Archaeological Survey in the Mediterranean Area

Donald R. Keller and David W. Rupp

BAR International Series 155
1983

THE COASTAL SITES OF WESTERN AKARNANIA
A TOPOGRAPHICAL - HISTORICAL SURVEY

William M. Murray

Location: Selected areas along the full length of the western Akarnanian coast from the mouth of the Acheloos River to Cape Aktion were examined.

Dates: Seven separate field trips were made between January 1979 and November 1980.

Funding Sources: The University of Pennsylvania; The American School of Classical Studies at Athens; Phi Alpha Theta, International Honor Society in History.

The major settlement areas of the western coast of Akarnania occur in topographically defined valleys. North of the Acheloos delta, a generally bold shoreline is broken by three sizable bays at the heads of which valleys run inland. In antiquity, each valley was dominated by one major settlement site which controlled the surrounding farmland and utilized the natural harbor formed by the large bay associated with the valley. Palairos controlled the northern valley, Alyzeia the middle one and Astakos the one to the south. In the extreme south, Oiniadai controlled the Acheloos River delta.

Little survey work of any kind has been conducted in Akarnania and although many sites have been observed, few have been accurately mapped, described or dated. Of the four major cities along the coast, two had never been mapped, none of the numerous hill forts, watchtowers or signal stations had ever been mapped or photographed, and except for the obvious harbor mole south of the city of Leukas, submerged remains had gone unnoticed. Since an intensive survey was impractical for so large an area my goals were threefold:
1) to document more fully the sites already noted in the literature,
2) to record all new sites known by the local inhabitants and
3) to record all underwater remains to the depth of about eight meters (the depth to which I can easily free dive, i.e. without SCUBA equipment, and to remain long enough to work effectively).

Each site was mapped with a Brunton pocket transit and a thirty meter tape. On the map thus created, certain features of the walls were noted: use of clamps, existence of drafting, the presence of internal transverse walls bonding the circuit wall's outer and inner faces together, changes in masonry styles and stretches where the wall's line was not preserved. Each section of the wall were was photographed and the position and direction of each camera 'view' were was noted on the plan. All find spots of diagnostic pottery, coins, inscriptions, large concentrations of sherds and rooftile fragments were noted on the plan as well. Diagnostic pottery was sketched and photographed only if it provided dating evidence for the occupation of a site not previously attested by literary or inscriptional evidence.

Sites under water were plotted onto a survey of the adjacent beach. Floats were then placed over selected points of the submerged structure and bearings shot from four or five designated positions along the beach to locate it on the plan. Further details

were added to this outline from measurements taken in the water. Diagnostic pottery associated with the structure was roughly located on the plan, brought to the shore, sketched, photographed and returned to the find spots. Depths were recorded for all submerged structures, special care being taken to measure fully in situ mole and dock surfaces. Rough depth profiles were made for the mole near Pogonia (Palairos' ancient harbor) and for the mole at Leukas. These measurements provide a rough idea of each mole's overall shape and volume and allow its observable mass to be computed.

Many of the problems associated with the alluviation process in the Acheloos delta and the Leukas Canal area would have benefitted greatly from programs of coring and high frequency seismic profiling. Financial limitations relegated such projects to the future. I was fortunate in having the kind help and advice of Tjeerd van Andel of the Geology Department, Stanford University, during one of my field trips in the summer of 1980. Many faulty assumptions have been avoided due to his help. Richard Jones of the Fitch Laboratory, British School of Archaeology, kindly examined some samples of lime plaster that helped to define a use phase of an ancient reservoir dam. Last but not least, Dimitrios Lalas, Department of Meteorology, The University of Athens, kindly reviewed my wind theory arguments for establishing the ancient sailing route along this coast, and made available to me much statistical data and insightful advice. My understanding of the ancient winds enabled me to pinpoint locations of ancient harbors with consistently good results.

Summary of Results: The physical remains of this coast agree well with the scanty picture provided by our historical sources. Although the major city sites were inhabited by the sixth and fifth centuries, relatively large scale building projects were apparently not undertaken until the fourth and third centuries. In general, the Hellenistic period was one of prosperity for these towns and saw the extension of city circuits, the erection of signal towers, garrison posts, refuge strongholds against pirate attacks and the building of permanent harbor moles and docks. These harbors offered important anchorages for boats sailing northwest. A thin band of thermally generated wind enabled vessels to sail against the prevailing wind when they remained close to the Akarnanian shore. This was the favored route when the Leukas Canal was navigable and our literary and epigraphical sources indicate this was the case during the prosperous years. Amphora fragments from the harbor moles at Leukas and Palairos and from the site of Astakos show that some goods were imported from Corinth and Italy, and an 'oriental jar' fragment at Palairos indicates some imports came from further afield. Yet except for the mole at Leukas, the harbors of the Akarnanian cities were quite modest. As one would expect, these people were never apparently engaged in large scale trade. By the first century, this prosperity is not evidenced by the remains. At the founding of Nikopolis in 30 B.C. the cities of this coast were sparsely populated and many inhabitants no doubt chose to migrate to the new city in search of work.

Measurements from dock surfaces near Leukas, Palairos and Alyzeia indicate that the sea level was -3.4 m ± 0.8 m during the seventh to fifth centuries. It had risen about 0.5 m by the fourth to third centuries and generally remained at this level relative to the land

(-3.0 m $\pm$ 0.6 m) until sometime shortly after the sixth century A.C. when it rose above the moles' surfaces. Since that time it has risen an additional 1.3 - 1.7 m.

Key to sites on Figure 1.

1. Oiniadai
2. Agios Pandeleimona
3. Astakos
4. Kastri
5. Pyrgos
6. The Mytikas Valley Dam
7. Alyzeia
8. Alyzeia's harbor
9. Pyrgos
10. Kastri
11. Palairos' harbor
12. Palairos
13. Hilltop Santuary on Pr. Elias
14. Kastro on Kokkino Stephani
15. Sterna
16. Kastro
17. Polyvoleio on Vigla
18. Shoreline structure
19. Leukas
20. Peratia (Ancient Perdioricto)
21. Leukas' harbor (the South mole)
22. Kastri Lithles
23. Kastelli at Phagia
24. Vathy Avali
25. Pyrgos atop Kotoupa

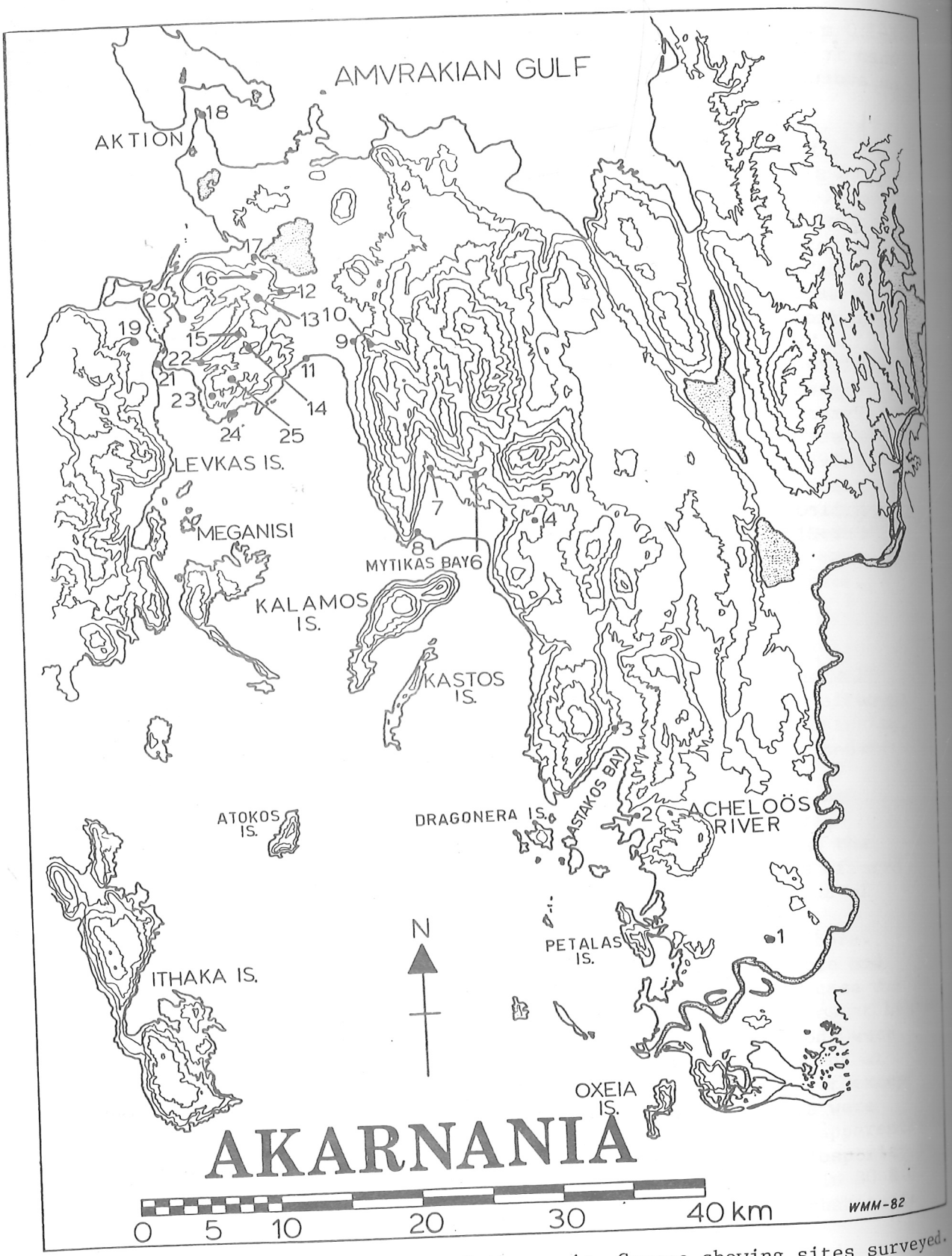

Fig. 1 Map of the Western coast of Akarnania, Greece showing sites surveyed.