

UNDERWATER PTOLEMAIC COIN HOARDS FROM MEGADIM

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In 1964, divers of the Underwater Exploration Society in Israel surveyed the shallow underwater zone adjacent to Naḥal Megadim, on the Carmel coast (Fig. 1). During this survey, they discovered a concentration of bronze objects, among them coins from the Hellenistic and Mamlūk periods. The site was subsequently covered with sediments for about twenty years. In 1983, following a severe storm, the center of the site was exposed. A joint rescue expedition was carried out by the Marine Unit of the Israel Antiquities Authority and the Leon Recanati Institute for Maritime Studies of the University of Haifa.¹ As a result, hundreds of artifacts were documented and recovered from the site.

Already in the preliminary stages of exploration it was apparent that two wrecks, dating from different periods, were present at the site; one was from the Hellenistic period and the other, from the Mamlūk period. The Hellenistic-period remains were scattered over an area of 100 × 300 m at a depth of 2–4 m, about 50–150 m offshore. The assemblage from the Mamlūk period was concentrated in a relatively small area measuring 30 × 30 m.

The investigations revealed numerous Hellenistic metal artifacts including silver and bronze coins, bronze artifacts and a Rhodian amphora that contained a large quantity of bronze objects. The amphora was originally intended to store wine; this was indicated by the pine resin that coated its inner wall. This type of container was in use during the second century BCE (Gerald Finkielsztein, pers. comm.; see also Misch-Brandl and Galili 1985:12 [English]; drawing on p. 12 [Hebrew]). The amphora was found to contain ten bronze coins (see below), as well as finished, unfinished

and broken bronze artifacts, including winged arrowheads, hundreds of nails, tacks with mushroom heads and nails with gilded heads, square ingots (three of them bearing stamped inscriptions), gilded objects and ornaments, fragments of a life-sized statuette, a *himation*

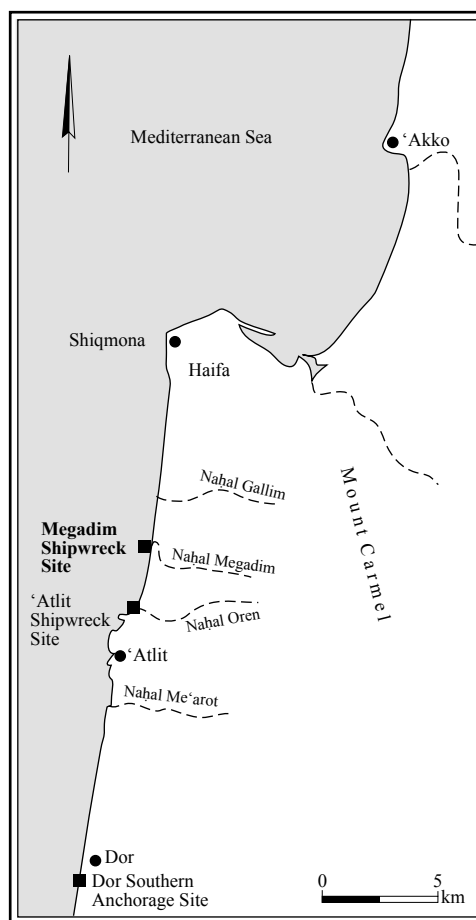


Fig. 1. Location map.

(clothing article) inlaid with silver decoration, decorated bracelets, unfinished bronze fittings for building, fishing hooks and a silversmith's tool-kit, containing compasses and chisels. Bronze objects found on the seabed included figurines of Harpocrates and an unidentified male, two bronze oil lamps, one with three nozzles, hundreds of nails, anthropomorphic and zoomorphic statue fragments and two oil lamps (Misch-Brandl and Galili 1985).

THE NUMISMATIC MATERIAL

The coins were collected during five different dives, and initially were not separated into groups. However, according to the dive logs, the coins can be confidently separated into three groups: bronze coins (hereafter, Hoard 1), which were found together; silver coins (hereafter, Hoard 2), which were found scattered in an area of c. 20 × 20 m; and coins from within the amphora (hereafter, Hoard 3).² Five additional bronze coins, which were collected during those dives are clearly stray finds; they include two unidentifiable 15 and 16 mm coins, one *foliis* of Constantine I (316–317 CE) and two Mamlūk *fulūs* of Sultan Faraj (1399–1405 CE; see Cat. Nos. 74–76). The *fulūs* most likely belong to the Mamlūk wreck that sank very close to the Hellenistic-period wreck, itself yielding an enormous hoard of bronze coins (Misch-Brandl and Galili 1985: Cat. No. 43).³

Hoard 1

This hoard consists of 55 medium-sized Ptolemaic bronze coins, 51 of them in the 23–27 mm diameter range (Nos. 1–51). Most are worn smooth from use, or nearly so. Of these 51 coins, 11 can be securely identified as examples of Svoronos (1904) Nos. 1190 or 1193, 6 being clearly the latter issue. On some of the other coins enough detail is visible to enable us to conclude that all 51 coins are, in fact, of the same type: on the obverse is the head of Zeus-Ammon right; on its reverse, an eagle with folded wings standing left on a thunderbolt. To

the left of the eagle is the sign Ω above Σ, and to its right—the date.

Svoronos associated such bronze coins with precious metal coins of Tyre, Sidon, and Ptolemais bearing the portrait of Ptolemy IV (222–205 BCE) and the control letters ΣΩ or Ω above Σ (Svoronos 1904: Nos. 1177–1179, 1185–1187). He interpreted these letters as the signature of Sosibius, minister to Ptolemy IV, and dated these coinages to the time of the Fourth Syrian War, the bronzes specifically to the years 220/19 and 219/8. The bronzes bear a second control on the obverse, a KP monogram, which Svoronos took to be a mintmark of Crete or, less likely, Cyprus (Svoronos 1904, 4:227–230). Mørkholm later reattributed this complex of coinages to the early years of Ptolemy V (205–180 BCE) in the context of the Fifth Syrian War (202–198 BCE). He assigned the dated bronzes to an uncertain mint in Phoenicia (Mørkholm 1979:207, n. 14).

Neither of these published attributions can be accepted for the dated bronze series (Svoronos 1904: Nos. 1190–1191 and 1193–1194). Svoronos No. 1193 appears in some number in Egyptian lots, making it likely that the dated bronze series was minted in Alexandria. The style of the eagles, with their legs mostly covered by feathers, is incompatible with the dates proposed by Svoronos and Mørkholm; in the early reign of Ptolemy V the eagle was still depicted with only a tuft of feathers at the top of the legs, which were otherwise bare. Based on this stylistic criterion, the bronzes might be datable to the early years of Ptolemy VI (180–145 BCE) or to his joint reign with his younger brother Ptolemy VIII (170–164 BCE). However, the hoard record now includes a series of overlapping bronze hoards that account for the bronze coinage of the early and mid-second century (Faucher and Lorber 2010:47–49, 60–62). The absence of the dated bronze series from these hoards supports a date of issue after the reign of Ptolemy VI. The next new regnal count did not begin until the accession of Ptolemy IX in 117, and indeed, Svoronos Nos. 1190–1191 and 1193 were assigned to this reign

in a study of a bronze hoard found at Gezeir, Egypt (Faucher and Shahin 2006). The Gezeir hoard consisted of dated bronzes exclusively and this appears to be the case for our Hoard 1 as well. This pattern of hoarding may indicate that the dated bronze series was demonetized in a currency reform. The letters ΣΩ, which appear on the dated bronzes, are probably an abbreviation for Soter, the epiklesis of Ptolemy IX.

Of the remaining four Ptolemaic coins, the smallest (19 mm; No. 54) and the largest (32 mm; No. 55) are worn smooth beyond any possibility of identification. The third (No. 52) carries on the obverse the head of Alexander the Great wearing an elephant skin, not identifiable to a specific ruler, and the fourth (No. 53) has an eagle with open rather than folded wings, but with all other details obliterated. This coin is probably of Ptolemy II (284–246 BCE).

Hoard 2

Hoard 2 consists of 19 silver tetradrachms, all in a very poor state of preservation (Nos. 56–74). Most are almost smooth, although it cannot be certainly determined if the wear was caused by use or by sediment abrasion. The silver coins were found relatively close to Hoard 3, which was found inside the amphora. The coins are greatly underweight because of leaching that occurred while they were underwater; some coins lost more than half their original weight.

On eight coins, the head of a Ptolemaic ruler can be discerned, and on six coins, it can be determined that the eagle has folded wings. Six coins could be fully identified. These range from Ptolemy VIII to Ptolemy X (152/1–100/99 BCE). It seems very likely that the others fit within this range. The three coins of Ptolemy VIII are from Cypriot mints (two from Citium, one from Salamis). The other three, although they carry the letters ΠΑ, are from the mint of Alexandria, not Paphos.

Hoard 3

Apart from bronze artifacts (see above), the hoard contained ten bronze coins, seven of

which were identified: four Ptolemaic coins (Cat. Nos. 79, 80, 83, 84), in a very poor state of preservation;⁴ two Seleucid coins (Cat. Nos. 81, 82); and a Lycian coin (minting range c. 180(?)–168 BCE; No. 78).⁵ The three later coins are in an excellent state of preservation, although the Seleucid coins were at least several decades old at the time the ship sank (see below). This suggests that they were picked up at some port of call. Further corroboration of the suggestion that this hoard is an eclectic collection of objects from various ports is the coin from Lycia, very rarely found in Israel. As far as we are aware, only five other such coins from this coast were found in the country, all in a hoard from Ashqelon (Gitler and Kahanov 2002: Nos. 37–41).

Hoard 3 could not have been assembled before 116 BCE, the earliest date of the latest type (No. 84). The mixed nature of the coins suggests that they were added singly into the amphora, possibly at various ports.

Dating

With the necessary reservation applied due to poorly preserved specimens, it can be safely determined that the latest identifiable coin in Hoard 2, dated 100/99 BCE (No. 61), supplies a firm *terminus post quem* for the shipwreck. This date falls a few years after the foray of Ptolemy IX Lathyrus to the Levantine coast, so a connection of the wreck with this episode can be ruled out.⁶

The bronze coins from Hoard 1 date slightly earlier, and the latest coin from Hoard 3 (116–96 BCE; No. 84) could be contemporaneous. The nature of Hoard 3 as bronze scrap for remelting argues for a later date, because the coins of Ptolemy IX/X in it would have been still current in 100/99 BCE, and need not have been relegated to the scrap heap. Another explanation for this late coin is possible, namely that it entered the amphora somewhere where it was not appreciated as currency.

Thus, a reasonable date for the wreckage would be toward the end of the first decade of the first century BCE.

The Origin of the Ship

The Ptolemaic silver coins of Hoard 2 likely belonged to the ship's owner, a crew member or a passenger, and were current at the time the ship was lost. This last argument suggests that the ship was Ptolemaic, but this need not be so. Commercial ships plied the coastline and stopped wherever there was business to be had, and the presence of Ptolemaic, Seleucid and Lycian coins in Hoard 3 shows that the ship visited diverse ports. The Seleucids even facilitated trade relations with Egypt by the continued use of the Ptolemaic standard in Koile-Syria and Phoenicia after 200 BCE.⁷ Although we cannot determine the 'nationality' of the ship, the make-up of Hoards 1 and especially 2 suggests that one of its last ports of call was either in Egypt or, more likely, Cyprus. It should be noted that the coin of Ptolemy IX/X from Hoard 3 (No. 83), mentioned by Gitler and Kushnir-Stein (1994–1999) in connection with Lathyrus' stay on this coast, could just as easily have been picked up by the ship on Cyprus. Another Cypriot connection appears to be that Lycian coins have been found on the island (Nicolaou 1990:75, No. 572; Michaelidou-Nicolaou 1993:19, No. 13). Interestingly, this last reference shows, albeit at a different time, the two-way connections between the Syro-Palestinian coast and Cyprus, as the hoard discussed there contained no less than seven coins from Phoenicia, Judea and Nabatea, spanning the period from Antiochus IV (175–164 BCE) to 139–140 CE (three coins of Tyre: Michaelidou-Nicolaou 1993:17–21 [Hoard II]; Nicolaou 1990:79–80, Nos. 592–594; for Jewish coins found on Cyprus, see Destrooper-Georgiades 2006).

CATALOGUE

Hoard 1

1. IAA 102774.

Cleopatra III and Ptolemy IX joint reign, 115/4 BCE, Egypt.

Obv.: Head r. (traces)

Rev.: [ΠΤΟΛΕΜΑΙΟΥ] ΒΑΣΙΛΕ[ΩΣ] Eagle l., wings folded, on thunderbolt

To l. Ω/Σ, to r. date ΛΓ

Æ, ↑, 10.71 g, 25 mm.

Cf. Svoronos 1904: No. 1190.

2–4. (2) IAA 102769; (3) IAA 102768; (4) IAA 102772.

Cleopatra III and Ptolemy IX joint reign, 114/3 BCE, Egypt.

Obv.: Head r. (traces)

Rev.: [ΠΤΟΛΕ]ΜΑ[ΙΟΥ] ΒΑ[ΣΙΛΕΩΣ] Date ΛΔ Eagle l., wings folded, on thunderbolt

Æ, (2) ↑, 7.76 g, 25 mm; (3) Æ, 7.26 g, 24 mm;

(4) Æ, ↑, 10.81 g, 25 mm.

Cf. Svoronos 1904: Nos. 1190–1194.

5. IAA 102764.

Cleopatra III and Ptolemy IX joint reign, 114/3 BCE, Egypt.

Obv.: Head of Zeus-Ammon r. (traces of the horn only)

Rev.: To l. Ω (over Σ?), to r. date ΛΔ

Æ, ↑, 9.33 g, 25 mm.

6. IAA 102767.

Cleopatra III and Ptolemy IX joint reign, 114/3 BCE, Egypt.

Rev.: To r. date L(?)Δ

Æ, ↑, 13.48 g, 27 mm.

7. IAA 102780.

Cleopatra III and Ptolemy IX joint reign? 114/3 BCE? Egypt?

Obv.: Head r.

Rev.: Obliterated. Eagle l., wings folded, on thunderbolt. To l. obliterated, to r. date ΛΔ(?)

Æ, ↑, 11.08 g, 25 mm.

8–12. (8) IAA 102770; (9) IAA 102771; (10) IAA 102763; (11) IAA 102766; (12) IAA 102781.

Cleopatra III and Ptolemy IX joint reign, 115/4–114/3 BCE, Egypt.

Obv.: Head of Zeus r.

Rev.: ΠΤΟΛΕΜΑΙΟΥ [ΒΑΣΙΛΕΩΣ] Eagle. To l. Ω/Σ, to r. obliterated
 Æ, (8) ↑, 11.61 g, 26 mm; (9) Æ, ↑, 11.14 g, 25 mm; (10) Æ, ↖, 12.13 g, 26 mm; (11) Æ, ↑, 12.12 g, 25 mm; (12) *Rev.*: To l. unclear letter (Ω?) over Σ, to r. obliterated, Æ, ↑, 9.53 g, 26 mm.
 Cf. Svoronos 1904: Nos. 1190–1194.

13–51. IAA 102777–779, 102782–792 and unnumbered coins.

Ptolemaic, probably as Nos. 1–12, 2nd c. BCE.

Obv.: Head r. (traces)

Rev.: Inscription obliterated or illegible. Eagle l. on thunderbolt (traces)

Æ, on 8 coins axis ↑, the rest cannot be determined. Weight range 6.23–13.87 g, diameter range 23–26 mm. Mostly worn smooth.

52. IAA 102773.

Ptolemaic, 2nd c. BCE.

Obv.: Head of Alexander in elephant skin r.

Rev.: Obliterated. Eagle l. To l. uncertain letter over Σ

Æ, ↑, 11.99 g, 27 mm.

53. IAA 102765.

Ptolemaic, 2nd c. BCE, Egypt.

Obv.: Head of Zeus-Ammon r. (traces)

Rev.: Traces of inscription, small letters. Eagle l., wings open. To l. illegible monogram, to r. date?

Æ, ↑, 14.88 g, 28 mm.

Cf. Svoronos 1904:341.

54. IAA 102793.

Ptolemaic, 3rd–2nd c. BCE.

Obv.: Obliterated

Rev.: Inscription obliterated. Eagle l. (traces)

Æ, 4.39 g, 19 mm.

55. Ptolemaic.

Æ, 17.12 g, 32 mm.

Hoard 2

56. IAA 102775.

Ptolemy VIII, 152/1 BCE, Citium (Cyprus).

Obv.: Head of Ptolemy r.

Rev.: ΠΤΟΛΕΜ[ΑΙΟΥ ΒΑΣΙΛΕΩΣ] Eagle l., wings folded, on thunderbolt. To l. date ΚΘ, to r. ΚΙ

Æ, *tetradrachm*, ↑, 7.10 g, 23 mm.

Svoronos 1904: No. 1578.



57. IAA 102776.

Ptolemy VIII, 130 or 127 BCE, Citium.

Obv.: Head of Ptolemy r.

Rev.: ΠΤ[---] Eagle l., wings folded, on thunderbolt. To l. date ΛΑΑ or ΛΑΔ, to r. ΚΙ

Æ, *tetradrachm*, ↑, 6.66 g, 24 mm.

Cf. Svoronos 1904: Nos. 1580–1581.

58. IAA 102762.

Ptolemy VIII, 120 BCE, Salamis.

Obv.: Head of Ptolemy

Rev.: Obliterated. Eagle l., wings folded, on thunderbolt. To l. date [Λ]Ν, to r. ΣΑ

Æ, *tetradrachm*, ↑, 11.24 g, 22 mm.

Cf. Svoronos 1904: Nos. 1564–1565; *SNG Ptolemies*: 582.

59. IAA 102758.

Ptolemy IX and Cleopatra III, 114/3 BCE, Egypt.

Obv.: Head of Ptolemy

Rev.:]ΛΕΜ[---]ΒΑ[---] Eagle l., wings folded, on thunderbolt. To l. date ΛΓ, to r. ΠΑ

Æ, *tetradrachm*, ↑, 5.62 g, 25 mm.

Cf. Svoronos 1904: No. 1663.

60. IAA 102761.

Ptolemy X, 101/100 BCE, Egypt.

Obv.: Head of Ptolemy

Rev.: [ΠΤΟΛ]ΕΜΑΙΟ[Υ] ΒΑΣΙΛΕ[ΩΣ] Eagle l., wings folded, on thunderbolt. To l. date ΛΙΔ, to r. ΠΑ

Æ, *tetradrachm*, ↖, 11.26 g, 23 mm.

Cf. Svoronos 1904: No. 1674.

61. IAA 102760.

Ptolemy X, 100/99 BCE, Egypt.

Obv.: Head of Ptolemy

Rev.: ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ Eagle l., wings folded, on thunderbolt. To l. date ΛΙΕ, to r. ΠΑ

Æ, *tetradrachm*, ↑, 11.29 g, 24 mm.

Cf. Svoronos 1904: No. 1675.



62–74. IAA 102759, 102794, 102797–102805 (two unnumbered).

Ptolemaic, 2nd c. BCE.

Obv.: Head r. (traces)

Rev.: Obliterated inscription. Eagle (mostly obliterated)

Æ, *tetradrachm*, ↑ (on six coins), 4.18–10.59 g, 22–26 mm.

Stray Coins

75. IAA 102757.

Constantine I, 316–317 CE, Lugdunum.

Obv.: IMP CONSTANTINVS PF AVG Bust r., laureate

Rev.: SOLI INVIC–TO COMITI Sol, naked, stg. l., r. hand raised. In l. globe. In field l. T, in field r. A

Æ, ↓, 4.48 m, 23 mm.

RIC VII:102, No. 88.

76. IAA 102796.

Faraj, 1399–1405 CE.

Obv.: Traces of inscription

Rev.: Obliterated inscription. Cup

Æ, *fals*, 2.55 g, 20 mm.

Balog 1964, No. 659 (var.).

77. IAA 102795.

As No. 76.

Obv.: Traces of inscription

Rev.: Geometric design

Æ, *fals*, 2.01 g, 15 mm.

Balog 1964, No. 657.

Hoard 3

78. IAA 81239.

Autonomous, c. 180(?)–168 BCE, Lycia.

Obv.: Obliterated (Head of Apollo, facing)

Rev.: [Λ]ΥΚΙΩΝ Bow and quiver.

Æ, 1.32 g, 8 mm.

SNG Denmark VI: No. 39.



79. IAA 81238.

Ptolemy VIII, 164–116 BCE, Paphos(?)

Obv.: Head of Zeus-Ammon r. with horns (grotesque)

Rev.: ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕ[ΩΣ] Eagle l., w. folded wings on thunderbolt. In field l., lotus bud

Æ, ↑, 4.70 g, 20 mm.

Cf. Nicolaou 1990: No. 175.



80. IAA 81242.

Ptolemy VIII (?), 164–116 BCE, Cyprus.

Obv.: Head of Zeus-Ammon r.

Rev.: Inscription obliterated. Eagle l., w. folded wings on thunderbolt. In field l., lotus bud

Æ, ↑, 1.93 g, 16 mm.

81. IAA 81240.

Antiochus V, 163/162 BCE, Tyre.

Obv.: Head r., with diadem.

Rev.: [ΒΑΣΙΛΕ]ΩΣ Α[ΝΤΙΟΧΟΥ] Palm tree. Date N–P

Æ, *dilepton*, ↑, 2.88 g, 15 mm.

Cf. SNG Israel I: Nos. 1248–1251.



82. IAA 81241.

Antiochus VII, 138–129 BCE, Antioch.

Obv.: Head of lion r.

Rev.: [BAΣ]IΛEΩ[Σ]/ANT[IOX]OY/EYEPΓETOY
Club. In field l. ♣ over * Date obliterated.

Æ, 1, 2.41 g, 15 mm.

Cf. *SNG Israel* I: No. 1897.



83. IAA 81243.

Ptolemy IX or X, 116–103 BCE Cyprus.

Obv.: Head of Zeus-Ammon r.

Rev.: Inscription obliterated. Two eagles l.

Æ, ↑, 2.89 g, 15 × 17 mm. Hole centered.

Gitler and Kushnir-Stein 1994–1999:53,
No. 96.

84. IAA 81244.

Ptolemy IX or X, 116–96 BCE Cyprus(?)

Obv.: Head r.

Rev.: [–]ΠΤΟΛΕ[–] Eagle l. In field l. ΤΣ over Δ(?)
Æ, ↑, 1.44 g, 16 mm. Not bevelled.

NOTES

¹ The excavations and the surveys were headed by Ehud Galili, Kurt Raveh and Shelley Wachsmann (Permit No. A-1196/1983).

² For the sake of completeness, the seven identifiable coins from Hoard 3 are also fully described in the catalogue that follows (with some revised identifications).

³ The coins were cleaned in the IAA laboratories, headed by Ella Altmann, and photographed by Clara Amit. They were originally identified by Yaakov Meshorer. Revisions were made by Donald T. Ariel. We offer our thanks to all.

⁴ Ptolemaic coins, especially the later ones, are notorious for their poor preservation. Although none of the present coins were tested metallurgically, a late Ptolemaic coin found at Ashqelon (Gitler and

Kahanov 2002:262, No. 47, and p. 263) was found to be made of a highly leaded alloy. Such alloys are prone to heavy corrosion near the surface (Gitler and Kahanov 2002: n. 5), which well explains the poor condition of most of these coins.

⁵ These coins were first identified in Misch-Brandl and Galili 1985.

⁶ This episode is described in detail by Josephus, *War* 1.4.2 (§86); *Ant.* 13.12.1–13.13.3 (§320–355). Coins found in Israel and apparently connected to this episode were discussed by Gitler and Kushnir-Stein 1994–1999, and Galili, Syon and Finkielsztein, forthcoming.

⁷ On this see Mørkholm 1984:96; Le Rider 1995:396–398.

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