

# In the Shadow of Nikopolis: Patterns of Settlement on the Ayios Thomas Peninsula

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One of the stated themes of this symposium is to examine the effects of the foundation of Nikopolis on surrounding areas. That these effects were felt in regions quite removed from the city is attested to by both literary and archaeological evidence, and they have been described by several of the conference participants. In this paper, however, I present evidence from an area quite close to the city, the Ayios Thomas peninsula, which was the focus of intensive archaeological and geo-

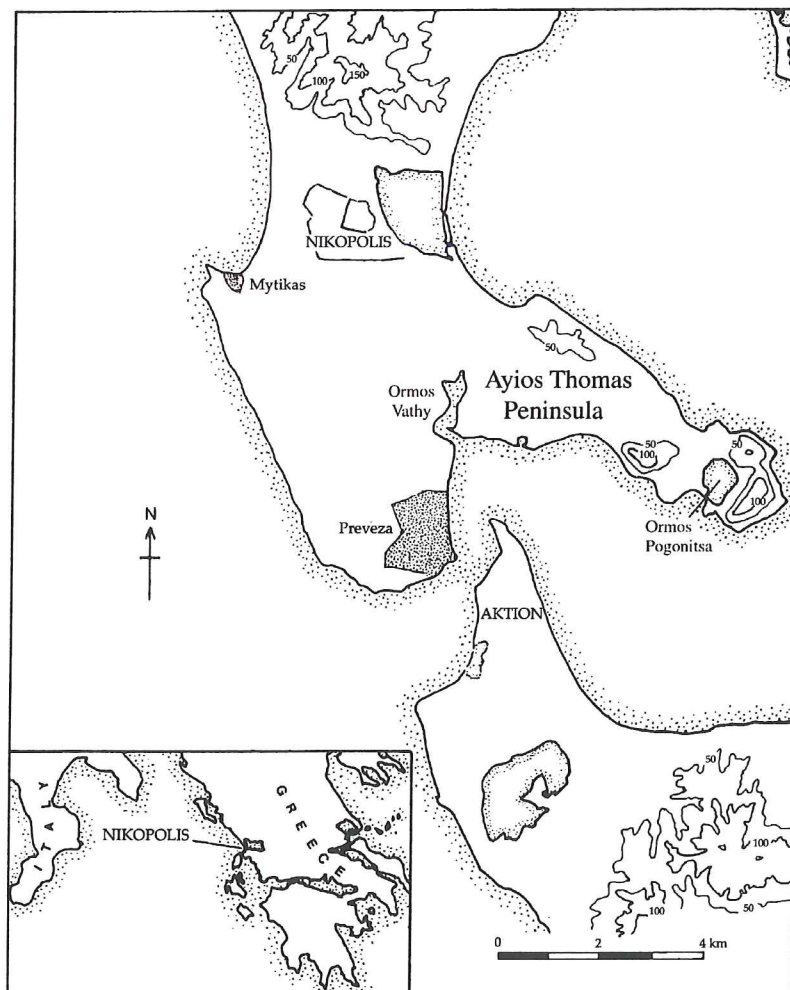
logical investigations by the Nikopolis Project during the summers of 1993 and 1994 (Fig. 1).<sup>1</sup>

The Ayios Thomas peninsula extends eastward from modern Preveza into the Ambracian Gulf, and provides an excellent case study for examining the effects of imperial incorporation. Its proximity to Nikopolis all but ensured substantial changes in land use following the foundation of the urban center. Perhaps the most radical of these changes was the centuriation of the peninsula, previously detected by researchers using a combination of aerial photographs and topographic maps.<sup>2</sup> Equally important was the utilization of Ormos Vathy, an inlet at the western end of the peninsula, as one of two harbors for the newly founded city.<sup>3</sup> Multidisciplinary research by the Nikopolis Project has helped to clarify these changes and their effects on the peninsula's subsequent history.

A brief description of the landscape and our strategy for exploring it follows. The peninsula measures roughly 15 km<sup>2</sup>, and, despite the rapid expansion of many of its coastal communities, there are still large areas covered by agricultural and grazing fields. The only elevations of note are a ridge along the north coast, and the elevations surrounding Ormos Pogonitsa at the eastern end of the peninsula. The surface of the peninsula is covered with a thin mantle of Pleistocene sediments and paleosols, which overlies a thick deposit of marine sands.<sup>4</sup> The great age of the surface (ca. 20–50,000 ya) indicates that sites of all periods may be found in the course of surface survey.

The sampling strategy employed on Ayios Thomas, and by the Project in gen-

Fig. 1. Map of the Ayios Thomas peninsula (after Murray and Petsas 1989, fig. 1).



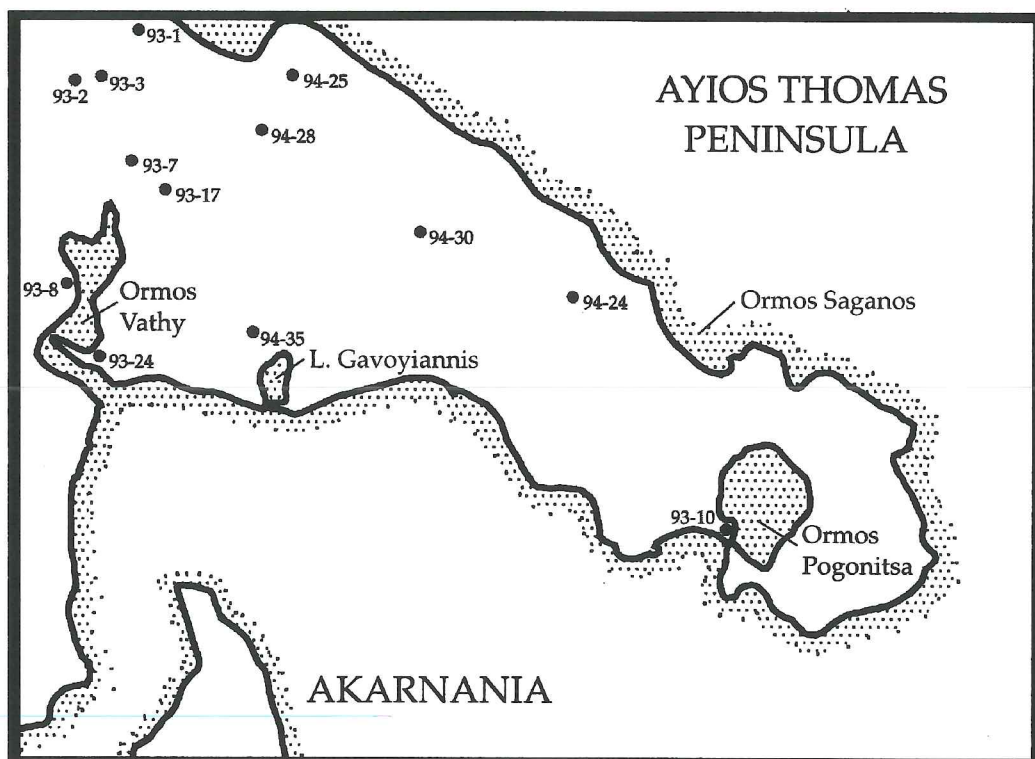


Fig. 2. Roman and Late Antique sites on the Ayios Thomas peninsula.

eral, used a combination of extensive and intensive survey across a variety of environmental zones. Three such zones were defined for this peninsula: a coastal zone, comprised of areas directly adjacent to the Ambracian Gulf; lowlands, defined as interior areas below 40 masl; and highlands, the upper slopes of the elevations mentioned previously. These divisions are somewhat arbitrary given the small size of the peninsula and the relative homogeneity of its landforms, but a sampling strategy based on such divisions increases the potential for locating sites of all types and periods. Special attention was also paid to areas of known archaeological or historical interest.

A total of 134 survey units were carried out on the peninsula, covering 1.3 km<sup>2</sup>, or roughly 10% of the total surface area.<sup>5</sup> Evidence for human activity was found to range from the Lower Palaeolithic through Post-Medieval periods, providing a long, though not continuous, history of land use on the peninsula. One of the gaps in this land-use sequence occurs in the Archaic through Hellenistic period: of the thousands of artifacts counted and collected,

only about a dozen have been dated to Greek times, and most of these are likely Hellenistic. These Greek-period sherds were all found in the vicinity of either Ormos Vathy or Ormos Pogonitsa, not coincidentally where some of the best dated Early Roman material was found as well. At present, it appears that these two inlets, at opposite ends of the peninsula, may have been the only places to “witness” the transition to Roman rule.

In stark contrast to the underutilized Greek landscape, abundant evidence for activity in the Roman and Late Antique periods was found throughout the peninsula. Nine new sites were identified in the course of our investigations, and an additional four, previously known to the local Ephoreias, were systematically explored (Table 1; Fig. 2). I will discuss the finds at several of these sites in detail before considering their implications for Roman and Late Antique period land use. I must stress the preliminary nature of these findings, as the analysis of the data is ongoing.<sup>6</sup>

### *The Survey Results*

The largest site on the peninsula, and the

Table 1. Roman–Late Antique Sites on the Ayios Thomas Peninsula

<i>Site Name</i>	<i>Site Number</i>	<i>Size (ha)</i>	<i>Zone</i>	<i>Interpretation</i>
Mazemata	SS93-1	0.21	lowlands	villa?
Analipsis 1	SS93-2	0.19	lowlands	farmstead
Analipsis 2	SS93-3	0.17	lowlands	farmstead
Kleopatra 1	SS93-7	0.25	lowlands	farmstead
Kleopatra 2	SS93-17	0.20	lowlands	farmstead
Ormos Vathy	SS93-8	22.50	coastal	harbor town
Margarona	SS93-24	0.10	coastal	bath
Metamorphosis	SS94-25	2.50	coastal	villa?
W. of Neochori	SS94-28	0.66	lowlands	farmstead
Ayios Minas	SS94-35	2.48	coastal	LA village, R. bath?
Ayia Triadha	SS94-30	0.01	lowlands	tile grave
Ayioi Apostoli	SS94-24	0.80	lowlands	farmstead
Ormos Pogonitsa	SS93-10	0.13	coastal	?

one that received the most detailed study, is located at Ormos Vathy, or “Deep Bay.” The inlet was identified as the inner harbor of Nikopolis by Col. William Leake,<sup>7</sup> who used a passage in Strabo (7.7.5) and a complex of architectural remains at the inlet’s southeast corner to support his theory. Despite such promise, the area had never been systematically explored.

The importance of Ormos Vathy was confirmed in 1993 when Nikopolis Project team members identified a harbor town (SS93-8) on its western shore. The locations of our survey units are indicated in Figure 3. The densest concentration of artifacts was noted within an area measuring 250 m (E-W) x 900 m (N-S). The northern and western limits of the site are fairly secure, but exploration of the southern boundary was limited by the presence of a military base and, further south, the buildings of Nikopolis’s successor, modern Preveza. Over 39,000 artifacts were counted within the boundaries of the site, almost 2,000 of which were collected for further study, and the vast majority of this material (over 90%) dates to the Roman and Late Antique periods. The finds from

Ormos Vathy include large quantities of transport amphoras, fine wares, lamp and glass fragments, and coins, indicating that both commercial and domestic activities took place. In addition, several special activity areas were noted within the larger site.

The first activity area consists of a series of piers along the western edge of the inlet. The area is heavily overgrown, but portions of at least eight piers were identified, along a 100-m stretch, at the edge of the waterline. The piers are constructed of field stones and waterproof cement, with a brick-faced exterior, and they are clearly Roman in date (Fig. 4). Less clear is how the piers functioned. Despite their roughly linear orientation, the majority of the piers are not in situ, and for the time being they have been identified simply as harborworks.

A second activity area was identified 100 m north of the piers. Here a large midden of *Murex brandaris* shells was discovered, indicating that purple dye was produced somewhere in the vicinity.<sup>8</sup> At the time of survey, the midden was approximately 16 m long and several meters

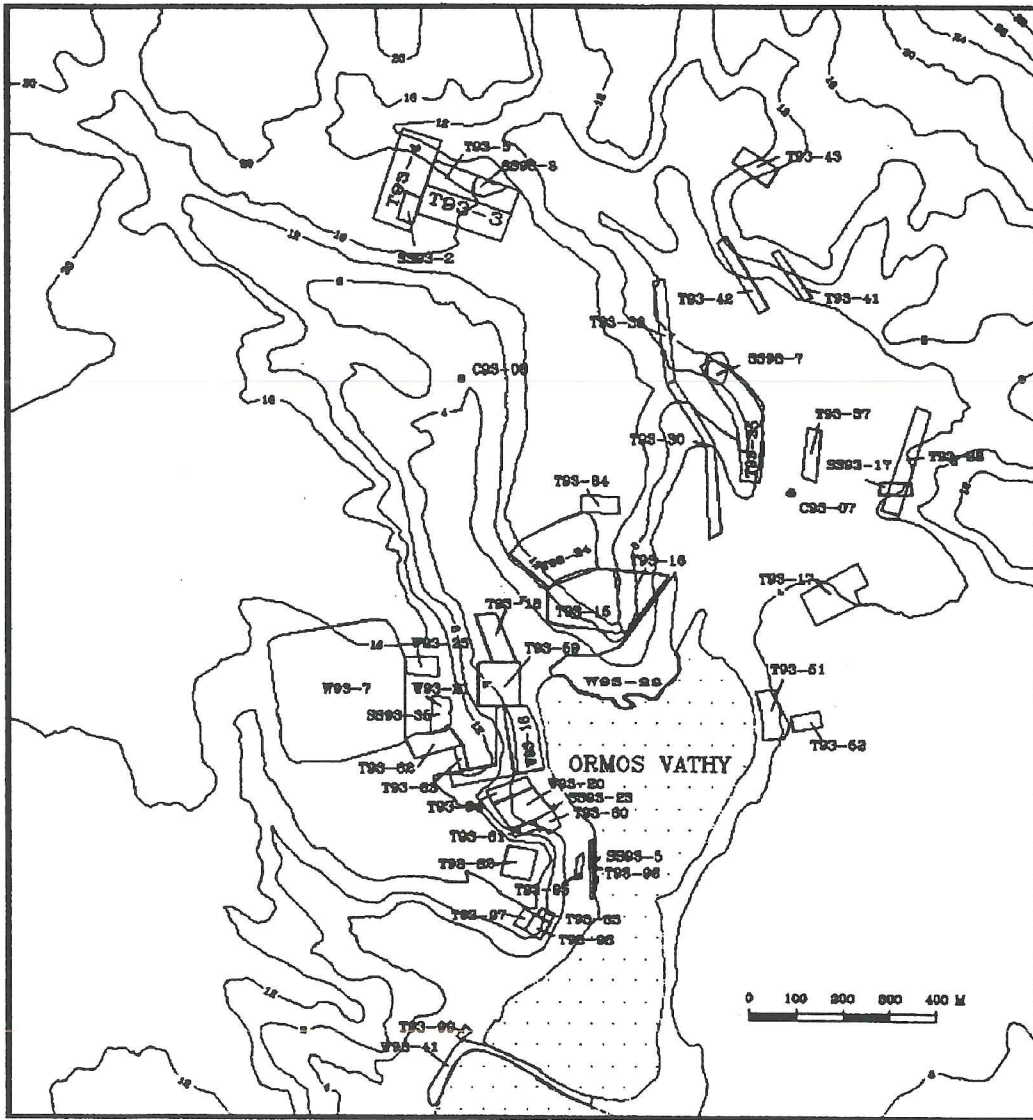


Fig. 3. Survey units at Ormos Vathy.

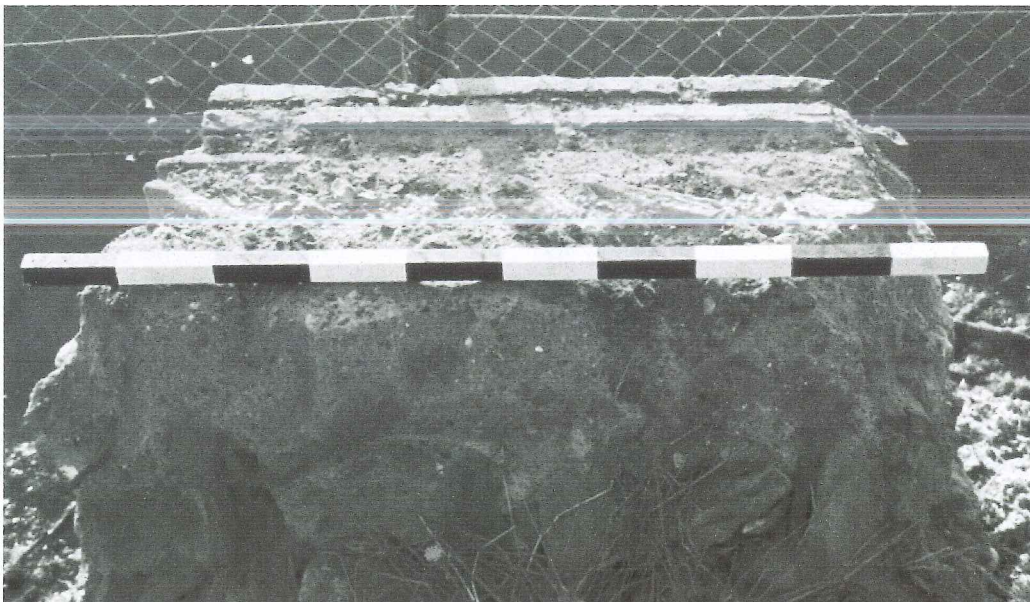
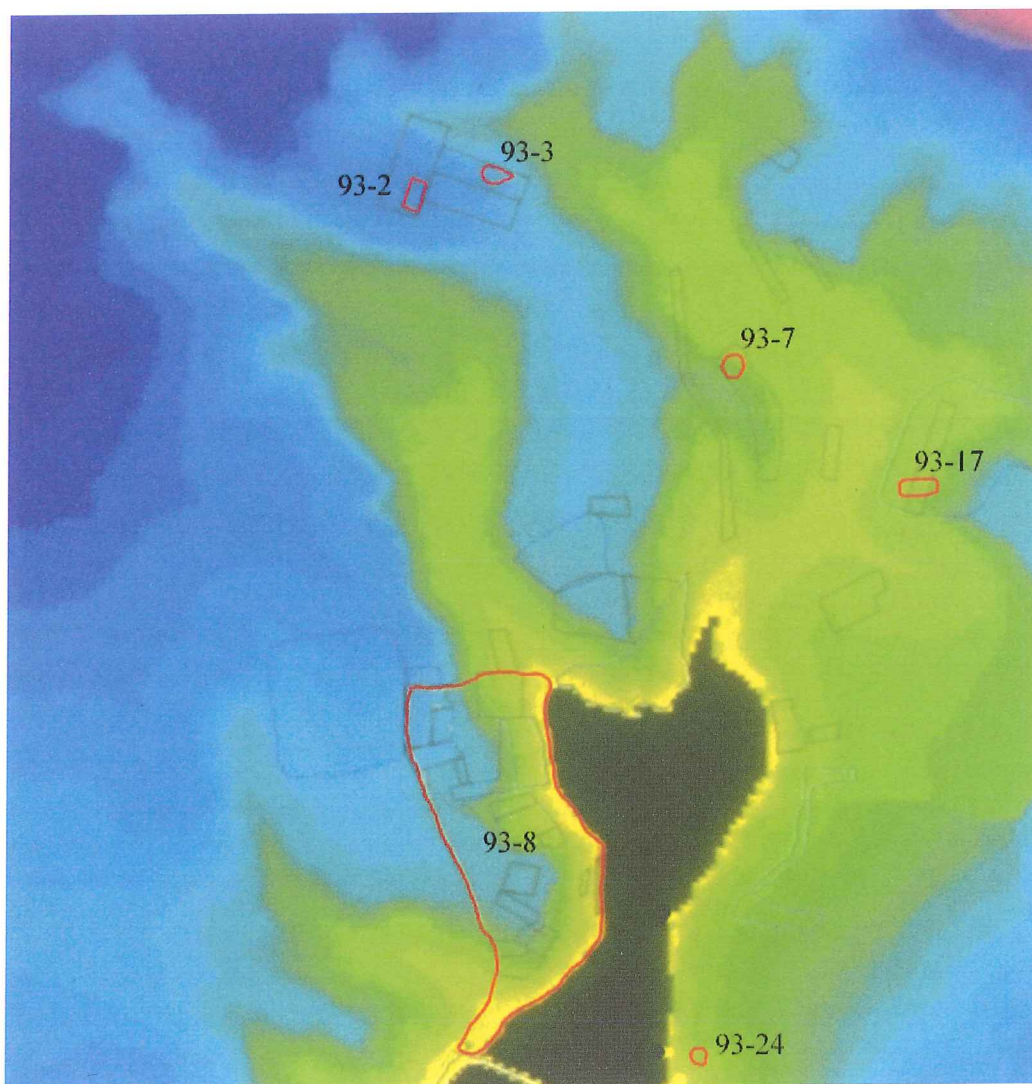


Fig. 4. Brick-faced pier at Ormos Vathy.

Fig. 5. Digital elevation model of Ormos Vathy. Lower elevations are indicated in yellow and green. Roman-Late Antique sites are outlined in red.



high, although it was partially obscured by the surrounding vegetation, and a portion of it had been cleared away by farmers. Artifacts collected in the vicinity of the midden, including fine wares, lamps, and a number of glass fragments, suggest that the activity in this area was not exclusively industrial.

A final activity area was designated near the northeast edge of the harbor town where two joining fragments of a marble inscription were found (NI 93-1a,b). The inscription, in well-cut Greek letters, preserves the first portion of someone's name, perhaps a freedman as the name is a combination of Roman and Greek forms:

ΚΛΑΥΔ - - -  
ΦΡΟΣ - - -

The fragments may be part of a plaque

or grave stele and, if the latter, would be further evidence for the limit of the town in this direction. I should point out, however, that there was likely to have been almost continuous settlement between Nikopolis and the harbor town, with one or more roads connecting them as well.

In addition to the archaeological survey, limited geophysical survey was used to explore the remains within the harbor town.<sup>9</sup> In 1993, a magnetometer survey was carried out near the findspot of the inscription, but the presence of modern surface debris obscured any patterning in the data. In 1994, a second survey was carried out, this time in a small, fallow field on a terrace overlooking the piers. This field was selected for further study because of a particularly heavy concentration of

artifacts, as well as the presence of a threshold block, clearly not in situ, at the field's eastern end. Magnetometer survey in this location revealed the presence of a large structure, at least 20 m in length, with one internal cross wall. Some evidence for the date and/or function of this building may be obtained when the analysis of the artifacts has been completed.

The archaeological remains at Ormos Vathy cannot be understood without reference to the geomorphological study of the area, a project undertaken by Zhichun Jing and George Rapp.<sup>10</sup> That the configuration of the inlet has changed over time is suggested not only by the surrounding contours, but also by a map of the region drawn by Leake.<sup>11</sup> Leake's map, although clearly not to scale, shows the two arms at the north edge of Ormos Vathy projecting much further inland than they do today. He states that the western arm "touches a part of the site of Nikopolis" and that the eastern arm "approaches the coast of the Gulf of Arta."<sup>12</sup> The remnants of these two arms are seen clearly in a digital elevation model, where the lowest lying areas are indicated by yellows and greens (Fig. 5).

To investigate these probable shoreline changes, a series of four cores was taken at the northern end of Ormos Vathy. The geomorphological data indicate that the western arm of the bay did extend several hundred meters further inland during the Roman period, and Jing and Rapp suggest that the waterway would have been navigable for much of this distance. The data from the eastern arm, however, in apparent contradiction to Leake's description, indicates that much of the lowlying area was occupied by fringe marsh rather than bay water. This conclusion is based on the finds from a single core and should be tested further, but, in either case, whether covered by marsh or water, these lowlying areas would not have been habitable in the Roman period. The reconstruction of the Roman-period shoreline at Ormos Vathy has implications not only for our understanding of the harbor town, but also for a series of Roman-Late Antique

habitation sites located to the north of the inlet. These rural sites will be examined shortly.

Roman-period activity on the eastern shore of Ormos Vathy was more difficult to characterize. In general, the eastern side of the inlet is more heavily vegetated, and many areas were enclosed within modern house lots and not available for survey. Nevertheless, the substantial architectural remains at the southeast corner of the inlet do attest to a Roman presence on this side of the bay. These remains are located near the church of Zoodhochos Pygi, and probably once formed part of a Roman bath building (SS93-24). Among the surviving wall sections, constructed of *opus testaceum*, can be noted a vaulted corridor; a semi-circular and a rectangular niche; and two apsed areas, possibly for plunges. In addition, a fine black-and-white mosaic is reported to lie below the floor of the modern church.<sup>13</sup> Despite these impressive remains, our limited survey work on the eastern shore of Ormos Vathy did not reveal a level of activity comparable to that on the western shore. For the time being, therefore, the limits of the harbor town have not been extended in this direction.

Two other inlets on the south coast of the peninsula – Lake Gavoyiannis and Ormos Pogonitsa – were also the focus of activity in Roman and Late Antique times (Fig. 2). Lake Gavoyiannis is currently separated from the Ambracian Gulf by a narrow neck of land. As recently as the 19th century, however, the inlet was completely open to the sea and the locus of commercial fishing.<sup>14</sup> Although no cores were taken to determine the configuration of the inlet in the Roman period, the surrounding topography indicates that the lake may have extended several hundred meters further north. Some evidence for prehistoric activity (probably Bronze Age) was found on either side of the inlet, but, in general, the southern shores of the lake have been much disturbed by recent construction activities, and the historical-period remains are rather sparse. Roman-period occupation was identified near the northwest corner of the lake, in the vicinity of the

church of Ayios Minas (SS94–35). The church is known to the Byzantine Ephoria in Ioannina as the site of an Early Christian basilica,<sup>15</sup> and there are a number of reused architectural pieces within the church today. Archaeological and geophysical survey work in the environs of the church have helped to clarify the nature and limits of the activity there. The densest concentration of artifacts was found within a ca. 2.5-ha area south and west of the church. Although the bulk of the finds are, not surprisingly, Late Antique in date, ceramics from the first three centuries A.D. were also included in the assemblage. More intriguing is the discovery of a *tegula mammata* just south of the church, suggesting that there may have been a Roman bath building in the vicinity. Geophysical survey south of the church revealed possible structural remains, but whether these are related to the earlier church, the proposed bath building, or some other structure cannot be determined without excavation.

Ormos Pogonitsa was also once open to the sea, and must have been used as a harbor in Roman times. Nicholas Hammond identified it as such, and reported that large amphoras had been recovered from the waters there.<sup>16</sup> The lake is currently separated from the Ambracian Gulf by a causeway, almost certainly man-made, through which channels have been cut to supply water for a fish hatchery. Archaeological survey around the lake revealed concentrations of Roman material near its southern shore, both on the smaller of the two elevations incorporated within the causeway (SS93–10) and on the causeway itself.<sup>17</sup> The nature of the occupation here is still unclear, but an amphora waster included among the finds suggests that pottery production took place nearby. No kilns were identified during our survey, but the coastal location, with plenty of timber on the surrounding elevations, would have been ideal for such an activity.

One final coastal site was investigated, this one on the north coast of the peninsula in a locality known as Metamorphosis (SS94–25). The remains of this site are

scattered over a large, low-lying area surrounding the church of Ayia Soteira. A spring to the northwest of the church has likely contributed to the extension of the coastline here, but no coring was done to confirm this hypothesis. Ca. 200 m east of the church, portions of an apsidal building were exposed and partially destroyed in a road cut. The apse of this building faces northeast, and thus the structure does not appear to be an early church. A second set of wall remains was located on a terrace to the south of the church, but its connection, if any, to the apsidal building is not clear. Surprisingly little ceramic material was found in the vicinity of these remains, but a large number of waterworn sherds was noted along the present shoreline. It is possible that a small harbor was located here, either for fishing or quick access to Nikopolis by sea; the architectural remains may form part of a small coastal community or perhaps even a villa. Identifying this site as a villa may seem overly optimistic, if not risky, given the meager ceramic evidence, but the architectural remains are suggestive and their location even more so. The site at Metamorphosis may form one of a string of coastal villas that have been identified along the north shore of the Ayios Thomas peninsula.<sup>18</sup>

Archaeological survey in the lowland zone identified a number of Roman–Late Antique sites that have been classified as rural farmsteads. Most of these sites are small in size, with assemblages typically spanning several centuries. A full range of domestic ceramics is usually present, and fragments of Roman rotary querns were a common find. Of the cluster of sites found north of Ormos Vathy (SS93–2, 93–3, 93–7, and 93–17), only one deserves further mention. This site (SS93–17), in a locality known as Kleopatra, was identified in an alfalfa field lying above what would have been the eastern arm of the bay. The long, thin shape of the artifact concentration at this site was unusual, and the presence of what appeared to be a buried limestone block north of the site aroused further suspicion. Geophysical survey of the main artifact concentration failed to

reveal any subsurface architecture, however, and the site remains classified as a farmstead.

The two largest farmstead sites – one located west of the village of Neochori (SS94-28), the other near Ayioi Apostoli (SS94-24) – are each less than one hectare in size, and thus are unlikely to be second-order settlement sites, or villages. Still, the remains at these sites could easily belong to a few buildings rather than just one. More enigmatic is the small site that lies between them, near the village of Ayia Triadha (SS94-30). This site consisted of a small concentration of tiles with very little associated pottery, and a revisit to the site in 1995 failed to produce any diagnostic material. Some of the finds were identified as Roman on the basis of fabric, and the site was tentatively classified as a farmstead. An alternative interpretation of these remains will be presented below.

### *Settlement Patterns*

What can now be said of land-use patterns on the peninsula in the centuries following the foundation of Nikopolis? The coastal areas, particularly the inlets on the south coast, appear to have been heavily utilized, both for their access to marine resources and to seaborne travel and trade. Along several stretches of coastline, there is a fairly steep drop to the sea, and the absence of sites in these areas is not surprising. More perplexing is the absence of finds at Ormos Saganos (Fig. 2), northwest of Ormos Pogonitsa, which seemed to be a likely focus of activity in the past and was briefly surveyed in 1994; further investigation in this area might prove fruitful. The stretch of coastline between Lake Gavoyiannis and Ormos Pogonitsa was almost certainly exploited, but modern construction and heavy vegetation prevented survey in this location. We did, however, note probable ancient walls just offshore and midway between the two inlets, near the site of a modern jetty.

In the highland zone, not one site of the Roman or Late Antique period was identified. There are several possible expla-



*Fig. 6. SPOT panchromatic image of the Preveza peninsula.*

nations for this, including poor visibility, a lack of walkable areas, or even the effects of increased erosion. But evidence for Post-Medieval habitation was plentiful in this zone, and erosion, at least, does not seem to be a major factor. In the Roman period, the highland areas may have been used for grazing and bee-keeping, activities less easily detected in the archaeological record. Comparative data from highland areas in other parts of the Project area may help clarify this issue.

In contrast, archaeological survey revealed substantial evidence for activity in the lowlying interior during the Roman–Late Antique period. Although it is unlikely that all of these sites were occupied simultaneously, preliminary phasing of the sites suggests that many of them were, and the pattern of rural habitation appears to have been fairly dense. This impression is strengthened when one considers that less than 10% of the lowlands was systematically surveyed. A higher density of rural sites closer to Ormos Vathy provides further evidence for the importance of this harbor, although there is some danger that the intensity of the survey work



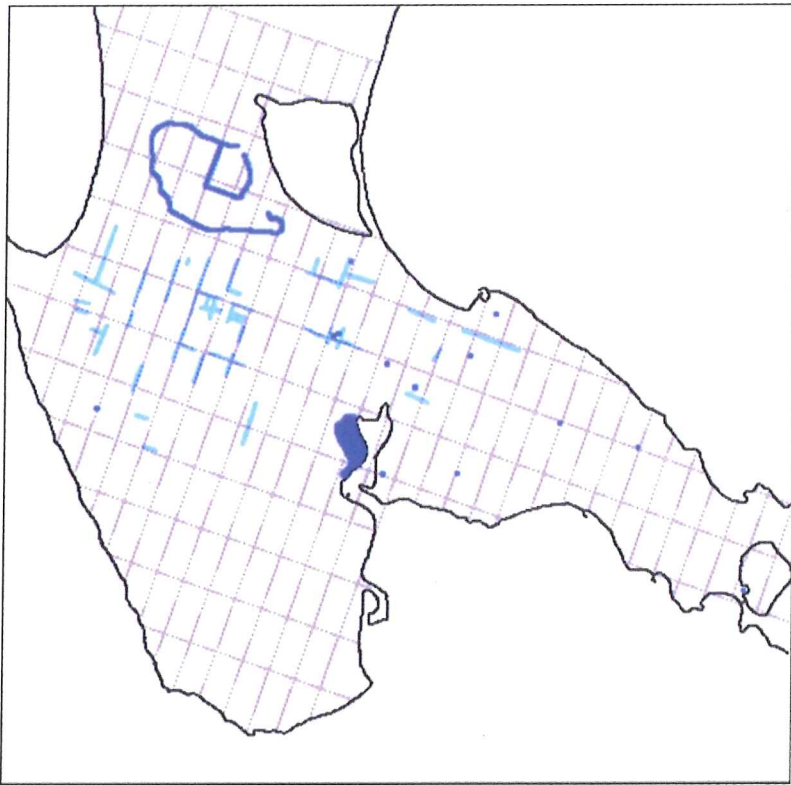


Fig. 7. Projected centuriation scheme (pink) with the locations of Roman – Late Antique sites superimposed (dark blue). Preserved traces of ancient field boundaries are indicated in light blue.

in this area has skewed the data. Were the remainder of the peninsula surveyed with equal intensity, a more even distribution of sites might be revealed.

#### Settlement and Centuriation

One further aspect of the settlement pattern remains to be explored: its relationship to the centuriation system identified south of Nikopolis.<sup>19</sup> Land division schemes are notoriously difficult to date, but Doukellis has convincingly argued that this scheme was laid out at the time Nikopolis was founded.<sup>20</sup> Surface survey data from a centuriated landscape are rare, and provide an opportunity to test various aspects of a field system, including its date, extent, and longevity.<sup>21</sup> In addition, as will be seen below, the position of a site within a centuriation scheme may aid in its interpretation.

To determine whether there was any correlation between the locations of the sites and the proposed centuriation scheme, I projected Doukellis's scheme onto the Ayios Thomas landscape using a combination of aerial photographs and SPOT panchromatic satellite imagery (Fig.

6). I began by tracing some of the same ancient field boundaries used by Doukellis in his 1988 work, focusing on a fairly complete grid square just south of the city walls of Nikopolis. This square measures roughly 708 m on a side, quite close to the standard size for a 20 x 20 actus scheme. A grid pattern was then extrapolated from this square, and the locations of the survey sites were superimposed (Figs. 7–9).<sup>22</sup> On visual inspection, there appears to be a strong correlation between the two datasets. While the analysis of the patterning is still ongoing, some preliminary observations may be made.

Of the thirteen sites investigated by the Project, ten lie in close proximity to the projected *limites*, while three do not. Two of the three “anomalous” sites, Kleopatra 1 and 2 (SS93-7 and 93-17), are located on what would have been the eastern arm of Ormos Vathy, and their position was more likely influenced by this topographic feature than the rural network. The third site, at Metamorphosis (SS94-25), is exceptional both because of its coastal location and the fact that the remains are scattered over a wide area. Nevertheless, the location of Metamorphosis at the center of a grid cell may indicate a larger size for this landholding, providing possible support for its identification as a villa.

The close proximity of Analipsis 1 and 2 (SS93-2 and 93-3), part of the cluster of farmsteads north of Ormos Vathy, suggests an intriguing relationship that may be revealed with further study. A preliminary examination of the finds from these sites reveals a difference in the dates of their assemblages, raising the possibility that they may represent two (consecutive?) farmsteads working the same plot of land. The farmstead west of Neochori (SS94-28) is the best candidate for a single-period Early Roman site on the peninsula; its alignment with the rural network helps to confirm the Augustan date of the centuriation scheme. Ayioi Apostoli (SS94-24), the largest of the farmstead sites, is located at the intersection of two *limites*, a likely place for a higher-order settlement to grow. The position of Ayioi Apostoli with-

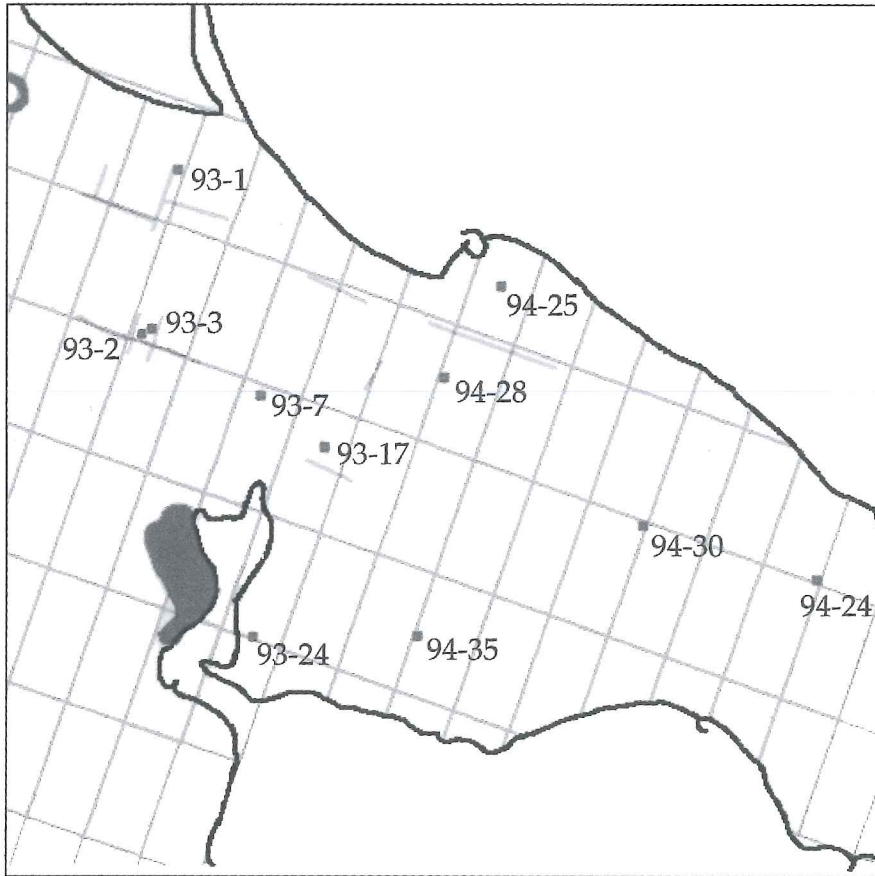


Fig. 8. Detail of Figure 7, western half of peninsula.

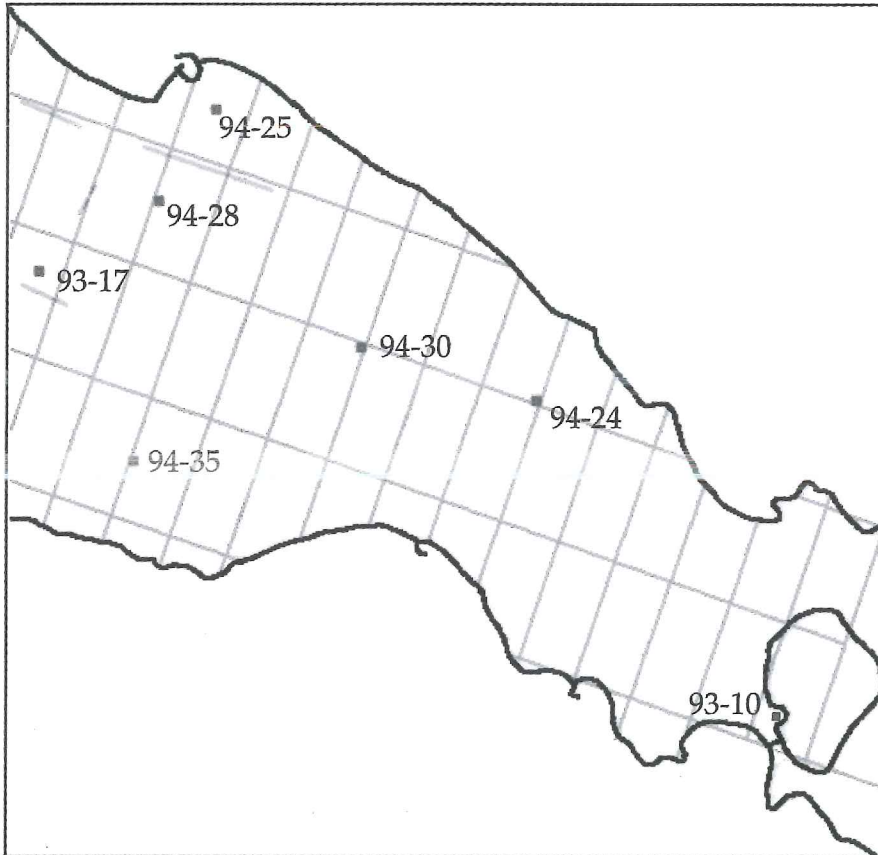


Fig. 9. Detail of Figure 7, eastern half of peninsula.

in the centuriation scheme and its relatively large size may indicate that it is better interpreted as a small village. Finally, it is now apparent that Ayia Triada (SS94-30), the enigmatic tile scatter, is also located at the intersection of two *limites*. In this case, the correlation provides some evidence, not found in the material record, that the scatter may best be interpreted as a tile grave.

## Conclusion

Investigations by the Nikopolis Project have documented the profound changes in land use on the Ayios Thomas peninsula following the foundation of the city. This study presents only the initial stages in the analysis of the settlement patterns. The ru-

ral settlement typology on the peninsula will continue to be refined, and patterns of settlement and land use will be developed for each chronological period. The data from the Ayios Thomas peninsula will then be compared to the remainder of the Project area, in particular with the Acheron River valley, to the north, where investigations of similar intensity were carried out. The comparison of these two areas, at varying distances from the city of Nikopolis, will provide additional evidence for assessing the effects of the foundation. It is my firm belief that, with data from regional investigations such as these, we will be able to determine how far – and for how long – the shadow of Nikopolis was cast.

# Notes

## NOTE 1

The Nikopolis Project, directed by James R. Wiseman, Boston University; Angelika Douzougli and Konstantinos Zachos, 12<sup>th</sup> Ephoreia of Prehistoric and Classical Antiquities; and Frankiska Kephallonitou, 8<sup>th</sup> Ephoreia of Byzantine Antiquities, was carried out from 1991 to 1996 under the auspices of the American School of Classical Studies at Athens. An overview of the project and a listing of publications to date may be found in Wiseman (this volume).

## NOTE 2

Cladas 1975; Doukellis 1988.

## NOTE 3

Leake 1835, vol. 1, 196.

## NOTE 4

Curtis Runnels, personal communication, 1993. See also Runnels et al. 1999.

## NOTE 5

For an explanation of the terms used to designate survey units, see Wiseman (this volume) note 5. A fuller discussion may be found in Tartaron (in press).

## NOTE 6

I am indebted to Melissa Moore for allowing me to incorporate her most recent thoughts on the ceramics from this area.

## NOTE 7

Leake 1835, vol. 1, 196.

## NOTE 8

For evidence of purple-dye production in Epirus during the Roman period, see Dakaris 1971, 17 (Cassope) and Dakaris 1986, 62 (Dodona). Cf. Wiseman, this volume, note 25.

## NOTE 9

The geophysical surveys were carried out under the direction of John Weymouth and Apostolos Sarris, whose preliminary interpretations are presented here.

## NOTE 10

Jing and Rapp, in press. For additional discussion of their findings, see also the article by Wiseman in this volume.

## NOTE 11

Leake 1835, vol. 1, 187.

## NOTE 12

Leake 1835, vol. 1, 181.

## NOTE 13

K. Zachos, personal communication, 1992.

## NOTE 14

Pouqueville 1826; see the map of the Preveza peninsula by J.G. Barbié du Bocage.

## NOTE 15

Pallas 1959, 197–202; Soustal 1981: 270.

## NOTE 16

Hammond 1967, 48.

## NOTE 17

The material on the causeway appears to have been dredged up during a cleaning of the channels connecting the lake to the Ambracian Gulf.

## NOTE 18

Cf. *Praktika* 1959, 98–113 [Phtelia]; another possible villa site (SS93-1) was identified by the survey ca. 400 m southeast of Phtelia. For other coastal villas in Epirus, see the article by Angeli and Katsadima in this volume [Riza, Frangoklessia]; and *ArchDelt* 48 (1993): 282–285 (with earlier references) [Strongyli].

## NOTE 19

The system was first noted by Chevallier [Chevallier 1958] and published in more detail by Panagiotis Doukellis [Doukellis 1988], who incorrectly identified the module as 20 x 40 actus (707 x 1414 m). While the centuries may indeed be rectangular, the module corresponds to a 10 x 20 actus scheme; cf. Cladas 1975. See also note 14 below.

## NOTE 20

Additional support for an Augustan-period date was presented by Kostas Zachos (this volume), who has determined that the temenos of Apollo, Augustus's victory monument, was aligned with the *cardo maximus* of the city.

## NOTE 21

Survey data from centuriated land is available from other parts of the empire; see, e.g., Attolini et al. 1991 [Cosa]. At the time this paper was presented, however, the hinterland of Nikopolis was the only centuriated land in Greece to have been intensively surveyed. The project area of the Eastern Korinthia Archaeological Survey, which conducted its first season of fieldwork in 1999, also includes centuriated land; the results of this project should provide a valuable comparison to the data from Ayios Thomas.

## NOTE 22

It is unclear whether the N–S limites that are visible south of Nikopolis at 10-actus intervals represent internal divisions of a 20 x 20 actus scheme or constitute evidence for a 10 x 20 actus scheme. Conservatively, I have reproduced Doukellis' 10 x 20 actus scheme. It should be noted that, aside from Nikopolis and Ormos Vathy, the remainder of the sites in Figures 7–9, regardless of size, are indicated with a single dot.

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