

THE 1984 SEASON AT ABILA OF THE DECAPOLIS

by

W. Harold Mare, Michael J. Fuller, John
J. Davis, Horace D. Hummel, Jonathan F.
Grothe and Neathery B. Fuller.

The third season of the Abila of the Decapolis Archaeological Excavation, northern Jordan (Pl. LI: 1), was conducted June 25 to August 10, 1984. The main sponsor of the excavation was Covenant Theological Seminary. Co-sponsors were Cincinnati Christian Seminary, Concordia Seminary, St. Louis, and Grace Theological Seminary, Indiana.

Abundant assistance for the excavation was graciously given by the Department of Antiquities of Jordan, Dr. Adnan Hadidi, Director-General. Through Dr. Hadidi's direction and encouragement, the Department provided the use of some archaeological equipment and the rental of a department jeep and arranged for the use of the Harta Secondary Girls' School for staff headquarters. Mr. Sultan Shureidah, District Inspector of the Irbid office of the Department of Antiquities, and Mr. Ibrahim Zu'bi, District Inspector of the Ramtha office, ably assisted the excavation in many ways.

The core staff decided that the field operations in 1984 should be concentrated in four areas (Pl. LI:2): Tell Abila (north tell) to expand the excavation of the basilica and other buildings beginning to be uncovered in the 1982 excavation and to probe the city wall at the north of the tell; to excavate on Khirbet Umm el 'Amad (south tell) to determine the function and age of the archaeological deposits there; to continue excavating the tombs (along the wadis) both undisturbed and salvage projects to gain additional information on the cultural history of the site; to expand the survey work to test the models of intersite and intrasite settlement patterns and to study further the hydrological system of Abila; to continue special archaeological studies in geology, in archaeobotanical, zooarchaeological and anthropological remains recovered during the excavation;

and to collect systematically ethnoarchaeological and ethnohistorical data related to the population of Harta.

Area A:

The Excavation on Tell Abila (Supervisor: Horace Hummel)

In Area A situated slightly east of the summit of Tell Abila (Fig. 1) the four squares, A 1-4, of 1982 were expanded and more deeply probed; six new adjoining squares, A 5-10, were begun still making an "L" shaped configuration.

The four following phases were found in evidence in Area A: *Post Umayyad*; *Umayyad*; *Byzantine*; *Roman*; and *Hellenistic*, with Iron II C/Persian sherds sometimes mixed in.

The excavation of additional squares of A 5-10 further clarified the evidence for the Umayyad Phase at the site. The Umayyad structure found built over the apse of the basilica, and the adjoining building just to the east of the basilica both showed the reuse of materials from the triapsidal Byzantine basilica. Voussoirs from the Byzantine basilica had been used to bisect the central apse of the basilica (Area A 9-10), a technique which, with the stockpiling of the architectural fragments in A 8, may have been the preparation for the construction of an Umayyad building (possibly a mosque) within the walls of the ruined basilica. Alternately, these fragments may have been for the building in A 3, east of the basilica, exemplified by a fragment of a triglyph from a frieze of an earlier Hellenistic or Roman structure seen built into Wall A 3002. The ceramic profile in the majority of loci in A 5, 6, 8-10, and the upper loci of A 7 (Loci 7001-7003) point to Umayyad presence.

The Byzantine Phase in Area A continued to be seen in the large triapsidal basilica further uncovered in A 5-10: in A 8

a cross design was exposed on an excavated column (the pinholes were in the design of a cross); a fragment of a white marble chancel piece decorated with a cross and wreath design was discovered; and fragments of fifth and sixth century glass lamps were found within the Byzantine structure. Also within the Byzantine basilica was found a stone inscription containing what seems to be the word, Abila. The Byzantine basilica is to be dated to the fifth-sixth centuries A.D. Area A 7 demonstrated stratigraphic evidence of Byzantine activity, namely through Loci A 7004, 7006-7021. Included in this evidence was water conduit A 7010, oriented in a west-southwesterly direction, with Byzantine and earlier sherds found in its .25 cm. of silt sediment (Locus 7011).

The Area A 1984 excavation supports the hypothesis from 1982 that Walls A 1005/2015, 1006 and 1024/1032, and related walls were part of a Roman rebuilding on top of Hellenistic walls. The quality of workmanship and the related installations (i.e., the tabun) suggest that these walls may have belonged to a domestic structure. Further evidence of an impressive Greek/Roman building was discovered in 1984 at the western extension of the north side of the central apse of the Byzantine basilica in Area A. Here the upper and the two lower courses of apse Wall A 5002 showed a difference: all the headers of the upper course revealed very irregular surfaces, while the two lower courses in header-stretcher construction had smooth surfaces; further the joint connecting the apse to the western extension is out of line and irregular. All of this suggests that the basilica may have reused the walls of an earlier Roman temple. A Hellenistic/Roman temple at Abila is depicted in a tomb, the Temple Tomb (in the South Transept) painted in the Roman period--see the fluted columns and Corinthian capitals painted on the east wall; a temple with Ionic order capitals is painted on the north wall of the Temple Tomb. Broken Ionic order capitals have been found in the saddle area between Tell Abila and Umm el 'Amad.

Further it is to be noted that the wall

complexes in A 1 and 2 exhibit pure Hellenistic domestic habitation (Fig. 5). A 2081 (the tabun) showed evidence that its earliest use was Hellenistic: in its lowest course was found a piece of Hellenistic "white ware," and in the ash inside the tabun a Hellenistic coin (No. 132, A 2037, dated 155-154 B.C.) came to light. The lowest level (437.81 metres) of the tabun corresponds to the lowest course of Walls 2018 and 2019, and Tabun 2081 rests against Wall 2018. Thus the earliest use of those walls may be posited to be Hellenistic. Other Hellenistic evidence is ceramic, including a base of an Eastern Terra sigillata plate (Locus A 1020, No. 1419, dated second-first century B.C.) and a rim, black exterior and red interior (Locus 1049, No. 720, second century B.C.).

The location of Hellenistic domestic walls on the summit of Tell Abila suggests that the population then may have used one of the aqueducts discovered in 1984 which brought water from 'Ain Qweilbeh to the site. The Umm el 'Amad Lower Aqueduct may have been built in the Hellenistic period, or even in the preceding Iron II period for this purpose (see the survey report below).

Area F - North City Wall

(Supervisor: Reuben G. Bullard)

The exposed perimeter wall on the north slope of Tell Abila, Area F, called for special attention (Plate LII: 1). Between the 1982 and 1984 seasons a local farmer bulldozed out the north slope of Tell Abila and exposed an extensive segment of a massive perimeter wall some 5 meters high. When appraised of what had happened, the government stopped the farmer's activity. In 1984 the Abila excavation put in a probe at this wall to test its composition and period of construction. The preliminary investigation showed the wall to be Roman-Byzantine, evidenced by the pottery (F 1002, sherd No. 924, rim, and F 2001, A, sherd No. 810, a base, both pieces early first century red ware), and the glass and coin data (coin No. 174, F 1, unstratified dated to the reign of Nabataean King Aretas IV, 9 B.C.-A.D. 40).

Area D:

The Khirbet Umm el 'Amad Excavation
(Supervisors: Reuben G. Bullard, Michael J. Fuller, and Jonathan F. Grothe)

The Area D excavation (Fig. 3) was undertaken to test the date and function of the materials to be found in this sector. The work was laid out in two regions. One part, Area D 1-4, 11, 12, was laid out near the crest and to the southeast of the theater cavea, at the region of the column ruins, which in 1888 Schumacher had called a "temple." The second probe, D 5-10, was positioned some 30 metres to the northwest of the columns region, in a depression containing some protruding column fragments.

In the first sector, D 1-3, a "gas pipe" trench 1 by 15 metres was excavated; a Robber's Trench (D 4) to the north of D 1-3 was probed to salvage some stratigraphic information. Also two 5 metre by 5 metre squares (D 11 and 12) were eventually opened to the east of D 2 to bring further clarification of the remains found in D 1-3 and 4.

The excavation of D 1-3 (called Trench I) and D 4 (Fig. 4) produced evidence of Umayyad habitation; Umayyad sherds were found in the loci next to the surface here (Strata I-III). But this Umayyad material was not related either to building reuse or architectural stockpiling. Also Umayyad sherds were found resting directly upon the paving stone floor in Square D 4, suggesting that the Byzantine basilica on the summit of Umm el 'Amad had not fallen into disuse until that date.

Evidence of periods earlier than Umayyad were found in D 1-4. In D 1-3 below the surface of the micritic limestone flagstone pavers (Stratum IV), the fill layer (Stratum V), the dark brown clay layer (Stratum VI), and the mortar layer (Stratum VII) proved to be Byzantine, according to the sherd finds. In the Robber's Pit (D 4) (Pl. LII: 2) Stratum VII, below the pavers, and the setting-bed plaster (Stratum V) and the underbedding (Stratum VI) proved to be the same. In D 11 and 12, Stratum III above the pavers (Stratum IV)

and Stratum VII below the pavers and the underbedding (Strata V and VI) also proved to be Byzantine.

The exposure of a Corinthian capital with a Christian cross in relief on one side in D 3 (Locus 3007) showed that the structure in D 1-4, 11, 12, was not, in the time in question, a Roman "temple" but a Byzantine basilica; the fall of the column pieces there show that the building was oriented east-west. The excavation in D 1-3 and 11 and 12 uncovered the line of the north and south stylobates (also in the south of Square D 12 a threshold stone was found); paving stones were found both within and outside the stylobate line (see Fig. 2). Late Byzantine loci were found in D 3010, 2018, 2019, 3011, 4003, 4004, 4005, and D 12009; the Byzantine glass lamp handle fragment found in D 11 (cf. Fig. 7) suggests that the building was used during the fifth and sixth centuries.

It is possible that the Byzantine basilica was laid on the foundation of an earlier Roman structure. The shallowness of the probe in D 3 before encountering the mortar surface (D 3008) compared to the meter of layers of fill south of Stylobate D 2017, suggests that in Late Byzantine times (cf. the area of the previously standing structure which had D 2017 as the south wall and the mortar beneath D 3011 as its floor) was altered by dumping fill layers in D 2 to bring this section up to a level for the new structure's floor pavers (Stratum IV, D 1014, D 2012, and D 3009). The huwwar surface in D 4 found at a considerably lower level than the floor pavers there, also suggests a Late Roman use of the site, as does also the massive size and depth of the stylobate D 2017 in relation to the apparent size and height of the columns it was to support. Additional supporting evidence is the Roman coin (No. 175, dated A.D. 296) found in D 4, Stratum IX.

In 1982 it had been suggested that the region to the west of the fallen columns on Umm el 'Amad had been a Roman forum area. Two test trenches, Trench II (D 5-7) and Trench III (D 8-10) were opened west-northwest of the fallen columns (toward the olive grove) to ascertain the period and function of the strata and

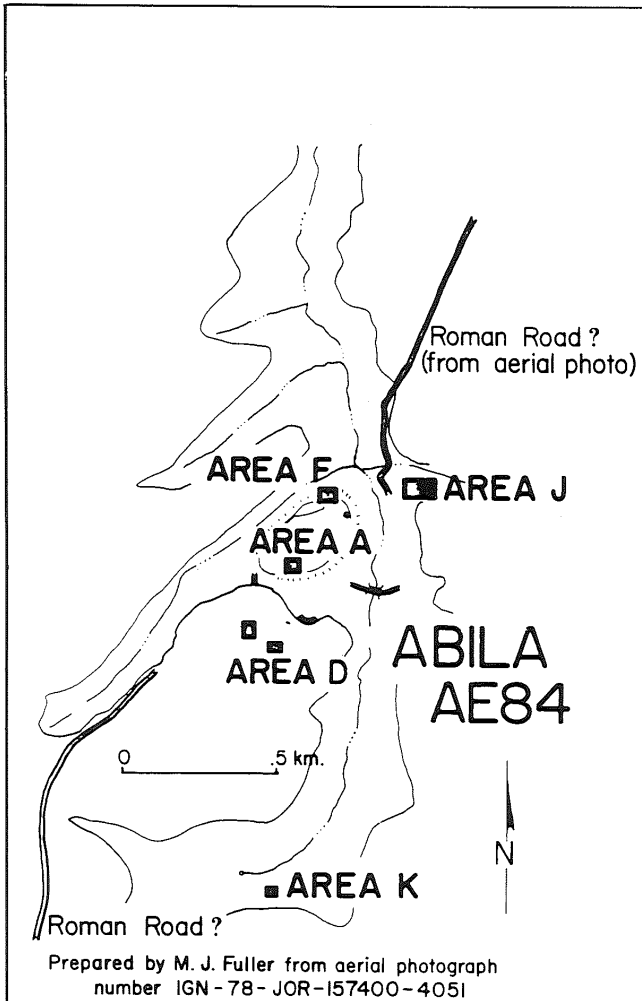


Fig. 1: Map of Areas Excavated in 1984.

ABILA AE84
Umm el Amad Excavation Units

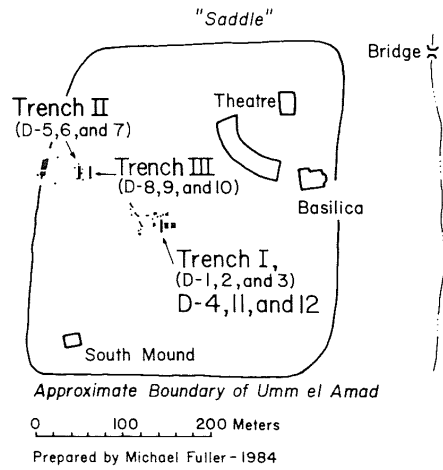
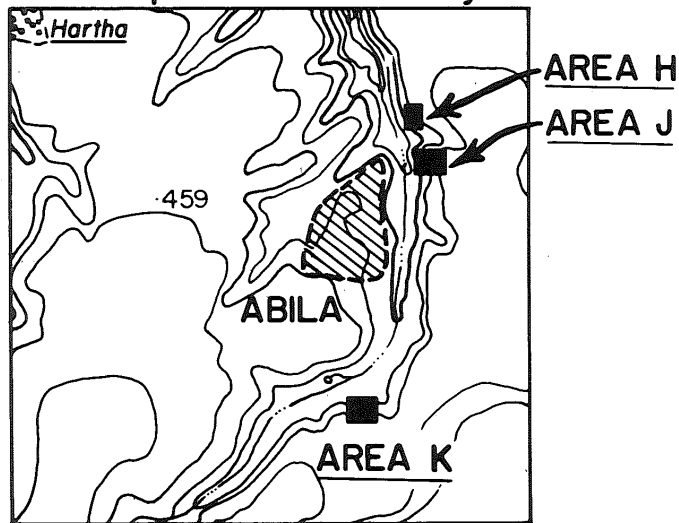


Fig. 2: Map of Abila Cemetery Areas.

Index Map of Abila Cemetery Areas



Area = 9 sq. km.

Fig. 3: Umm el 'Amad Excavation units.

ABILA AE84
Top Plan of Area D Trench I and Squares 4, 11, and 12

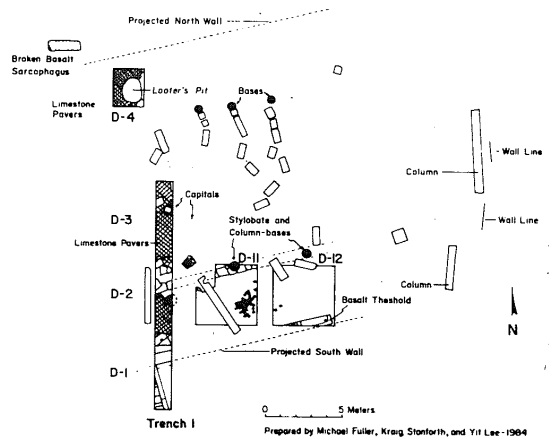


Fig. 4: Top plan of Area D, Trench 1 and Squares 4, 11 and 12.

structures in this region. Trench II ("Forum West"), measuring 1 by 15 meters, was laid out lengthwise on a north-south line; Trench III, also 1 by 15 meters, was subsequently laid out parallel to Trench II, but 17 meters east of it (see Fig. 3).

Architectural features encountered in Trench II (D 5-7) included remains of two stylobates: one, a set of three large (.95 cm. wide) footworn stone pavers (D 5003) rested on bedrock and ran east-west across the trench; the other stylobate, consisting of large (.93 cm. wide) pavers, (D 7005) was located 1 metre north of the south end of D 7, extending across the trench. The pottery deposits in D 5-7 were mainly Byzantine-Umayyad, and the stratigraphic evidence suggests the periodic dumping of material into this sector in Byzantine times. The origin of the materials is unclear, but there is a possibility that this area and that to the north of D 7 were occupied earlier than Byzantine times--compare Stratum Va, D 7019, containing Iron IIC/Persian ceramic evidence.

The aim in excavating Trench III, D 8-10, located ca. 17 metres east of Trench II and slightly up the terrace toward the basilica ruins, was to discover if the parallel stylobates uncovered in D 5003 and D 7005 continued this far. The surface debris of D 8-10 showed a large concentration of boulder-size building stones, mostly worked basalt blocks. The stratigraphy of Trench III proved to be similar to that of Trench II, with evidence that the bedrock sloped from south to north and that there had been a filling and levelling of material there in preparation for building activities. The pottery corpus in D 8-10 showed Byzantine and Umayyad material in Strata I, IIa, IIb, and III, and Byzantine in Strata IV, V (e.g., the lamp fragment with cross motif in the east balk of D 9009), and VI (e.g., six Byzantine sherds were found in D 10013). Architectural features unearthed in Trench III included two large flagstones in D 8 (Locus 8005), one course on a line parallel with Stylobate D 5003; and a configuration of two courses of flat-surfaced flagstones in D 10, 1 meter by 1.13 metres, with its north line being in line

with the north edge of stylobate D 7005. Important finds included a few pieces of marble (such as Euboean marble also found in Trench II). The large number of glass fragments, namely of domestic glassware, together with the lamp with the cross design, suggests that a middle class group resided here in Byzantine times.

There are only enough column fragments uncovered in D 5-7 and 8-10 to make two full columns. Although the structural and artifactual evidence in Trench III points to the region as being a residential area, the large open area of Trench II and the paucity of glass and ceramic evidence there allow for a range of interpretations for the function of the region: a street or market (like a meat market); a palaestra; or a garden of a Byzantine villa, with two columns to mark its entrance.

Areas K and J:

Tomb Excavation

(Supervisor: John J. Davis)

The 1984 excavated tombs, both salvage and undisturbed tombs (Fig. 2), again presented evidence of the Early and Late Roman and Byzantine periods as did the Area H and J tombs excavated in 1982. The 1984 tomb excavations were first made in Area K, located to the southeast of 'Ain Qweilbeh, and then in Area J, on the east bank of Wadi Qweilbeh, just east of Tell Abila.

The Early Roman Period (63 B.C.-A.D. 135), Tombs K 1 and J 21

Tomb K 1 (Fig. 6) was a standard type Roman tomb featuring a central chamber, fifteen loculi, and a floor grave inside along with two loculi in the west wall outside the entrance. Shallow trough graves had been cut in the bottoms of Loculi 6, 7, and 14. Stone pillows had been cut in the rear of Loculi 2, 4, 9, and 10; geotectural features indicated that simple shroud burials were intended with the head positioned toward the rear of these loculi. The stratigraphic and ceramic evidence suggested that a small portion of the tomb was prepared in the Early Roman period with its major

expansion and use occurring in the Late Roman period (A.D. 135-324), with concluding modification dating to the Byzantine period (A.D. 324-640) a period when the floor grave was cut into the rear of the tomb and two small loculi were cut outside the entrance in the west wall. Most of the thirteen complete lamps in the tomb were of Late Roman date and likely of local manufacture. One Late Roman lamp of white ware (No. 23) was an imported piece. The LR lamps were mainly of the rounded type, with decorated discs. Other standard funeral artifacts found included beads, ear-rings, bracelets, coins, bowls, cooking pots and juglets. Five intact glass unguentaria were found in Loculus 11, standard types paralleled at Pella, Jericho, etc.

The nine limestone busts (cf. Pl. LII. 3) found in the main chamber of K 1, located in some instances at the end of individual loculi which in the main had been sealed with stone slabs or with stone and mortar, suggest the tomb was used for cult feasts or annual family reunions; but a strong Roman burial cult is not indicated since pig bones were missing.

The two trough graves in Loculus 7 (Loculus 6 also has the same) point to the burial of important persons (cf. Khirbet Shema and Bethany). The shortened Loculus 8 (one-half the length of Loculus 9) with its two disarticulated adult burials, suggests secondary burial use. Short Loculus 1 had nine secondary burials. This practice of ossilegium has a history traceable to Chalcolithic times. Byzantine reburials are seen in the short Loculi 16 and 17 outside the tomb entrance (Fig. 6).

Tomb J 21 (J cemetery west), had three loculi, two cut into the southeast wall and one into the northeast; a grave was cut into the north sector floor. The tomb originated in the early second century A.D.; several lamps there dated to the third century A.D. Among the eleven persons buried in J 21 was a five-year-old child in Loculus 3 which also contained remains of an adult and a small bracelet, a patula, a necklace of fine beads, and an amethyst gemstone, artifacts pointing to a female burial. Food offering remains of

chicken and sheep and goat bones were found in Loculus 2.

Cemetery data thus far accumulated at Abila points to an Early Roman or Herodian population of modest size varying in degrees of economic sophistication.

The Late Roman Period (A.D. 135-324), Tombs J 6, J 13, Sarcophagus K 2

The Abila cemetery remains thus far studied show that burial activity in the Late Roman period was intense and widespread.

Tomb J 6 (J cemetery north) had been recently robbed and badly disturbed. This tomb consisted of a central square chamber with six loculi, two in the west wall and four in the south. A recessed opening was cut into the east wall with a bench provided for a fully extended burial. Ceramic and stratigraphic data point to a Late Roman origin with limited use and later Byzantine limited reuse of the tomb. A small globular juglet with a lip-to-shoulder strap handle and a small Herodian period glass vase were found and also parts of glass bowls, metal hinge spikes, ceramic juglets and bowls. A Byzantine lamp base (Locus J 6005) points to Byzantine reuse of the tomb, and the fragment of a metal brace with nails to the use of a wooden coffin.

Small Tomb J 13 (with its fine masonry) and a long narrow entrance leading into a small chamber with an arcosolium on the east wall and another on the north wall. It was used first in Late Roman times, then in the Early (A.D. 324-491) and Late Byzantine (A.D. 491-640) periods, and in the Umayyad period (A.D. 630-750). Among the Late Roman and Byzantine artifacts are lamps, bone pieces, fragments of glass vessels and bowls, beads, bracelets, a gold earring, and small bronze funerary bells (cf. such bells at Jerusalem, Petra, etc.). In the standard Jordan and Palestine lamp repertoire represented here see lamps No. 99 and No. 114 in Figs. 10 and 11.

The excavation of the recently exposed Roman sarcophagus K 2, found several meters south of Tomb K 1, revealed a structure cut from a solid block of basalt; it represented fine Roman work-

manship, exhibited by the low relief bucrania and cord or garland design on its front (parallels at Beth She'arim). The lid, of traditional gable type, was fixed to the body of the sarcophagus by four iron spikes found in melted lead.

The Byzantine Period (A.D. 324-640), Tombs J 7, J 8, J 11, J 12; Graves J 9, J 10, J 14, J 15, J 18, J 22, J 23, J 24, J 25.

Tomb J 7, originally used at the end of the fifth century A.D., had a small, single rounded chamber; an iron coffin ring (six were found in J 5, 1982) found points to a wooden coffin burial. Byzantine Tomb J 8 was a single, narrow loculus, a Roman type at Heshbon. Small chamber Tomb J contained an articulated male propped up in the cramped space, evidence pointing to a poorer class burial. Artifactual evidence in small chamber Tomb J 11 was Byzantine.

Representative of the nine undiscovered fully articulated Byzantine grave burials, graves exhibiting ledges on which were placed sealing stones, is Grave J 9 which contained two females (all the other eight graves contained a single burial), one laid on top of the other. The artifactual assemblage here included five juglets, of the style of slightly flaired rim and handle extending from lip to shoulder; this is characteristic in northern Palestine, with earliest Hellenistic types, and then copies occurring in the third century Roman period and in Byzantine times. The homogeneous ceramic materials in Grave J 9's entrance fill points to the Byzantine period for the burials, showing that the juglets were produced in the Byzantine period, or indicating that they were heirlooms from the earlier Hellenistic or Late Roman periods.

Also distinctive among the Byzantine graves was well-cut Grave J 15 which contained a fully articulated female (10 to 15 years old) with a bronze ring on her finger, a small bell at her waist, and a number of beads nearby. Interestingly, Grave J 23 was hastily cut over earlier Grave J 25 which contained fetal bones still in a 17- to 25-year-old female's pelvic

region; also finds there included a complete typical long-spouted Hellenistic-type lamp (see Fig. 11: 1, No. 109), possibly an heirloom — a Byzantine or Late Roman copy of an Hellenistic original, or an actual Hellenistic piece. Byzantine Grave J 24 also contained a Hellenistic-type lamp, dark, long-spouted (J 24005, No. 110), possibly an heirloom.

Pathological information from the human skeletal remains at Abila show common problems (true also of many Palestinian sites) of osteoarthritic lipping, dental enamel wear, cavities and attrition, periodontal disease, and fused vertebrae. The mortality rates at Roman and Byzantine Abila were high: 36 percent of the 134 individuals studied died before their 16th birthday.

The burial settings observed, all the way from elaborate and painted tombs to the loculi tombs and simple graves, point to a wide socio-economic spread of the Roman-Byzantine population. The masonry skills reflected in the tombs and graves represent a wide variety of workers, from skilled artists and masons (possibly from traveling guilds) to average or poor work of local masons.

Survey - Architectural Investigations

(Supervisor: Michael J. Fuller)

Hydrological Investigations:

In addition to the Khureibah Aqueduct (possibly of Roman date) south of 'Ain Qweilbeh, investigated in 1982, the 1984 survey team discovered two other underground aqueducts which run from 'Ain Qweilbeh north under the eastern edge of Umm el 'Amad toward the saddle area between the two tells (Fig. 7). The "Upper Aqueduct" runs one to three meters higher in elevation than the "Lower Aqueduct."

The Upper Aqueduct had been constructed in two steps: (1) construction-maintenance shafts (*putei*) were cut down into the bedrock; (2) then the *putei* were connected by tunnels dug between *putei*, thus creating "joins" in the aqueduct.

Lamp niches were cut into the walls to hold clay lamps for light during construction. The survey investigation consisted of: mapping of an open section of the aqueduct; digging out a soil "choke" (caused by a poorly sealed puteus); and then continuing the exploration and mapping. The total of 1,062 metres of the Upper Aqueduct was mapped, a process accomplished through 122 survey stations in the aqueduct. At each station the following measurements were made: passage bearing; distance to the next survey station; ceiling height; and passage width. Cross-sections were drawn for 24 locations in the Upper Aqueduct. For each cross-section drawn there was a "test probe" excavated in the tunnel floor to determine the depth of the mud fill, fill cemented with calcium carbonate (an average .30 to .40 cm. of mud) (Fig. 8). When the hardened mud was dug out, sherds of glass and pottery (of the ribbed variety, Late Roman and Byzantine) were discovered. Also Ayyubid/Mamluk sherds were found resting on the surface of the mud fill in both the Upper and Lower Aqueducts. An extensive Greek inscription (now being studied) was found painted on the Upper Aqueduct wall, as well as an assortment of incised crosses and Christian monograms, painted Greek letter graffiti, and four engineering graffiti scratched into the walls.

The mean width and height measurements of the Upper Aqueduct (0.78 cm. wide and 1.76 metres high) compare closely with the width and height of the tunnel portion of the first and second century A.D. Caesarea Maritima High Aqueduct (0.60 cm. to 0.65 cm. wide and 0.60 cm. to 1.50 metres high) and the Roman-Byzantine Aqueduct under the Forum at Samaria (0.50 to 0.65 cm. wide and 1.35 to 1.78 meters high). On these comparisons and the ceramic evidence, the Upper Aqueduct is dated to Roman-Byzantine times.

The Lower Umm el 'Amad Aqueduct was discovered during the first day of detailed mapping of the Upper Aqueduct. Starting from an entrance into the lower tunnel some distance north of 'Ain Qweilbeh, a distance of 777.4 metres of this

tunnel was mapped; the distance from the last excavated soil choke south to the spring is over 1,200 metres. Actually both aqueducts should be about 1,400 meters long, the distance from the spring to the saddle area between Umm el 'Amad and Tell Abila. Pottery sherds from the Lower Aqueduct date from the Roman, Byzantine, and Ayyubid/Mamluk periods. The Ayyubid/Mamluk sherds found on the surface of the mud fill on the floor of the aqueduct indicates the tunnel was used in the Ayyubid/Mamluk period as a temporary shelter. The Lower Aqueduct truncated several small tombs which are pre-Roman; the Lower Aqueduct was probably constructed during the Hellenistic or Early Roman urban expansion of Abila, or even built as early as the Iron Age or Persian periods.

Experiment comparing Sherd Densities from Survey Cells:

In 1984 a survey experiment was conducted in the area immediately north of Tell Abila to provide information for correlating the fine grain 20 x 20 meter survey technique of 1980 with the coarse grain 100 x 100 survey technique of 1982. By marking off a special cell measuring 50 x 100 meters and five small cells measuring 20 x 20 meters and altering the total time of surface sherd collection, 30 minutes in the 50 x 100 meter cell and 60 minutes in the 20 x 20 meter squares, it was determined that one can correlate the sherd densities, for instance, of a 100 x 100 meter cell, and a group of 20 x 20 meter cells, when the different amounts of time spent in collection are recorded.

Regional Site Testing:

The excavation of 12 test units in the North Regional Transect in cells NT 1, NT 2, NT 3, NT 4, NT 5, and NT 11, provided basic confirmation of the age (Late Roman and Byzantine) and functional interpretations of the area (i.e., Late Roman-Byzantine domestic and farmstead areas) developed during the 1982 regional survey.

Ethnoarchaeological Studies

(Supervisor: Neathery Batsell Fuller)

The objectives of the ethnoarchaeological studies were four: (1) start a folk history of the Village of Harta; (2) begin a census of the village; (3) gather economic and food production data; and (4) locate and verify various archaeological sites which the villagers and Bedouin had discovered.

Harta is a small to medium size modern Arab village established in 1781; its present population is about 5,000. It is located about 16 kilometers from Irbid, the second largest city in Jordan. Harta is only about 1 kilometer from Abila, both of which, then, are near the major lines of communication between Philadelphia (Amman), Gerasa (Jerash), and Damascus. The 'Obediat tribe is the major family in Harta, with other families, the Fahmowi, 'Omary, Safady, Sukni, (Muslim tribes), and the Hadat (a small Christian family) making up the difference.

In agriculture some of the chief crops of the Harta-Abila region include melons, cucurbits, grapes, wheat, barley, tobacco, and fruit crops from pomegranate, lemon, apple, fig, plum, and olive trees. Although domestic animals, such as cows are kept, there are fewer and fewer of such animals. Of course, one sees herds of sheep and goats, tended by Bedouin who dwell in turn in various parts of the area.

The main source of water for Harta is 'Ain Qweilbeh. Tabuns (ovens) for baking flat bread, important in ancient days at Abila, is becoming less important in modern Harta. More and more people are buying their bread. Even old olive presses are in short supply. The newest olive press, mechanically run, is located near Harta's post office.

Several regional archaeological sites (Fig. 9) were visited and surveyed in 1984. Liksara, a site about 50 meters in diameter located east of Harta on the edge of a wadi scarp, seems to have been a small farmstead, dating mainly to Ayyubid/Mamluk

times (15 sherds), and possibly also to the Umayyad/Byzantine (3 sherds), and Byzantine (5 sherds) periods. Bir Ruways, to the northeast of Harta, covering about 300 x 100 meters, produced 152 sherds and some tesserae, in distribution showing Islamic predominance on the west side of the site and Byzantine on the east; nearby (200 metres to the southeast) there was a group of tombs (both loculus and arcosolium types). Northwest of Ruways was Lijwar, a site of medium size, 178 sherds of the Byzantine, Byzantine/Umayyad, and Ayyubid/Mamluk periods were collected; an old unused olive press was found in a nearby cave together with 38 Ayyubid/Mamluk sherds.

The "fort" Habis (a word meaning "prison") on the side of the steep slope of the Wadi Yarmuk, consisted of a series of rooms or cells (with a Latin cross cut in the wall above the cells) with one large cell resembling a chapel. Eight Byzantine sherds were collected near the cells. The site of Ras Yusuf was found on the plateau overlooking Habis, with a majority of the 82 sherds found there being Byzantine (a few were Roman and Umayyad); tesserae and plaster fragments were also found. The site of Habis may well have been a place where Christian ascetics lived and worshipped, and the site is possibly to be identified with the Crusader fortress, Habis Jaddak (A.D. 1097-1187).

Glass Studies

(Supervisor: Neathery Batsell Fuller)

The pieces of glass surveyed represent a cross-section of domestic glass used in Syro-Palestinian sites from 200 B.C. to the sixth century A.D. This collection is markedly devoid of any of the fine "art" glass objects usually associated with glass of these periods. Such fine art objects are probably in the hands of private citizens or museums (due to the clandestine digging at the site). The results of the Abila glass analysis does not appear to differ in any major respect from the results of such glass studies of Jerash and Pella materials.

ABILA AE84

North Section through the Upper Aqueduct

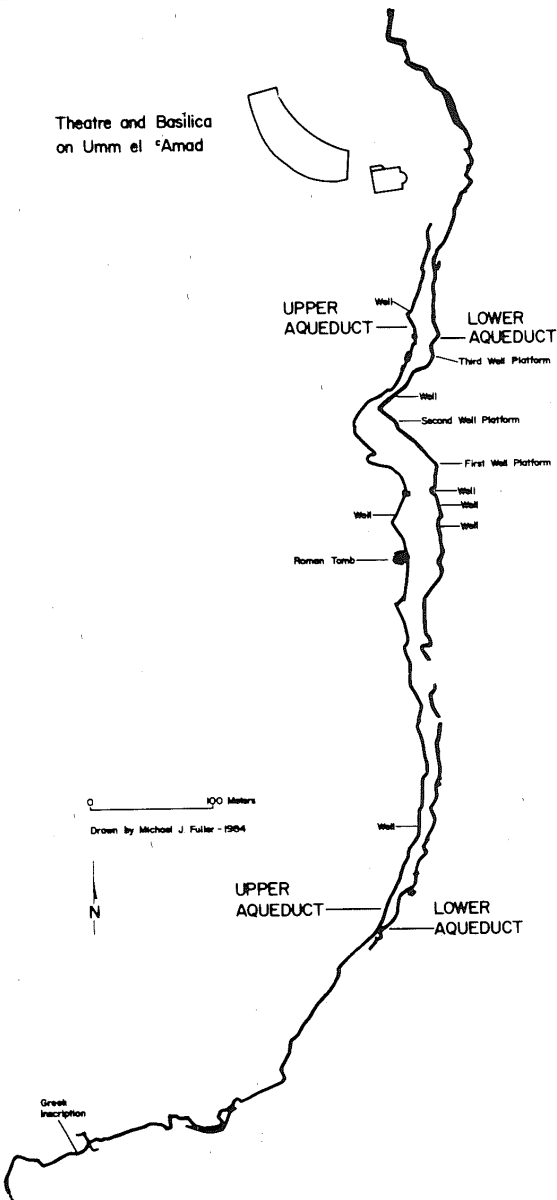
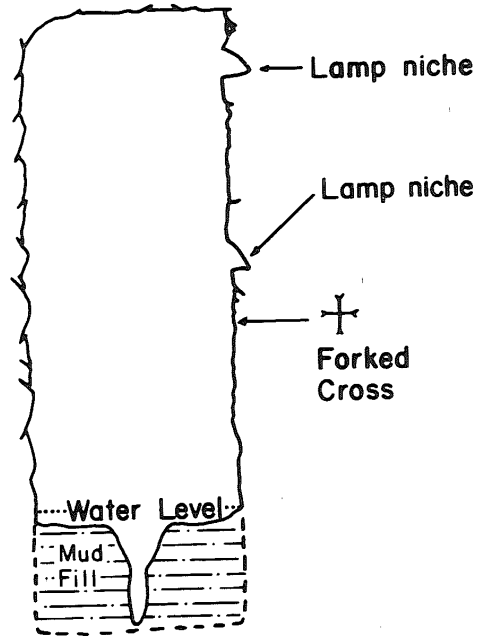


Fig. 7: Map of Umm el 'Amad Upper and Lower Aqueducts.



0 1 Meter

Prepared by Kraig Stanforth - 1984

Fig. 8: North Section through the Upper Aqueduct.

Settlements and Placenames in the region around Abila, Northern Jordan

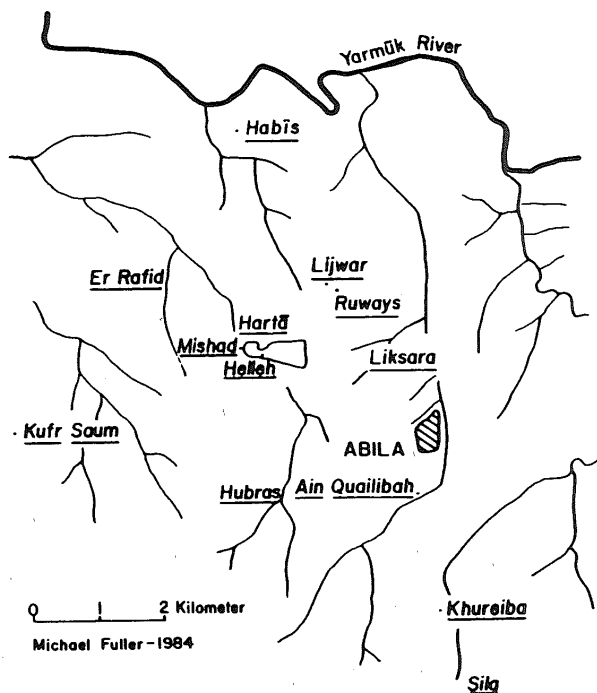


Fig. 9: Map of Settlements in the Abila Region.

The 1984 Season in Perspective¹

The broad ranging research² engaged in by the Abila staff³ brought a wider comprehension of the history and culture of Abila of the Decapolis. Evidence from this integrated research coming from excavation on the tells and the tombs, survey and hydrological studies, and geological and ethno-archaeological research points to an Early Roman Abila of moderate size with considerable expansion in the Late Roman and Byzantine periods. A wide socio-economic base is indicated at the city during these periods. Evidence for the later Umayyad and earlier Hellenistic city is just emerging. Further understanding of these and earlier periods, as well as a better understanding of Roman-Byzantine Abila, awaits further excavation.

Selected Finds from the 1984 Excavation at Abila of the Decapolis (Listed by object number and area identification number.)

Figure 10 (Ceramic artifacts)

Fig. 10:1, No. 9 (A 7). Two-piece mold-made lamp, Byzantine with inscription; spout missing. Rough texture, fired to pink colour (5 YR 7/3); some grits. Double raised rim around a central orifice (dia. 2.4 cm.), with inscription around orifice, reading, r. to l. APOC MY; l. to r. - IXY E. Bottom, raised ring. Max. ht. 3.3 cm.; max. length preserved 8.5 cm.; max. width 6.5 cm. Probably fifth-sixth cent. A.D. See Hayes, *Anc. Lamps*, Pl. 57, No. 497; Bagatti (1971), p. 361, No. 224.

Fig. 10:2, No. 23 (K 1, 1042). Two-piece

¹ The 1984 Abila excavation had affiliation with the American School of Oriental Research and with the American Center of Oriental Research in Amman. The expedition, as always, had splendid support, cooperation, and assistance from the Department of Antiquities of Jordan, Dr. Adnan Hadidi, Director-General, and Mr. Sultan Shureidah and Mr. Ibrahim Zu'bi, Department Representatives. To all these who contributed to the success of the third season of work, the expedition gives sincere thanks.

² The stratigraphy discovered thus far at Abila of the Decapolis can be divided into five phases (based mainly on the ceramic, glass, and stratified numismatic evidence): (1) Modern and Post-Umayyad (with modern ceramics and coins found, and ceramics of the Ayyubid/Mamluk period); (2) Umayyad (Umayyad sherds); (3) Byzantine (Early and Late Byzantine artifacts, sherds, and coins); (4) Roman (Early and Late Roman artifacts, sherds, coins and glass); and (5) Hellenistic (Late Hellenistic lamps, sherds, coins and glass). The ceramic, numismatic, and glass evidence mentioned above was supplemented by the evidence of architectural styles (walls, structures, distinctive architectural fragments, such as the triglyph from a frieze of an earlier Roman or Hellenistic structure found imbedded in the Area A 3002 wall), and the tomb wall paintings (e.g., those on the Umm el 'Amad Temple Tomb painted during the Roman period); and the structure of the aqueducts — structures coming from the Roman-Byzantine periods, or even from the Hellenistic or Iron periods (as is possible for the Lower Umm el 'Amad Aqueduct).

³ The American staff of third-three persons served

in the following capacities; W. Harold Mare, Director; Michael J. Fuller, Chief Archaeologist and Chief Architect-Surveyor; John J. Davis, tomb Supervisor; Reuben G. Bullard, Geoarchaeologist; Horace D. Hummel, Area A Supervisor; Jonathan F. Grothe, Area D Supervisor; Kathleen A. McGregor, Registrar and Ceramicist; and Thomas J. Kick, Osteologist. Square Supervisors were: Gunnar Brockett, Howard Bullard, Ernie Campbell, Neathery B. Fuller, J. Marshall Magner, Robyn Magner, Lee Maxwell, Mark Meehl, Randy McGuire, Shannon McPherson, Bruce Pefter, Robert Smith, Kevin Vogts, Catherine Williams, David Wilson, John Wineland, and Wilkie Winter; Photographers, Eddy Jones and Douglas Potter; Educational Director, Wilkie Winter. Other Specialists were: Neathery B. Fuller, Ethnoarchaeologist; J. Marshall Magner, Entomologist; Yit Lee, John McGuire, Steve Ray, Kraig Stanforth, Architect-Surveyors; Kathleen McGregor, John Shoup, John McGuire, Artists; Neathery B. Fuller and Ernestine T. Magner, Flotation Supervisors. Ernestine T. Magner served as Botanist; John Shoup as Camp Director; Robyn Magner as Construction and Electronic Specialist; and David McCreery, Director of the American Center of Oriental Research, as Consultant. Special thanks go to Eleanor Soltau, M.D., and Aileen Coleman, R.N., for their willingness to store all the Abila equipment in the off-season at the Annoor Hospital, Mafraq, Jordan, and to Clem E. Rowe, St. Louis, and David F. Graf, University of Michigan, for their study in the United States of the coins and the inscriptions, respectively.

The Abila Excavation expresses special thanks to all of the above for making the third season of work at Abila of the Decapolis a success.

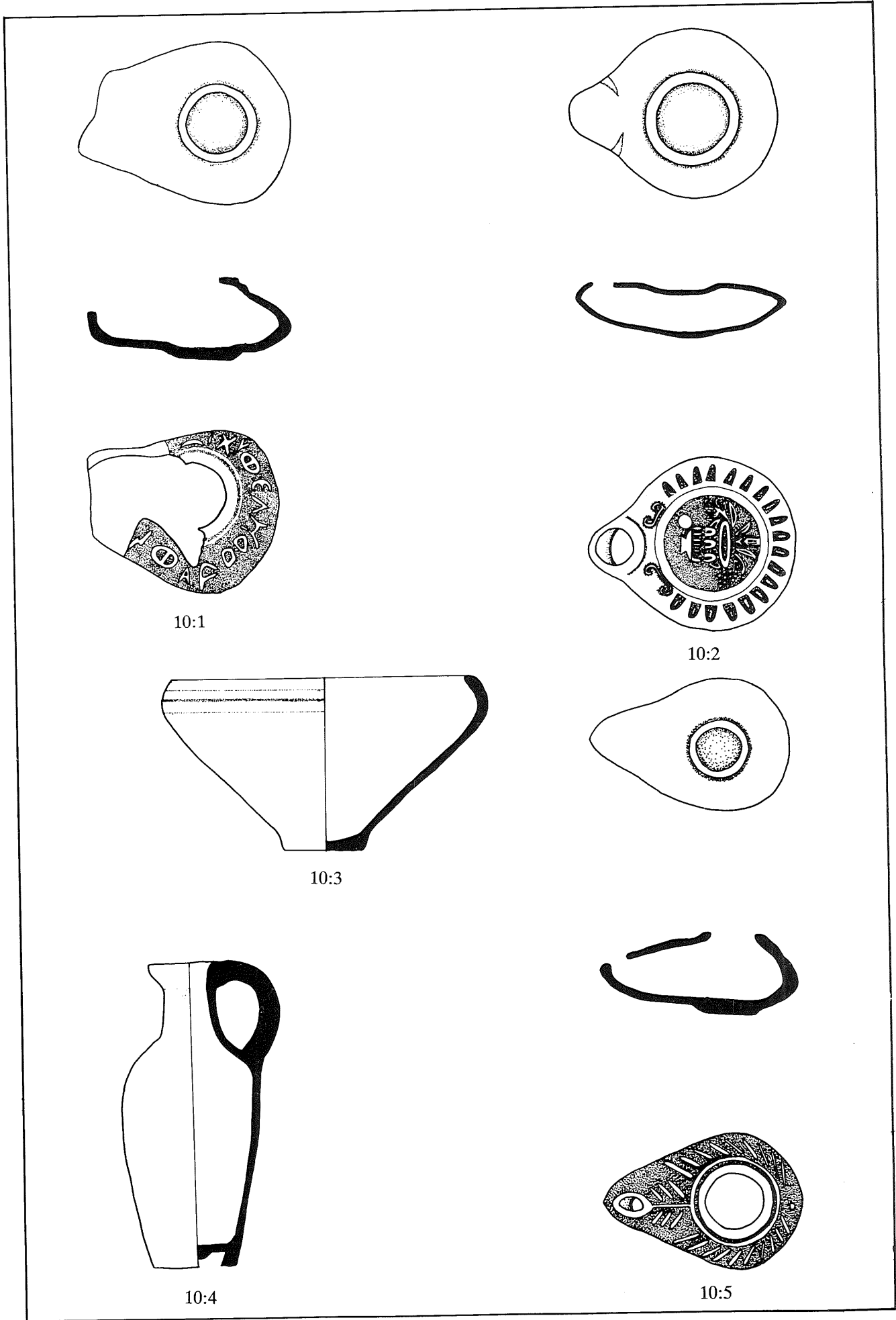


Fig. 10: Selected finds: Ceramic Artifacts.

mold-made lamp. Roman, with circular body and flower motif. Finely mixed clay, sparse grits, fired to an off-white (2.5 YR 8/2). Two concentric rings with attached rays around the central disc; two scroll designs one on either side toward the wick orifice; a shallow disc inside the circles with the design of a two-handled flower pot decorated with loops and rays, and with leaves and flower rising from the pot; small central orifice at lower left of pot. Carbon black on wick orifice. Max. ht. 1.9 cm.; max. length 8.5 cm.; max width 7.0 cm. Cf. McNicoll, et. al., *Pella*, (1982), pp. 146, 7, No. 13.

Fig. 10:3, No. 43 (K 1, 1002). Small wheel-made bowl, almost intact. Roman. Uneven manufacture, pinkish tan texture (7.5 YR 8/4); some evidence of reddish gray slip (5 YR 5/8) both inside and out; some evidence of small drips of reddish brown slip (2.5 YR 5/6) on exterior. Slightly turned in rim, sloping sides to a small string cut base; smooth on exterior, ribbed on interior. Max. ht. 7.5 cm.; dia. at rim 13.6 cm., at base 4.7 cm.

Fig. 10:4, No. 47 (J 9, 9004). Small, moderately slender jug, wheel made; intact. Roman. Medium grained texture, pinkish white (7.5 YR 8/2). Cylindrical body with inverted base and bottom; sloping shoulder merging with a gentle-flaring neck with thickened rim, slightly inverted; round and slightly flattened handle from rim to shoulder. Max. ht. 12.6 cm.; max. dia. at rim 3.2 cm., at body's widest point 5.7 cm. Roman, possibly Early Roman. Cf. Hayes, *Roman Pottery* (1976) Pl. 33, No. 330; see also Pl. 5, No. 47; Pl. 19, No. 156; Pl. 20, No. 157; Pl. 37, No. 341.

Fig. 10:5, No. 99 (J 13, 13005). Two-piece mold-made lamp. Byzantine. Good quality; fairly well mixed clay; even firing to pink color (7.5 YR 8/4). Raised circular ridge around central orifice (dia. 2.2 cm.) with outer circle surrounded by oblique rays and dot to back; straight line from outer circle to elongated wick orifice (with carbon black), with three oblique rays on each side of line; underside raised ring foot

(dia. 2.9 cm.). Max. ht. 3.0 cm.; max. length 8.0 cm.; max. width 5.5 cm. Probably sixth cent. A.D. Cf. Smith, *Pella* (1973), Pls. 66, 84, Nos. 311, 384, p. 219.

Figure 11 (Ceramic and glass artifacts)

Fig. 11:1, No. 109 (J 25, 25004). Small mold-made lamp. Late Hellenistic. Uneven texture fired to white (10 YR 8/2); evidence on upper surface of red body wash (10 R 5/6). Intact except for small hole toward the rear; small (?) handle broken; rim around central orifice (dia. 1.4 cm.) with rays on two sides; 2.5 cm. long neck extending to wick orifice (some carbon black); double scroll with three projecting arms extending toward wick orifice; flat bottom with slightly raised circular base. Max. ht. 2.3 cm.; max. length 8.0 cm.; max. width 4.5 cm. Probably second-first cent. B.C. Cf. Hayes, *Anc. Lamps* (1980), Pl. 8, No. 61; McNicoll, et. al., *Pella* (1982), p. 139, No. 14, 15.

Fig. 11:2, No. 114 (J 13, 13005). Two-piece mold-made lamp. Byzantine with Christian motif. Fine mixed clay, fired to reddish yellow (7.5 YR 7/6); few grits. Three concentric rings with attached rays on three sides with the four rays at the back sloping up to a stub handle; central orifice dia. 2.6 cm.; Christian cross (horizontal equal arms with dot at each end; perpendicular double arms with flaired ends; one dot in the middle of each quadrant between arms); cross extends toward the wick orifice (slight carbon black); diagonal rays on either side of cross. Slightly rounded bottom and slight circular base. Max. ht. 2.8 cm.; max. length 8.5 cm.; max. width 6.2 cm. Fourth-sixth cent. A.D. Cf. Hayes, *Anc. Lamps* (1980), pl. 38, Nos. 303-306.

Fig. 11:3, No. 126 (J 21, 21008) small mold-made lamp. Late Hellenistic. Finely mixed clay, fired to gray (5 YR 6/1), with evidence of dark gray slip (2.5 YR N4/); some grits. Small round body (broken from back of central orifice) with sloping elongated, narrow neck and slightly flaired and elongated large wick orifice (dia. 1.2 cm.

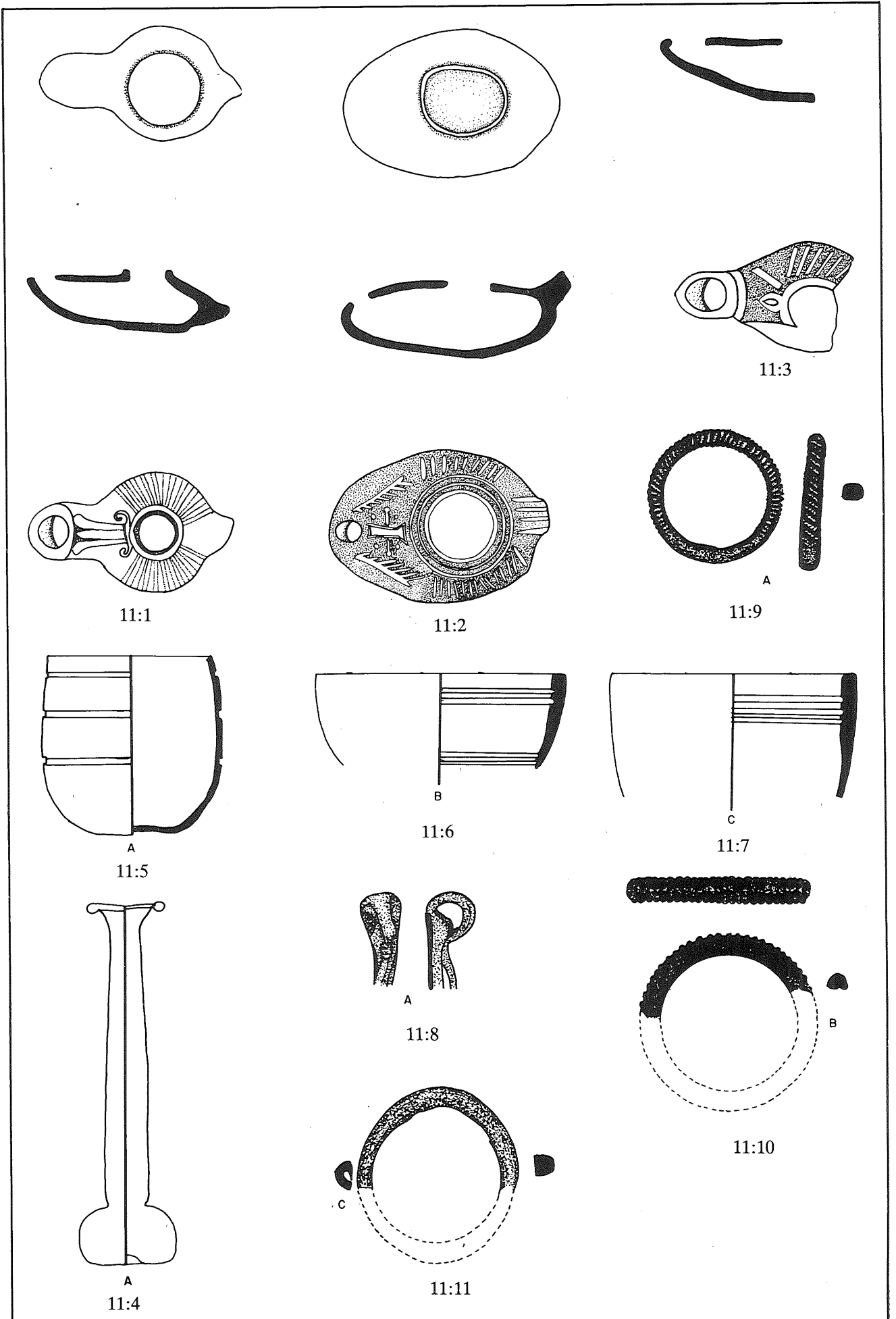


Fig. 11: Selected finds: Ceramic and Glass Artifacts.

by 1.4 cm.; carbon black present; horizontal band just before orifice and one oblique band and on either side of wick orifice); circular band around central orifice) dia. 1.4 cm.) and attached rays on the one side preserved; lozenge extending from central orifice toward the wick orifice. Max. ht. 2.3 cm.; max. length projected 8.0 cm.; max. width 4.3 cm. Second-first cent. B.C. Cf. Hayes, *Anc. Lamps* (1980), Pl. 8, Nos. 66, 68, McNicoll, et. al., *Pella* (1982), pp. 138, 139, Nos. 14, 15; p. 141, No. 8.

Fig. 11:4, No. 36 (K 1, 1037). Free blown, tall-necked unquenterium with an infolded and flattened rim. Roman. Light green glass. Height 14.4 cm.; max. width 3.4 cm.; 23.3 gr.; volume 15 ml. Second-third cent. A.D. Cf. Hayes, *Roman Glass* (1975), Pl. 17, No. 239; McNicoll, et. al., *Pella* (1982), p. 147, No. 20.

Fig. 11:5, J 6, 6005. Lathe cut cup. Roman. Polished rim, light green glass. Rim dia. 6.7 cm.; depth 6.9 cm. This cup has parallels in Goldstein, *Pre-Roman and Roman Glass* (1979), p. 138.

Fig. 11:6, A 1, 1050, Lathe cut bowl. Roman. Polished rim; light green glass; rim dia. 10.1 cm. This is a traditional lathe cut form that harks back to the Hellenistic period. Cf. parallels in von Saldern (1980), Pl. 20, Nos. 8 and 56.

Fig. 11:7, D 10, 10002. Lathe cut bowl. Roman. Polished rim; light green glass; rim dia. 9.9 cm. Cf. parallels in von Saldern (1980), Pl. 20, No. 56.

The above J 6, A 1, and D 10 cast, lathe cut, and polished glass vessels are a part of a common type on the Syrian-Palestinian coast, Cyprus, Asia Minor, Greece, Italy, Egypt, and Southeastern Europe. See von Saldern, "Two Achaemenid Glass Bowls and a Hoard of Hellenistic Glass," *Journal of Glass Studies*, 1975.

Fig. 11:8, D 11, 11007. Late Byzantine lamp handle. Light green glass. Cf. von Saldern (1980), Pl. 23, Nos. 235, 237-250, 266.

Fig. 11:9, No. 148, J 21, 21010. A complete ribbed glass bracelet. Roman, or possibly Hellenistic. Reddish-brown glass. Inside dia. 40.6 cm.; outside dia. 45.0 cm.; thickness 6.5 cm.; weight 13 gr. Cf. von Saldern (1980), Pl. 10, No. 233.

Fig. 11:10, F 1, 1012. Fragment of a black, ribbed glass bracelet. Roman, or possibly Hellenistic. Inside dia. 5.5 cm.; outside dia. 7.1 cm.; max. thickness .9 cm.; weight 29 gr. Cf. von Saldern (1980), Pl. 10, No. 233.

Fig. 11:11 J 7, 7002. Fragment of a biconical, black bracelet. Byzantine. Inside dia. 5.6 cm.; outside dia. 6.6 cm.; max. thickness .9 cm.; weight 1.1 gr. Cf. von Saldern (1980), Pl. 16, No. 679.

Plate LIII: 1, 2 (Coins from the 1984 Season)

No. 174 (F 1, unstratified). Bronze coin. Place of origin: Nabataean Kingdom, reign of Aretas IV and Shaquilath. Date: 9 B.C.-A.D. 40. Obverse: conjoined busts of Aretas IV and Shaquilath; inscription (if any) illegible. Reverse: double cornucopiae; Nabataean script above and below.

No. 132 (A 2, 2037). A Greek bronze, 20 mm. Place of origin: Syria, reign of Demetrius I Soter; struck in Tyre. Date: 155-154 B.C. Obverse: diademed head of Demetrius, right. Reverse: Stern of a galley, left, with standard; above and below Greek inscriptions; above, "of the King Demetrius," below, "of the Tyrians," and some uncertain Phoenician letters.

Plate LIV: 1, 2 (Coin)

No. 105 (Tell Abila, unstratified). Bronze 25 mm. Place of origin: Coin of Gadara of the Decapolis, in the reign of Elagabalus. Date: A.D. 218-219 inscription B.C.). Obverse: radiate bust of Elagabalus, right (inscription illegible). Reverse: tetrastyle temple, with a statue of Zeus enthroned holding Nike and scepter; below, inscription: ΓΑΔΑΡ(Ε) (WN?); to the left, date-mark: ΕΒΠΙC.

New Areas of Archaeological Importance

Expansion of the excavation on Tell Abila and Umm el 'Amad is needed to understand better the size, structure, and function of the two basilicas, one on each of the two tells, and to get a better picture of the Umayyad and the earlier Roman and Hellenistic cultures beginning to appear on Tell Abila in Area A and the Byzantine domestic/residential setting on the west side of Umm el 'Amad. The north city wall (Area F) on Tell Abila needs additional probing to determine further its age, extent and function in the Roman, Byzantine, and possibly earlier periods. Excavation needs to be opened up in the theater and saddle area between the two tells to give understanding as to the size, age, and function of the theater and of the massive ruins just to the north of the

theater. Further excavation in the Roman-Byzantine tombs will be helpful in understanding Abila's culture, but search needs to be made for the Hellenistic, Iron Age, and Bronze Age tombs for a further understanding of the culture of the city in those periods. Further investigation of the underground aqueducts needs to be made, but the survey needs to expand into the outlying region to see what other parts of the hydrological system might be found and to study what relationship there might be between this hydrological system and that at Gadara (Umm Qeis).

W. Harold Mare
Covenant Theological Seminary
St. Louis, Missouri 63141,
U.S.A.