign until the Bar-Kokhba Revolt. The tomb itself was probably built in the last decade of Herod's life

Table 17.1: Species according to origin and context.

Origin	Species	Stairway	Herod's Tomb	Royal Theatre	Plates
Mediterranean	<i>Erosaria spurca</i>			1	Pl. 17.I: 7
	<i>Bolinus brandaris</i>		3		Pl. 17.I: 2–4
	<i>Hexaplex trunculus</i>	1	2	2	Pl. 17.I: 1, 8
	<i>Glycymeris insubrica</i>			5	
Red Sea	<i>Cyprea pantherina</i>			1	Pl. 17.I: 9
	<i>Lambis truncata sebae</i>			3	Pl. 17.I: 10–12
	<i>Conus pennaceus</i>			1	Pl. 17.I: 13
	<i>Conus textile</i>			1	Pl. 17.I: 14
Nile	<i>Chambardia rubens</i>		3		Pl. 17.I: 6
Fresh water (local)	<i>Melanopsis buccinoidea</i>		1		
Terrestrial	<i>Xerocrassa simulata</i>			1	
Fossil	<i>Fossil gastropod</i>		1		Pl. 17.I: 5
	<i>unidentified</i>			1	

and remained in use until its deliberate destruction by First Revolt rebels around 66 CE. During the Bar-Kokhba Revolt (132–135 CE), the rebels dug tunnels in the mount, some of which emerged close to the mausoleum; parts of its architecture were used to hide the outlets of these tunnels.

Herod's Day up to the Bar-Kokhba Revolt

Surface: one complete, fresh shell of *Hexaplex trunculus* (L.A2578–5118) was found on the surface to the south of the mausoleum; and one broken shell of the freshwater gastropod *Melanopsis buccinoidea* was revealed in L.A2646–5371. Hypothetically, it might have reached Herodium via the aqueduct that brought spring water to the pool complex in Lower Herodium.

Herod's day till post-First Revolt (c. 71 CE): one complete shell of *Hexaplex trunculus* taken from the sea while the gastropod was still alive was found in a refuse dump close to the mausoleum (L.A2598–5267; Pl. 17.I: 1). Another shell from the same context (L.A2598–5251; Pl. 17.I: 2) belongs to *Bolinus brandaris*. Also found were two complete shells of the same marine gastropod taken from the sea while still alive. One was on a floor to the west of the

mausoleum (L.A2775–6199; Pl. 17.I: 3), and the other to the southeast of the structure (L.A2899–6563; Pl. 17.I: 4). A fossil gastropod was found in the eastern part of the building (L.A2705–5576; Pl. 17.I: 5).

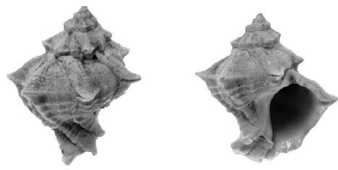
First Revolt: two fragments of the Nilotic bivalve *Chambardia rubens* were revealed south of the building (L.A2929–6590; Pl. 17.I: 6), and one was found inside it in its southern part (L.A2628–5312).

The Area of the Royal Theater

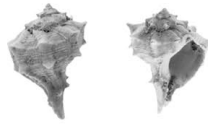
The royal theater at Herodium was probably built between 20 and 15 BCE and was in use till shortly before Herod's death (predating 4 BCE), when it was partly dismantled in favor of the construction of the artificial mount. All the shells from the theater were found in accumulations and it is difficult to distinguish those that were part of ongoing life at the theater from those that were used during the dismantling phase when the laborers resided there.

Sixteen shells were found in the theater. One of them is *Xerocrassa simulate*, the most widespread land snail in the Negev Desert (Heller 2009: 62–64). This land snail was found in L.A12386–12277, and came there naturally.

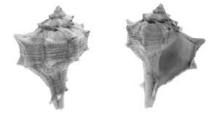
HERODIUM I: HEROD'S TOMB PRECINCT



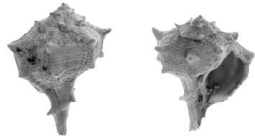
1
Hexaplex trunculus



2
Bolinus brandaris



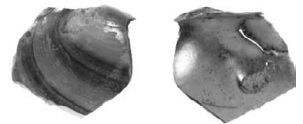
3
Bolinus brandaris



4
Bolinus brandaris



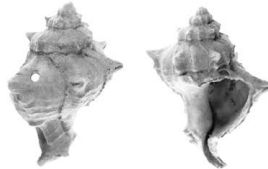
5
Fossil



6
Chambardia rubens



7
Erosaria spurca



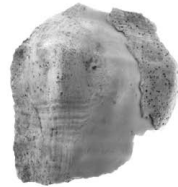
8
Hexaplex trunculus



9
Cyprea pantherina



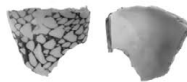
10
Lambis truncata sebae



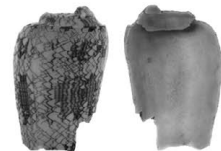
11
Lambis truncata sebae



12
Lambis truncata sebae



13
Conus pennaceus

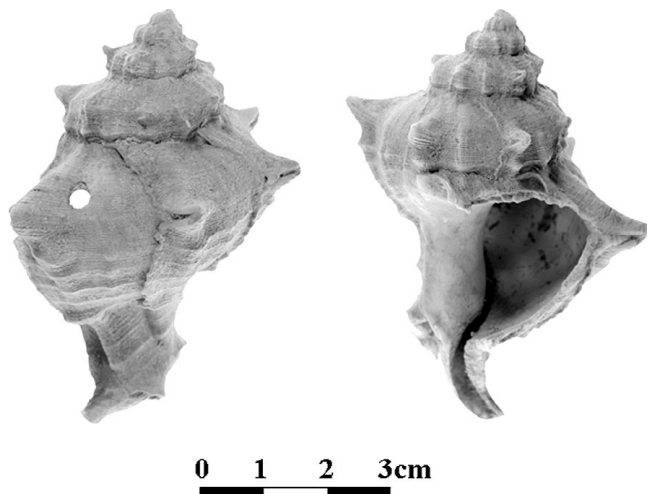


14
Conus textile



Pl. 17.I. Shell assemblage recovered during the 2007–2011 excavation seasons at Herodium.

Three species were brought from the Mediterranean Sea; a complete shell of *Erosaria spurca* with the back cut off was found in L.A12121–10425 (Pl. 17.I: 7). Two shells of *Hexaplex trunculus*, both taken from the sea while the gastropods were still alive, one complete and one broken with an artificially drilled hole in the body whorl, were found in L.A2083–10282 (Pl. 17.I: 8) and L.A12045–10207 (Ill. 17.1). Five complete shells of *Glycymeris insubrica* that had been collected on shore, were found in L.A12448–12278, L.A12156–10521 and 10534, L.A12330–10914, and L.A2915–6600. Four of them have an artificial hole in the umbo. Four species were brought from the Red Sea; one fragment of *Cypraea pantherina* taken alive from the sea was found in L.A12229–10432 (Pl. 17.I: 9). Three fragments of *Lambis truncata sebae*, one large and two small, from different parts of the shell, which unfortunately do not conjoin, were found in L.A12258–10706 (Pl. 17.I: 10), L.A12221–10389 (Pl. 17.I: 11), and L.A12224–10418 (Pl. 17.I: 12).



Ill. 17.1. *Hexaplex trunculus* with an artificially drilled hole in the body whorl (L.A12045–10207).

The fractures seem recent, perhaps caused during the excavation. It is possible but not certain that all of them originated from the same shell. The shell was collected on shore and is not worked. A fragment of *Conus pennaceus* was found in L.A12159–10541 (Pl. 17.I: 13); another from this basket was unidentifiable. Another fragment belonging to *Conus textile* was found in L.A12161–10544 (Pl. 17.I: 14).

DISCUSSION

Distribution and inter-regional connections

The malacological evidence from Herodium indicates contacts with the Mediterranean, the Red Sea, and the Nile River. Nine different taxa are present from these regions:

Four species are from the Mediterranean — *Erosaria spurca* (one specimen; Pl. 17.I: 7), *Bolinus brandaris* (three specimens; Pl. 17.I: 2–4), *Hexaplex trunculus* (five specimens; Pl. 17.I: 1, 8), and *Glycymeris insubrica* (five valves). All are common in the Mediterranean (Barash and Danin 1992).

Four species are from the Red Sea/Indo-Pacific: *Cypraea pantherina* (one specimen; Pl. 17.I: 9), *Lambis truncata sebae* (three specimens; Pl. 17.I: 10–12), *Conus pennaceus* (one specimen; Pl. 17.I: 13), and *Conus textile* (one specimen; Pl. 17.I: 14). *Cypraea pantherina* is common in the Red Sea and Gulf of Aden, at a depth of at least 3 m, in clear water adjacent to coral reefs (Burgess 1970: 205). *Lambis truncata sebae* is fairly common in the Red Sea and the tropical Pacific Ocean, living in colonies on sandy, algal, and coral rubble bottoms in the vicinity of coral reefs (Abbott 1961: 156). *Conus pennaceus* can be found along the Gulf of Eilat in very shallow water, buried in sand during day and night (Fainzilber et al. 1992: 9). *Conus textile* is found on almost any reef on the Sinai coast, at a depth ranging from 0.5 m to 15 m, usually buried in sand during the day and actively moving around the reef at night (Fainzilber et al. 1992: 12–13).

One species, *Chambardia rubens* (Pl. 17.I: 6), is from the Nile River. This is a large freshwater mussel distributed in East Africa (the Nile River) and Central and West Africa. The shell is solid and ovate. Its interior is pink mother-of-pearl that changes to white when exposed to sunlight. It occurs mainly in stagnant or slowly running water (Mandle-Barth 1988; Pain and Woodward 1962). The fragments of *Chambardia rubens* were found in a locus with a *terminus ante quem* dated to the First Revolt (66–71 CE) but containing material from Herod's time; I believe that their usage dates from Herod's time and not later.

The finds from the area of Herod's tomb indicate

commercial connections with the Mediterranean and the Nile River from 20 BCE till 66 CE at the latest, and the finds from the royal theater indicate trade with the Mediterranean and the Red Sea during 20–4 BCE. In addition, also other goods were brought to Herodium from the Mediterranean, especially from Spain and Italy (Ecker 2013), or Alexandria/Egypt (Rosenberg 2013: 190–194). These connections are indicative of Herodium's central position and of the luxury goods that were brought there during Herod's reign.

Consumption

There are two main criteria concerning the usage of molluscs as food items: firstly, they must have been taken fresh and alive from the sea, and secondly, the species must be edible (as judged by what is eaten today). On rare occasions, there are signs of breakage on the shell that indicate it was detached from a rock, as in the case of *Patella caerulea*, or the opening of the valves in bivalves.

Shells of *Bolinus brandaris* (Pl. 17.I: 2–4) and *Hexaplex trunculus* (Pl. 17.I: 1, 8) from the Roman period are often found “fresh” (meaning they were probably taken alive from the sea). Both species are edible and *Bolinus brandaris* is considered as very tasty and nowadays is caught for consumption along the Catalan coast in the amount of 360 tons per year (Poppe and Goto 1991; Paloma et al. 1995). Four shells of *Hexaplex trunculus*, two of which were found in the theater and the other two in the mausoleum, and three shells of *Bolinus brandaris* revealed in the mausoleum, were collected from the Mediterranean while these gastropods were probably still alive. Although the amount of shells is small, there is a possibility that they had been consumed. This hypothesis could be tested when new material from future excavations from other areas at the site will become available for research.

Parallels for the consumption of members of the Muricidae family were found in Shuni, Lag'un, the Eden Hotel (Jaffa), the theater in Tiberias, and Horvat 'Eleq (Ktalav submitted; Mienis 2000: 527–528).

In addition to molluscs, fish were also brought to Herodium from the Mediterranean (see Chapter 16, above). It is plausible that Herod, as a host who

entertained elite members of Roman society at his court, also served non-kosher food such as molluscs. Furthermore, the presence of molluscs as exquisite food is in good accord with other finds from Herodium: fish sauces (*garum*) from Spain, wines from Italy, and apples from Cumae (Ecker 2013).

Ornaments and amulets

Five shells featured an artificial hole indicating their possible use as ornaments. One type of ornament was made from the common Mediterranean bivalves *Glycymeris insubrica*; their umbo is often found naturally or artificially perforated, making possible the use of the shell as a pendant or an ornament that could be sewn to cloth, baskets or similar materials. Four valves of this species were found in the theater (L.A12448, L.A12156, and L.A12330). Another type of ornaments was fashioned from a complete gastropod shell with an artificial hole that was produced by puncturing, rubbing or drilling in the body whorl. One such shell of *Bolinus brandaris* was also found in the theater (L.A12045).

Lambis truncata sebae has a large and decorative shell which could be used as an ornament or a decorative item. Such is the case with two other shells, of medium size: *Conus pennaceus*, and *C. textile*. All three shells were brought to Herodium from the Red Sea.

Erosaria spurca and *Cyprea pantherina* are cowry species. Cowries are known to have symbolic associations with the cosmic forces that govern fertility, birth, and life/afterlife (Eliade 1961: 143), but they also served as amulets against the evil eye (the shape of the cowry resembles a half-open human eye; Dickie 2001: 129–130). Since ancient societies believed that sterility of people, animals, and crops was caused by the evil eye generated by envy, protective amulets in the form of cowries may have been regarded as apotropaic (Ogden 2009: 224). This belief exists in many cultures around the world, but it is strongest around the Mediterranean, in the Middle East, and northwest India (Safer and Gill 1982: 140). In the context of a theater the supernatural played a role both in the plots on the stage and behind the scenes in the real life of the actors. In the Roman period, all kinds of entertainment (hippodrome, amphitheater, and theater) were highly competitive.

The competition was very passionate because the economic welfare of the participants was greatly dependent on the prizes paid to the victorious. Besides trying to bring their art to perfection, the actors did not neglect supernatural assistance. Actors (as well as gladiators and charioteers) cast spells on each other and used apotropaic magic against such spells (Ogden 2009:215, 270; Dickie 2001: 300–301). It is possible that *Erosaria spurca* was used as a personal amulet that could be threaded as a bead on a necklace or bracelet, or sewn to a cloth. The *Cyprea pantherina* is too large to have served as a personal amulet, but it could have been used to protect the area of the theater or part of it. A similar shell (in size and pattern) but of a different cowry species, *Cyprea tigris*, was found in a Roman context in the theater at Tiberias (Ktalav submitted).

SUMMARY

The shell assemblage from Area A supports the general understanding of Herodium as a governmental center and a consumer of imported luxury goods. Mollusc shells brought to the site from the Mediterranean coast, the Red Sea, and the Nile serve as evidence of connections with these areas. The shell assemblage attests to a luxurious way of life, which

is true not only for shells that were imported as luxury items, but also for the molluscs that were consumed. The effort to bring living/preserved molluscs into the desert was probably beyond the means of the simple man.

The worked shells, such as *Bolinus brandaris* and *Glycymeris insubrica*, were used as simple ornamentation in pendants or as beads sewn onto clothes and other degradable materials. *Lambis truncata sebae*, *Conus pennaceus*, and *C. textile* were used as luxury items. The cowries (*Erosaria spurca* and *Cyprea pantherina*) served as amulets or apotropaics against the evil eye, and the use made of *Chambardia rubens* is unclear although it is known to have had medicinal/cosmetic, magical/cultic applications in addition to serving as a raw material for inlays and as a food, which were clearly not the case at Herodium.

ACKNOWLEDGMENTS

I would like to thank Roi Porat for giving me the opportunity to study the discussed material. Special thanks are due to Henk K. Mienis (curator of the Mollusc Collection at The Hebrew University and Tel Aviv University) for his continuous aid and support. I also thank the anonymous reader for his comments.

NOTE

1. Henk Mienis, the curator of the Mollusc Collection at The Hebrew University and Tel Aviv University, provided useful advice regarding some of the shells more difficult to identify.

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