# The Eastern Korinthia Archaeological Survey: A Report to the Ministry of Culture, 2001

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Under the direction of Professors Timothy E. Gregory (Ohio State University) and Daniel J. Pullen (Florida State University), the Eastern Korinthia Archaeological Survey has conducted fieldwork in 1999, 2000, and 2001. The project has operated under a permit granted each year by the Ministry of Culture to the American School of Classical Studies at Athens. Special thanks are due to the Fourth Eforeia of Prehistoric and Classical Antiquities (represented by Mrs. P. Kasimi) and the Sixth Eforeia of Byzantine and Post-Byzantine Antiquities (represented by Mrs. K. Skarmoutsou). The Field Coordinator was Professor Thomas Tartaron (Yale University), geomorphology and GIS applications were supervised, respectively by Professor Jay Noller (Oregon State University) and Professor Richard Rothaus (St. Cloud State University), the investigation of tombs was undertaken by Professor Joseph Rife (Cornell University), and the study of the archaeology of the modern period was under the direction of Lita Diacopoulos (LaTrobe University, Australia).

From the beginning of the project the Eastern Korinthia Archaeological Survey has been an interdisciplinary undertaking, with full emphasis on the environment, both present and past. A full geomorphological study of the research area preceded the archaeological investigation, and all archaeological field units (Discovery Units) were defined by their environmental integrity. The project is also fully diachronic, with attention paid to all periods, from remote prehistory to the present. The research activities for the years 1999, 2000, and 2001 focused in the Examilia and Isthmia basins of the Eastern Korinthia.

### **ENVIRONMENTAL SURVEY**

Environmental study in the eastern Korinthia was conducted between 1997 and 2001 to assess the natural setting for the period of human occupancy of the region (40,000 years). We identified areas of rapid landscape change and worked (seasons 1999-2001) to ensure that the archaeological survey either avoided these areas or surveyed them with foreknowledge as to the implications of these data. We mapped soils, surficial deposits and landforms in and around the surveyed areas, under permit as well from IGME, to assist in placing the archaeological data in its physical context. Samples were taken of these materials to more accurately describe the physical properties of the landscape and, most importantly for this long-used agricultural region, soil quality. Major geological events, including earthquakes and floods, that have affected society in the eastern Korinthia have been characterized through detailed stratigraphical and mapping studies, augmented by review of ancient sources for those events occurring during the historical periods. Correlation of archaeological survey data with the environmental data will center on analysis of stepped views through time — paleogeographical maps demonstrating position of habitation with rivers, shorelines and fertile soils, etc. — will begin in 2002.

## ARCHAEOLOGICAL METHOD

This section on methodology and procedures employed by EKAS is divided into two sections, the first on the field teams and the second on the processing of the finds in the field.

## Field Team Method

The research design of the Eastern Korinthia Archaeological Survey includes strategies for sampling the territory that we have defined as our survey universe, and methods by which we expect to obtain data that are appropriate for addressing the research questions that we have defined for the project.

## Sampling

It is neither possible nor desirable to walk every square meter of the Eastern Korinthia, for a number of reasons. Portions of the survey area are inaccessible, such as military bases, steep mountain peaks, urban zones, and fenced private property. Other areas can be excluded because geomorphological analysis has shown that archaeological deposits are deeply buried under modern sediment. Rather than attempting total coverage, survey archaeologists generally select samples that they deem to be representative of the whole, and from which they reconstruct the histories of regions. Although there have been objections to the idea of studying regions archaeologically through samples (see especially S. Fish and S. Kowalewski, *The Archaeology of Regions: A Case for Full-Coverage Survey* [1990]), C. Orton's new treatise on sampling (*Sampling in Archaeology* [2000]) effectively dismantles this argument and shows that proper sampling (along with robust methods) is a powerful and effective means of characterizing a region's past.

Like many other successful surveys, EKAS chose to create a sample by first stratifying the survey universe into a series of environmental zones that reflect the range of environments and ecologies of the Eastern Korinthia. The survey area was first divided into six natural drainage basins, because it is these drainages that control the movement of sediments, and the artifacts within them, through the region. Next, basic physiographic zones were identified: the lowland northern plain; the lowland coastal zone near the Isthmus; the rugged Saronic coast; the peaks and passes of Mount Oneion; and the rugged hills and small basins of the interior areas of Athikia and Sophiko are examples of the spectrum of physiographic zones with their associated variability in ecological niches. Within each of these broad zones, blocks of contiguous survey units were placed to allow us to obtain information on representative, continuous landscapes. In 1999 and 2000 we concentrated on the lowland northern plain, the lowland coastal zone near the Isthmus, the peaks and passes of Oneion, and the Saronic Gulf coast near Kenchreai. In 2001, we intended to finish our sample with work in the interior (Athikia) and on the rugged Saronic coast (Korphos, Vayia). These areas were denied us, however, so we filled in areas of the northern lowland plain and some locations around Isthmia, while continuing our geomorphological work throughout the survey area. We hope that we will have an opportunity to work in the environmental zones that we missed in 2001.

Table 1. Main Areas Surveyed, EKAS 1999-2001

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Season	Main areas surveyed (local toponyms)	
1999	Xylokeriza, Marougka, Rachi Boska, Perdikaria	
2000	Kromna (Kesimia, Boulberi), Examilia, Gonia/Yiriza, Agios Kosmas, Kyras	
	Vrysi/Isthmia, Oneion, Kenchreai	
2001	Kyras Vrysi/Isthmia (Rachi Marias, Agios Dimitrios), Kromna, Perdikaria,	
	Agia Paraskeve	

## **Field Survey**

Our survey methods are designed to facilitate the process of discovery, analysis, and interpretation of patterns of cultural material on the modern surface. Decades of field research have demonstrated that the most effective regional surveys explore the surface in a *systematic* and *intensive* way. By systematic, we mean that the places that we walk in the countryside are chosen according to a deliberate strategy, with more or less uniform (and therefore internally comparable) techniques of coverage. In the survey units that we generate by our sampling scheme, walkers spaced at regular intervals transect each unit in parallel lines, observing in a standard two-meter-wide swath of the surface. Our survey is also *intensive*, which means that we walk at close spacing, normally 10 meters between walkers. At this interval, most concentrations of artifacts that are exposed on the surface may hypothetically be detected. Only the smallest artifact concentrations lying within the eight-meter interval between fieldwalkers' fields of view ("swaths" in EKAS terminology) go uninspected. For purposes of interpreting surface information, the data generated by intensive surveys have been considered superior to those obtained by non-intensive surveys.

There are three basic spatial units that we created for the collection of data: the Discovery Unit, the Extensive Discovery Unit, and the Localized Cultural Anomaly.

## Discovery Unit

The Discovery Unit (DU) is the basic spatial unit of our systematic and intensive survey. In the DU, we assess the presence of material evidence of past human activity over a very broad swath of the landscape. In this *discovery phase*, our principal aims are (1) to detect broad patterns of the presence and absence of human activity; (2) to evaluate the varying density of material remains and advance preliminary hypotheses concerning its significance; (3) to characterize where possible the chronology and function of the material remains; (4) to collect environmental information as a contextual framework for the archaeological material; and (5) to define anomalous concentrations of material that correspond to what are traditionally called "sites," but for which we have created the term "Localized Cultural Anomaly (LOCA)."

A fundamental innovation of EKAS is the principle by which each DU is laid out in the field. The modern surface typically reflects complex geological and anthropogenic processes that obscure the relationships between artifact distributions and the surfaces upon which they are found. For example, the widespread practice of grading fields by bulldozing cuts away ancient surfaces and deposits, mixing soils and sediments and their contents. Another common practice is the transport of soil from one place to another, along with whatever cultural materials the soil might contain. Instead of setting out DUs according to modern field boundaries or long transects superimposed on the landscape, as is typically done, EKAS DUs are delimited by Geomorphic

Units (GUs), which refer to units of terrain on which a single, dominant geomorphological process is controlling the movement of artifacts. Geomorphologists break up the survey universe into a mosaic of these GUs, which may be defined by soil changes, drainage conditions, slope, or obvious human activities (e.g., bulldozing or terracing). Several DUs may be placed in a single GU according to the needs of the archaeologist, but our strict rule is that no Discovery Unit may cross a GU boundary. An important benefit of this strategy is that as we are able to control for geological and anthropogenic disturbances to the surface record, we are in a good position to interpret surface artifact patterning with greater confidence. To ensure that this system operates as peak efficiency, a trained geomorphologist is attached to each survey team on a daily basis. The geomorphologist creates fine-scale geomorphological maps of each survey unit, and advises the team leader on processes that may affect the interpretation of artifact scatters.

In walking a DU, the crew is arrayed at a spacing of 10 meters between walkers. Each walker is equipped with two tally counters (clickers), a compass, and a number of plastic bags. Walkers proceed in parallel lines from one end of the DU to the other, observing the ground surface one meter to the right and one meter to the left. All observed artifacts larger than a thumbnail are counted. Certain objects are also picked up and placed in a plastic bag. The criteria for picking up these objects are embodied in the "ChronoType" system—essentially based on the idea that objects that are "unique" to an individual fieldwalker in each DU are gathered. This system seeks to avoid massive collections and needless duplication of finds, while recording every kind of fabric and body shape—thus providing a rough but nonetheless statistically valid relationship between the numbers and kinds of objects on the ground and what is recorded by the Processing Team (see below). Other gathered objects include all coins and lithics, and a selection of tiles with finished edges. All objects that are gathered are placed together in one or more artifact bags for processing by the Processing Team in the field. With rare exceptions, artifacts are not removed from the field during Discovery Phase survey. A DU form, designed for easy entry in the DU database, documents the characteristics of the unit and results of the investigation. This form has three pages: Page 1, general information, location, and survey procedure; Page 2, land cover, visibility, and land use; Page 3, features and course of action.

Because the EKAS project is diachronic, artifacts from the Modern Period (defined as the period from the formation of the modern Greek State in 1827 until the present) are recorded and processed in the same manner as premodern material Fieldwalkers are required to observe modern feature types (buildings, agricultural fields, structures, walls, churches, dump sites, industrial facilities, etc.) and record them on the DU recording forms. They are also required to include all modern ceramics, tiles, and glass fragments in their counts and recording, and examples of these are gathered for processing. A realization of the significance of modern components in comprising a distinct chronological period to be investigated in its own right is a relatively new phenomenon, and EKAS is taking the lead in developing ways of dealing with the modern material landscape. This approach also considers the human aspect of the present cultural landscape, including contemporary indigenous perceptions of heritage, history and national identity, and the threat and impact of modern development on the cultural landscape.

EKAS explicitly espouses a policy of minimal collection: gathered artifacts are left in the Discovery Unit for subsequent description and analysis by the Processing Team. Artifacts are only removed from the field in the case of certain LOCAs. The rationale for a minimal collection strategy, and the benefits derived from it, may be illustrated in the following terms. There is much concern at present with the preservation and conservation of the surface archaeological

record in Greece as elsewhere. In recent years, archaeologists have realized that simply collecting indiscriminately from all findspots is a short-sighted strategy. Until rather recently, the geomorphological mechanisms by which surface manifestations are revealed, concealed, and replenished have been poorly understood, and little thought has been given to the archaeological record that will be left to future generations of archaeologists, who will surely have at their disposal greatly refined tools for discovery and analysis. EKAS has responded to those concerns by cultivating a unique partnership with the local Greek archaeological authorities, aimed at developing a cultural resource management plan that balances the desire to preserve the archaeological landscape as much as possible, with the need to catalogue and study archaeological resources in the face of rampant modern development. Furthermore, this system eases the burden on chronically short museum storage space.

The minimal collection strategy, nevertheless, fulfills our requirements for robust data acquisition. The combination of artifact documentation of survey units by descriptions, drawings, and photographs; and controlled collection of artifacts in selected LOCAs, yields data of sufficient quantity and quality to permit experts to study finds in the normal way, both during the survey and in subsequent years.

### Localized Cultural Anomaly

In the course of surveying Discovery Units, teams may encounter clusters of archaeological material, or isolated but recognizable architectural features (such as sections of a wall or agricultural installations), that are insufficiently documented by fieldwalking alone. The traditional concept of the "site," thought to be easily recognizable by a dense clustering of artifacts and definable spatial limits, has become increasingly problematic in terms of methodology (how to define and delineate a site in an essentially dynamic surface record or against a continuous carpet of artifacts) and conceptualization (what past behaviors does a site represent?). A great achievement of intensive survey has been the development of approaches to the study of the kinds of activities that leave less clustered or less dense remains, among them shorter-term habitation, hunting, pastoralism, agriculture, and tool manufacture.

Because archaeologists seem unable to agree on what a "site" is, more neutral terms are often created to deal with anomalous, non-random scatters of cultural materials. Our term is *Localized Cultural Anomaly (LOCA)*. The elements of this term help explain the concept: 1) localized, thus having some spatial integrity by which it may be distinguished from the material and/or the landscape around it; 2) cultural, thus a product of human agency of manufacture or modification, and not (as far as we can tell) a result of natural causes; and 3) "anomaly," thus qualitatively and/or quantitatively different from the surrounding material and/or landscape. Because LOCAs often represent material remains associated with past and present settlements, sanctuaries, and activity areas, they are integral to the project's overall goals of illuminating the relationship of the Korinthia with the city of Ancient Korinth and the broader Mediterranean world.

LOCAs are interpretive rather than observational units; thus they are *designated* (rather than discovered or observed) by the team leader in consultation with the field coordinator, the geomorphologists, and fieldwalkers, based on the principles embodied in the LOCA concept. Ultimately, the designation of a LOCA is a subjective process that is informed by a wide variety of archaeological and environmental data.

The overarching principle in investigating LOCAs is that because they vary widely in terms of material, size, complexity, terrain, and other aspects, we must be flexible in recognizing that the treatment we extend to a scatter of stone tools, for example, must be quite different from that used to gather data on the site of a Roman villa or a modern-period cemetery. With this in mind, we develop a strategy for each LOCA that reflects its particular characteristics. In some cases, the investigation involves superimposing a collection grid (e.g., 10 m × 10 m squares) to define sampling units within the LOCA, allowing us to gain very fine spatial control over the locations of artifacts within the LOCA. For some LOCAs, samples are recorded or collected from all squares, while in others only a selection of the sample squares will be investigated. Removal of collections of artifacts from the field is undertaken only with explicit permission. The Field Processing team joins the LOCA investigation to carry out a ChronoType analysis of the artifacts. LOCA documentation is supplemented by topographic mapping, photography, architectural drawing, GPS readings, and geomorphological description. With regard to standing architecture and modern period LOCAS (such as villages and cemeteries), where collection is not required, recording may be limited to drawing plans, photographing of main features, and the systematic collection of oral information from local residents.

## Extensive Discovery Unit

As part of our sampling strategy, *extensive* survey has been implemented to supplement the intensive work. The inclusion of both extensive and intensive methods in a multi-stage research design can enhance the fundamental intensive survey work by increasing survey coverage and broadening the scope of investigation. In EKAS, extensive survey is a similar process to intensive survey except that the coverage is less intensive. The aims of our extensive survey are 1) to provide some degree of coverage for areas that cannot be examined using the intensive method; 2) to target some high-probability or problematic areas that will otherwise not be covered; and 3) to provide important tests for predictive locational models.

Like the intensive survey, the extensive survey is based on geomorphological principles; that is, each Extensive Discovery Unit (EDU) is defined in geomorphological terms and walked in a systematic fashion. EDUs use the same basic techniques as DUs, and employ the same paper forms. Extensive survey has been used in EKAS to investigate difficult-of-access locations such as the peaks of Mount Oneion, to ground-truth predictive models of later prehistoric settlement location, to map targeted features such as churches, and for many other purposes.

## Accomplishments, 1999–2001

In three seasons, EKAS has been able to carry out only  $\underline{9}$  of the 16 planned weeks of survey because of permit delays. In spite of this, the project has been hugely successful in obtaining evidence for all periods of the human past from Neolithic to modern times. The following statistics offer a measure of the work that has been accomplished to date (Tables 2, 3).

Table 2. EKAS Discovery Units, 1999–2001

Season	Field Days	Discovery Units	Area (sq km)
1999	18	281	1.05
2000	25	774	3.32
2001	5	357	0.82

Totals 48 1412	5.19
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Table 3. EKAS LOCAs, 1999–2001

Season	LOCAs
1999	6
2000	39
2001	11
Total	56

## **Conclusions on Method**

We believe that the EKAS survey methodology anticipates future directions in survey archaeology in many areas. The minimal collection approach is likely a vanguard of future surveys as budgets tighten, host countries seek to establish closer controls on extensive fieldwork, and archaeologists ponder the utility of large collections of redundant, fragmentary material.

The manner in which data are obtained and incorporated into our archaeological knowledge system is a significant area of innovation. The complete integration of geomorphological analysis in the research design and in the fieldwork is unique. Conforming DUs to Geomorphic Units allows us to assert confidently that the artifacts contained within them have been affected by uniform (and hopefully identifiable) geomorphological processes. The attachment of one or more geomorphologists to each survey team is also unique, and promotes a deeper understanding of the landscape and the processes affecting artifact distribution. A similar claim may be made regarding the GIS. While the use of GIS in archaeology is by no means rare, the completion of a comprehensive and fully functional GIS in advance of the fieldwork is quite unusual. From the outset, the GIS has been an integral part of sampling strategies, predictive modeling, the daily survey effort, near-real-time analysis, and ongoing evaluation and assessment of diverse data sets.

## **Processing of the Finds**

## Artifact recording and in-field processing

In 1999 the permit issued by the Ministry forbade the collection of material in the field; indeed the interpretation of the permit by Epimeletria Yiota Kasimi forbade the moving of material more than a couple meters from its specific findspot on the surface. Thus the recording of the materials found in the Discovery Units by the field teams had to take place in the field.

The field teams flagged items in each Discovery Unit using the "ChronoType System" of distinguishing any item that might be different from another and items of significance such as diagnostics. Team leaders helped to eliminate duplications. The processing team then went into the DU, identified and documented the flagged items by filling out the Survey Unit Item Registry sheets. The SUIR sheets record basic information such as extant portion, fabric, color, description, etc. In 1999 approximately 18% of the items seen in the field were drawn, and approximately 7% were photographed with a digital camera. The drawings were subsequently

scanned and stored along with the digital photographs. The SUIR sheets were entered into the EKAS Finds database (in FileMaker Pro).

In 1999 four items found in the field were deemed of such significant value that they could not be left in the field (three coins and a chalcedony projectile point). These were collected and turned over to Mrs. Kasimi. In 2001 these four items were placed with the other EKAS materials in the OSU apothiki at the Isthmia Museum.

In 2000 and 2001 the interpretation of the permit allowed for the movement of materials within each Discovery Unit to a central location within the DU for ease of analysis. The materials from a DU were left in a bag, flagged and labeled for the processing teams. Recording procedures by the processing teams were identical with those of 1999. Upon completion of the recording, drawing, and photography, the materials were "randomized" back into the particular field from which they came. This ensures that the material from each DU remains in its DU.

Innovations in 2000 included an additional processing team, and in 2001 a third processing team was added as necessary. All recorders worked together often to ensure compatibility.

The permits for 2000 and 2001 allowed for limited collection and removal of materials from the field (see Table 4). Those items selected from the DUs provide representative samples of the ChronoTypes seen by the field teams and recorded in the field by the processing teams.

In 1999 one LOCA [LOcalized Cultural Anomaly], no. 9001, was processed in the field. The LOCA was gridded into 10 x 10 m squares, and in each square a circle of 5 m<sup>2</sup> was marked off. Materials found in the circles were identified and documented in the field. No material was removed from LOCA 9001 in 1999.

LOCA collections began in 2000. For LOCA 9002, the site was gridded into 10 x 10 m squares. For 10 squares, circles of 5 m² were inscribed. The material from the circles was collected first by ChronoType, then all remaining items collected. Then the material from the squares containing the circles was collected by ChronoType, followed by all remaining items. For 30 additional squares, only circles (both ChronoType and Total) were collected. Grab samples were then made over the remaining grid squares. For LOCA 9002 material was drawn and photographed in the field, even when it was brought in for further analysis. A limited number of these documented items brought in to the lab were redrawn and photographed in order to test the effectiveness of field processing.

For other LOCA collections, ChronoType circles were used for LOCAs with high density, and ChronoType squares used for those with low density. All lithics were collected, either by the circle or square. LOCA 9008 (Mt. Oneion) had a slightly different collection procedure, due to the extreme topography at that location. Materials were chronotyped at particular points, each point designated a LOCA subunit. These collection points were recorded to be mapped into the GIS at a later date.

The Processing Team analyzed the material from the various LOCA collection units in the field in the same manner as for the DUs. A limited selection of representative, datable, or functionally distinctive items was selected for removal from the field for additional processing in the lab at OSU/Isthmia (see Table 4 below).

Table 4: In-field processing quantities and number of objects brought into lab

survey unit type	objects recorded in	objects brought into	lab objects as

	the field*	lab*	percentage of field observations
DU (1-3999)	36,374	232	0.6%
experimental (4000- 4999)	1929	661	34.2%
extensive DU (5000- 8999)	372	11	3.0%
LOCA (9000-9999)	9883	1015	10.3%
total	48,558	1919	3.9%

<sup>\*</sup> the material from a few DUs remains unprocessed, as the bags were taken by farmers and turned over to EKAS via the Eforeia too late in the season to be counted. These bags are in the Isthmia/OSU apothiki with the other EKAS material.

As part of testing the methodology of EKAS, the material from several DUs was examined in multiple ways. For DUs 4001–4002, all three Processing Team leaders examined and documented the material in the field. For DUs 4003–4004, all three Processing Team leaders examined and documented the material in the field; subsequently the material was brought in to the lab to be washed and examined in a clean state. This experiment will test the ability of the in-field processing to accurately identify the material.

#### The Finds Database

All items looked at by the processing team in the field were identified and recorded. At the end of the 2001 season, over 21,000 records had been entered into the finds database, representing 48,558 items (multiple examples of identical items were entered as one record). This number will increase when the few unprocessed units are recorded in 2002. Table 5 gives a general summary of the quantity of items recorded.

The photo database now has nearly 900 photos entered into it. The drawings database now includes approximately 2050 drawings. Thus approximately 4% of the items processed in the field have drawings, and 2% of the items are documented by digital photographs.

Table 5: general categories of items recorded in EKAS finds database			
Ceramic items total	38,763		
lamps	81		
Terra cotta items total	8,037		
tile	7,848		
bricks	38		
lamps	20		
figurines	10		
loomweights	33		
Stone total	1269		
obsidian	539		
chert	326		

Glass	344		
Metal	68		
Bone and Shell	21		
Plastic	3		
Building materials and miscellaneous	56		
total	48,558*		
*3 composite items are counted under both materials, hence these numbers add up to 48,561			

#### AREAS OF SPECIAL INTEREST INVESTIGATED BY EKAS

The following section of the report is organized geographically by subregions of the EKAS territory:

Gonia & Yiriza
Rachi Boska
Kromna, Perdikaria and Boulberi
Isthmia, South and West
Xylokeriza and modern village of Examilia
Kenchreai
Agia Paraskeve
Mt. Oneion

## Gonia and Yiriza subregion

In 2000, EKAS pursued investigation of the environs of Gonia and Yiriza. Some 165 DUs, covering 0.31 square km, were walked in the adjacent terrain (though not on the hills themselves, as they are both declared archaeological sites). Several locations of particular interest were identified. These LOCAs, along with the finds from the survey units, help us to establish the range of activities that took place around these two ridges over time. They will contextualize the excavations undertaken at Gonia and Yiriza in the early decades of the 20<sup>th</sup> century (see C. Blegen, *Metropolitan Museum Studies* 3 [1930–31]: 55–80; R. Hope Simpson, *Mycenaean Greece*[1981]: 34).

## **LOCA 9009: Prehistoric/historical scatter** (DU 1703–1704, Gonia and Yiriza map)

Situated in a long, narrow citrus grove near Agios Athanasios church, this LOCA (DUs 1703–1704) was first designated on the basis of an unusual concentration of both chert and (particularly) obsidian flaked stone artifacts. Further examination by the LOCA team provided ample evidence of prehistoric activity, with a particular emphasis in the Late Bronze Age. Smaller numbers of sherds from Neolithic, Early Bronze Age, and Middle Bronze Age vessels

show that later prehistoric utilization of this area was repeated if not continuous. The flaked obsidian and chert objects are likely part of the everyday assemblages of later prehistoric communities. While the artifact signature of LOCA 9009 is strongly prehistoric, substantial remains of Archaic–Hellenistic and Roman–Late Roman date show the long-term use of this landscape.

### **LOCA 9010: Prehistoric/historical scatter** (DU 1726, Gonia and Yiriza map)

LOCA 9010 is located southwest of the Gonia ridge in DU 1726. The artifact signature in this LOCA heavily favors the Late Bronze Age, to a greater degree than in LOCA 9009. Later prehistoric activity is also represented in smaller numbers from Neolithic, EH I and EH II, Middle Bronze Age, and Shaft Grave Era artifacts. Interestingly, relatively few flaked stone artifacts were recovered.

### LOCA 9230: Collection of Mycenaean pottery

In 2000, a local resident showed us a collection of largely Mycenaean ceramics that were brought up during plowing of his property south of the Gonia ridge.

There is one sherd of EH I; a few sherds of Middle Helladic matt-painted (dark on light), Gray Minyan, and other medium coarse—coarse wares; transitional MH—LH pottery represented by one incised sherd of so-called "Adriatic Ware," monochrome red painted, medium coarse bridge-spouted jar, tripod cookpot, and disc bases from cookpots. The percentage of early Mycenaean (LH I and II) is high. Much of this early Mycenaean pottery, e.g., one Vapheio cup and multiple alabastron fragments (globular or squat with rounded bottoms and straight-sided with a flat base), is of a greenish fabric that must be local. There is also a very red fabric used for the early Mycenaean (perhaps imported from the Argolid or elsewhere?). Later Mycenaean sherds are, however, the most numerous. It is noteworthy that there is only one sherd that seems to come from a kylix. By far the most common decorative motif is the running spiral, particularly on the cup forms. Other motifs are a pendant spiral, lilies (similar to Palace Style), pendant zigzag, dots, and one or more marine motifs. Painted bands are also common, for example on the alabastron sherds, and running concentrically around the handle attachment for a vertical strap handle.

# LOCA 9231: Mycenaean chamber tomb cemetery between Gonia and Yiriza (DU 1629, Gonia and Yiriza map)

Known site: in 1979, a Mycenaean chamber tomb cemetery was discovered between the Gonia and Yiriza hills; a chronological range of LH II–IIIB (IIIC?) was reported (e.g., *BCH* 104 [1980]: Chronique 593). In 2000, we examined the area surrounding the tombs. At least eight separate tombs can still be distinguished today, and Mycenaean sherds can still be observed in spoil heaps outside the tombs. The tombs, cut into soft marl, were severely cut back during the illegal ground-moving operations, so that the dromoi are greatly truncated. Rather little Mycenaean material was recovered in survey units adjacent to the tombs.

## LOCA 9011: Early Modern House with Wine Press near ancient aqueduct, north of Gonia

During 2000, the LOCA team observed and completed plans of an Early Modern house with associated wine press and a cistern, in a property near an ancient aqueduct, north of Gonia. The house, now abandoned and ruined, although still standing, is a large rectangular 2 story structure (18 x 8 m), divided into four, roughly equal sized rooms. The cistern is attached to the ancient aqueduct west of the house, while the wine press (8 x 3.80 m), directly northwest of the house, appears to be for industrial use, divided into two equal compartments.

## Rachi Boska subregion

The area of Rachi Boska was first explored by EKAS in 1999 as it fell within our initial 0.5 kilometer wide transect from the slopes of Mt. Oneion north across several drainages. A limited number of DUs at the end of that season crossed the Perdikaria drainage to explore the northern bounds. Further work was done in 2001 in Perdikaria to connect the Rachi Boska with areas at Kromna to the north, explored in 2000. LOCA work was performed in 1999 and 2000.

# Rachi Boska (LOCA 9001: Prehistoric and historic features and scatters) (DUs 627, 632, 636, Rachi Boska map)

The prehistoric site at Rachi Boska has long been known as a scatter of Early and Late Bronze Age sherds on top of the plateau and as a cyclopean wall at the base of the hill (C.W. Blegen, "Pre-classical sites," *Corinth* I,i [1932] 112, and fig. 81). EKAS was able to refine the chronology of the area, add many newly identified periods, and establish boundaries for some periods. Geological and geomorphological work in the area has shown that the plateau is in fact the forward edge of an uplifted ancient marine terrace, a geographical setting similar to that of Gonia, Ancient Korinth, and other prehistoric sites in the Korinthia. The north face of the plateau has been extensively modified by bulldozing into terraces, confirmed by the landowner as having taken place many years ago. Originally there was only one terrace just below the plateau, with a steep slope down to the valley of Perdikaria to the north.

LOCA (9001) was assigned to the main scatter at the highest portion of the plateau. An area approximately  $80 \times 80$  m was gridded into  $10 \times 10$  m squares. Circles of 5 square meters in area were marked off in each of the  $10 \times 10$  squares that fell within the boundary of the scatter. The artifacts in each circle were identified, recorded, and documented, then left *in situ* (as per 1999 permit).

In addition to the artifactual scatter, several features were noted and documented on top of the plateau and on the slopes. Along the eastern side of the highest point of the plateau, bulldozing to provide fill for a gully to the south (the gully fill was detected as an anomaly in the regular DU walking) revealed a row of well-dressed ashlar blocks, apparently *in situ* (on a revisit to the spot in 2001 we saw that one block had been pulled out of line of the others). Additional blocks were noted in rock piles along the north and northwestern edges of the plateau, as well as on the first terrace below the top. In conjunction with large Korinthian tiles and black-glaze fine wares (including a fourth-century kantharos fragment), a public structure, perhaps a shrine, of the classical period was located here.

Along the first terrace below the north edge of the plateau was found a recently disturbed burial chamber cut obliquely into the vertical face of the hill to a narrower interior chamber at a depth of ca. 2 m. This form of rock-cut tomb was used only in the region during the Late Roman-Early Byzantine era. Another example with a deeper, vertical entrance shaft and both covering slabs and human remains fragmentary but *in situ* was found ca. 40 m south of the geodetic marker to the west on the Rachi.

The cyclopean wall at the northern foot of the hill, directly below the highest point was examined and documented (GPS readings, measured drawing, photography). The wall has suffered some damage due to the terracing of the north slope of the hill, but much of the main section, including what appears to be a rectangular drain at its base, seems to be intact (one can compare our documentation with the photo published in Blegen 1932, fig. 81). Additional sections of the wall and individual blocks were discovered for at least 100 m in an east-west direction, elements not mentioned by earlier writers. The wall is clearly of Mycenaean date, though it is unusual in that it is at the *base* of the plateau. Further to the west, the gentler slope would make an easy ascent to the top. In this area a small rock-cut burial chamber was noted: this represents a common Late Roman-Early Byzantine regional type that is well represented in the cemetery of the 6th century A.D. at Lerna Hollow and the Asklepieion.

Rachi Boska has a long history of occupation similar to that of Gonia or Ancient Korinth itself. Blegen had noted sherds of Early Helladic and Late Helladic on the plateau. EKAS found a number of sherds of other periods. Other than the material associated with the classical period structure mentioned above, the majority of the finds date to the prehistoric period. Of great importance is the discovery of pottery of the Middle Neolithic (pattern and burnished Urfirnis, including pedestaled bowls), Late Neolithic, Early Helladic I (both Talioti and Saronic types) and Middle Helladic (Gray Minyan) periods. We also identified early Mycenaean (LH I-II) as well as later Mycenaean (LH III). We did not identify any sherds of Early or Final Neolithic, or Early Helladic III (sherds of these periods can be difficult to identify in survey). Thus the sequence at Rachi Boska seems to include Middle and Late Neolithic, Early Helladic I-II, Middle Helladic-Late Helladic, Geometric-Archaic, Classical (perhaps into Hellenistic), and Late Roman. The three graves demonstrate occupation of the area during Late Antiquity; they might well have belonged to a small rural establishment, possibly a Late Roman farm or villa such as that discovered as LOCA 9221 (below) just to the north.

## **LOCA 9004: lithic scatter** (DU 612, Rachi Boska map)

LOCA 9004, 200 meters south of LOCA 9001, was unusually dense in chipped stone artifacts. Within a 50 m × 50 m grid, 99 lithic pieces, chiefly obsidian blade fragments, were collected. At least six sherds are of Early Bronze Age date. During brief visits to LOCA 9004, Catherine Perlès remarked that the obsidian artifacts may be of either later Neolithic or Early Bronze Age date. While visibility in LOCA 9004 was excellent, substantial densities of obsidian pieces in adjacent survey units with less optimal visibility conditions indicate a locality of intensive obsidian working and use.

**LOCA 9002: Classical-Roman and lithic scatter** (DU 86–87, 589–597, Rachi Boska and Xylokeriza maps)

On the gentle southern slope of the ridge, approximately 575 meters south southwest of LOCA 9001 (400 meters south of LOCA 9004), LOCA 9002 contained mainly Classical–Roman material, but a few sherds and a substantial number of obsidian bladelet segments suggest prehistoric activity. We have been cautious about such blades, as similar specimens have been reported from apparently secure historical contexts at the Rachi settlement near the Isthmus.

# LOCA 9221: The "Plowed Field" Site below Rachi Boska (Multi-Phase Settlement) (DU 2209–2210, 2228–2233, Rachi Boska map)

Location: Large plowed field, approximately 150 meters north of the Rachi Boska ridge, just south of the east-west asphalt road running below Rachi Boska.

In the spring of 2001, two fallow fields lying just below Rachi Boska were deeply plowed, and bulldozed on their edges, exposing significant quantities of reasonably well-preserved artifacts and architecture. The larger field (to the east) was investigated as DUs 2228–2233, while the adjacent smaller field, now planted as a vineyard was DUs 2209–2210, and areas lying within a 150 meter radius of the field as DUs 2174–2190. Generally, survey showed high artifact densities throughout this area, even in poorly visible units, with the highest densities in the larger plowed field itself (DUs 2228–2233); typical densities for all areas investigated ranged between 100 and 300 artifacts/survey unit. One unit (2189) had higher-than-normal densities and was designated as its own LOCA (9080).

The larger plowed field itself certainly exhibited the highest densities and varieties of cultural material: tiles (Lakonian, Korinthian), fineware, medium-coarse and coarse ware, storage/transport vessels (amphorae), kitchenware, pithoi, glass, marble revetment, marble architectural mouldings, stone blocks, small column fragments, and an obsidian flake. The area was apparently used from the Archaic period at least to the Early Modern period, and the pottery was remarkably diverse for each period.

This suggests settlement continuity, or, at the least, major phases of reuse of the area from the Archaic Period into modern times. It is also apparent that each period is represented by a variety of functional ceramic types — fineware, storage/transport vessels, and kitchenware — suggesting the intensive use of the area in antiquity, probably for agriculture, among other things. However, the significant amounts of Roman and Byzantine fineware, and the associated architecture — scattered cut stone blocks, large tiles in tact, a couple of column fragments, marble revetment, marble architectural mouldings, and the rubble outline of a rectangular structure (on a roughly east-west orientation) in Survey Unit 2228 — indicate that impressive buildings, substantial in size and ornately dressed, once stood on the spot. It is reasonable to suppose that during the Late Roman and Medieval periods, a substantial complex, such as a villa or church, marked this area.

The units that were surveyed within the 150 meter radius of the plowed field exhibited high densities and similar types of pottery. There were, however, two periods represented that were not known from the area of the plowed fields: Late Bronze Age and Modern. Moreover, one nearby unit (2188) contained a perirhanterion rim of the Classical period. These patterns show that significant settlement during the Classical and Late Roman periods was not limited to the area of the plowed field but extended to the north, east, and west. In light of this, the LOCA described here is interpreted not as a rural site in isolation but as a well-preserved, denser cluster

of artifacts in an otherwise high-density area, bearing a relationship to the other settlements, industrial sites, and shrines/religious sites that spread between Rachi Boska and Kromna.

## **LOCA 9070: Classical and Roman Agricultural Site** (DU 2053–2054, Rachi Boska map)

LOCA 9070 is located just to the west of the Rachi Boska ridge, in an olive grove and apricot grove between the ridge and the paved road that curves around Rachi Boska. While surveying in the area west of the Rachi Boska ridge in 2001, EKAS teams noticed that bulldozing in the previous year had created a scarp between an olive grove (DU 2053) and a young apricot grove (2054), exposing large quantities of ceramics and small finds. With the exception of a piece of fineware from the Late Bronze Age, finds can be grouped into two broad periods of Archaic-Hellenistic and Roman. Fragments of ancient glass, andesite millstone, groundstone tool, ancient iron nail, obsidian and chert flakes were also found at the site. Altogether, the remains suggest an agricultural establishment in this area in antiquity, with good evidence for a building.

### LOCA 9080: Habitation (DU 2187, Rachi Boska map)

LOCA 9080 was identified in a field northwest of the Rachi Boska ridge and west of LOCA 9221, just south of the paved road running below the Rachi Boska ridge. Found in 2001, DU 2187 had relatively high artifact densities, especially considering the poor visibility of hay stubble (50%), and it is possible that high densities also continued to the west — an unsurveyed area — and to the east into the almond grove (DU 2186) with very poor visibility (10%). It is possible that this LOCA is a continuation of LOCA 9221, which lies east of the almond grove. The artifacts from LOCA 9080 were similar to other sites in this area: many ancient-period coarseware potsherds, and a few tiles. The diagnostic pottery have not been processed yet (see Processing section in this report).

### LOCA 9153: Classical-Roman farmstead (DU 2671–2672, 4021, Rachi Boska map)

LOCA 9153 is situated about 600 m to the east of LOCA 9001, at the intersection of two asphalt roads, to the east-northeast of Rachi Boska. In the western angle of the two roads is an open field of weeds and grain stubble, where the LOCA is located (DUs 2671–2672 and 4021). The total number of artifacts counted was not particularly high, but plowing has revealed what is likely to be *in situ* material. In one case, a nearly complete Lakonian tile was found. While no architectural stone is preserved on the surface, the density and large pieces of tile found indicate the presence of some structure. The finds have not yet been processed, but a preliminary look indicates that they are consistent with the assemblage of a farmstead of the Classical to Roman period.

## Kromna, Perdikaria, and Boulberi subregion

LOCA 9005: Sanctuary-Habitation-Industrial Site (DU 1012, 1014, 1028–1029, 1036–1040, Kromna Center map)

LOCA 9005 was designated in two olive groves (separated by a recently bulldozed vineyard) north of the gravel road that runs southeast from its intersection with the Examilia-Kyras Vrysi Road. This site begins approximately 100 meters east-southeast of the latter road and runs 300 meters to the east-southeast along the gravel road; the LOCA is approximately 75–100 meters wide (North-South). This site lies east and south of some ancient quarries and is part of the area that J. Wiseman (*Land of the ancient Corinthians* 1978, 66) designated as "Kromna" (based upon ancient citations and an inscription).

In 2000, EKAS recorded significant amounts of pottery (DUs 1012, 1014, 1028–1029, and 1036–1040) including transport vessels, medium to large storage vessels, kitchen wares, and finewares, amphorae, loomweights, and tiles (painted tiles and Korinthian pan tiles), as well as marble revetment fragments, chert, obsidian blades, and groundstone. The LOCA (9005) is a multi-component site, with the greatest representation from the historic periods (Archaic to Late Roman), and some finds from other periods (Early Helladic, Middle Helladic, Late Helladic, Protogeometric, Modern); the predominant ceramic periods are Classical and Late Roman. LOCA 9005 exhibits great variety in pottery fabrics and functions, with greater-than-usual amounts of fineware, perhaps suggesting that this area in antiquity served as both settlement and sanctuary — in association with the nearby quarries, roadway, and shaft graves.

To the west and northwest of this area evidence for several burials of Archaic-Classical or Hellenistic and Late Roman-Early Byzantine date has been found on the surface. Within the zone of densest artifacts several fields have produced fragments of monolithic sarcophagi cut from the nearby limestone quarries. Moreover, a row of narrow, rectangular chamber tombs dated Late Classical, Hellenistic, or Roman was discovered along a low rise due east of the modern dirt road, next to a standard Late Antique rock-cut tomb. These tombs had been largely destroyed by looting and agricultural operations.

## LOCA 9006 and 9134: Roman Tombs and Multi-Phase Settlement (DU 1092–1100, 1122, Boulberi map)

In the area a local farmer called "Boulberi", a ridge runs along the modern paved road between Examilia and Kyras Vrysi north of LOCA 9005. LOCA 9006 is the ridge, over 5,000 square meters, on the north side of the road, directly across from the area designated as "Kromna." This area is north and west of the ancient quarries. The cliffs delimit the perimeter of the ridge to the south, west, and east, although there is no northern cliff; the total plateau area covers over 5,000 square meters.

In 2000 EKAS investigated the limestone ridge, including three Roman chamber tombs cut into its southernmost extent. One of these tombs was previously noted (Wiseman 1978, 66, fig. 74), but all three had been extensively modified and damaged since the Roman era by Late Byzantine, Ottoman, or Early Modern reoccupation for domestic use, by recent vandalism and looting, and by bulldozing and dumping of fill from their eastern side. The best preserved of these consisted of a quarried dromos with a stairway descending into a large, open rectangular chamber with a narrow tunnel extending off the north wall, obviously a later addition. During its original phase the tomb had a decorative architectural façade, presumably oriented toward the ancient road that approached from the Isthmian Sanctuary. Two other tombs with a similar design in the vicinity were poorly preserved or incompletely exposed. An adjacent chamber of similar dimensions was once located immediately south of the preserved tomb, but apparently the dromos and much of its walls were quarried away at some point, leaving only a portion of

the interior, which is still visible closest to the modern road. Finally, a partially cleared dromos is evident on the surface immediately west of the dromos of the well-preserved chamber. An EKAS team walked the plateau itself (DUs 1098 and 1099) and units (1092–1097, 1100, 1122) below and immediately surrounding it. They discovered significant artifact concentrations – especially roof tiles – spread across the plateau and also in the vineyards (DUs 1092, 1094–1096) immediately below, to the west. The finds were numerous and diverse, suggesting firstly an agricultural and domestic assemblage (amphorae and stoppers, kitchen ware, pithoi, a stone vessel, millstone fragments, and plaster). The finds dated consistently between the Archaic-Classical and Late Roman periods, and the latter predominated.

The total area of high-density material below the plateau was approximately 3,700 square meters in area, with the pottery and tile concentrating in Units 1095 and 1096 directly below the hill. In addition, in Unit 1094 (a slope west of the plateau), part of a large millstone or mill (LOCA 9134) was found — 1.30 m in diameter with hole in the center — probably associated with the remains to the east. All this area together suggests intensive and consistent habitation between the Classical and Late Roman Periods; at some point during this broad period, the area probably served as a major agricultural-domestic establishment, as evident by the millstones, numerous storage/transport vessels, and ancient tiles. The extent of settlement remains unclear, but its direct association with a major thoroughfare (the Korinth-Isthmia Road) and built Roman tombs suggest that this was an important site in antiquity.

# **LOCA 9130: Classical-Hellenistic Period Ritual Dining Room (Upper)** (DU 1074, Kromna West map)

Location: A "dining room" approximately 80 meters east of the geodetic marker on the limestone ridge near the ancient quarries, in the area known as Kromna. GPS: 4196941 N, 671743 E.

In the 2000 and 2001 seasons, EKAS surveyed (Unit 1074), documented, photographed, and drew a rectangular depression cut into the limestone ridge. Three regular (quarried) cuttings, none deeper than 40 centimeters, meet at right angle corners to form the walls of a room. The western wall is cut into the limestone bedrock and measures 7.15 m in length along its inside edge. Its width cannot be determined; at the southwest corner is found the greatest height of 37 cm. The southern wall extends for at least 2.63 m from the southwest corner with a fairly even height of 38 cm. The northern wall, on average 15 cm high, extends for at least 3.30 m from the northwest corner, but its full extent cannot be determined because it is covered by vegetation and a beehive. The room lacks an east wall, either because it lacked a fourth quarry face in antiquity, or because the face was quarried away after the room fell out of use. Hence, the room is 7.15 meters wide (from north to south) and at least 3.30 meters (and probably much more) long.

The room has been exposed due to fairly recent digging. Lying on a recent mound of soil within the room are two monumental-sized limestone blocks (1.61 x 0.77 x 0.52 m and 1.31 x 0.77 x 0.40 m), as well as a third monumental block located to the southeast, just outside the walled area (1.48 x 0.77 x 0.42 m). The size of this block, together with a shallow (up to 5 cm) rectangular depression across its face, suggests that these three blocks represent *klinai* (dining couches) that stood along each wall of the room. There are other curious features within with the room: 3 consecutive rectangular cuttings in the floor along the northern wall; at least 2 rectangular cuttings flush against the southern wall; a massive and irregular piece of limestone

 $(1.87 \times 1.25 \times 0.50 \text{ m})$ . Outside the room were three smaller cut stone blocks, one with rectangular cuttings in it.

Despite heavy vegetation, the density of artifacts was very high. While documenting the feature (DU 1074), the EKAS team noted artifacts in and around the room: several large Korinthian cover and pan tiles; coarse pottery; and a ceramic perirhanterion fragment. Surrounding survey units (1071–1073, 1075, 1081–1082), in addition to containing more cut stone blocks, also produced a few pieces of Korinthian tile; cooking, coarse, and pithos wares; and Archaic-Classical-Hellenistic pottery (black-glazed, fineware). One piece of prehistoric (Early Helladic) was noted.

The features and artifacts noted here – especially the large, rectangular cut stone blocks and the perirhanterion fragment – suggest that this does in fact represent a ritual dining room, perhaps dating to the Classical/Hellenistic period.

# **LOCA 9131: Classical-Hellenistic Period (Dining?) Room** (DU 1080, 1091, Kromna West map)

Location: A second quarried room, located on the west side of the dirt road that turns south from the Examilia-Kyras Vrysi Road; approximately 150 meters north-northeast of LOCA 9130; between two deep areas (DUs 1080, 1091) of quarrying along the line of the limestone outcropping running along the Examilia-Kyras Vrysi Road. GPS: 4197051N, 671791E.

In the summers of 2000 and 2001, EKAS discovered and documented a second rectangular feature that was also formed from the depression remaining when the limestone was quarried away. Cuttings into the limestone bedrock delineate the walls of two connected rooms:

1) Room One. The eastern room is the most clearly defined of the two rooms. The southern bedrock wall of the room can be traced eastward from the southwest corner for a distance of 4.02 m. The wall (0.55–0.67 m wide) is highest (0.80 m) at the western end, and decreases gradually to the east until it reaches ground level. The western wall functions as a dividing wall between the east and west rooms. The total length of the western wall is 3.28 m, which provides a minimum north-south dimension for the room (the northwest corner is not visible). From a height of 0.80 m at southwest corner, it quickly drops to a height of 0.09 m for a distance of 1.30 meters, probably marking the low threshold of a door connecting the two rooms.

The ground at the western end of the room was cleared in the past, revealing a cement floor. The eastern half of the room is covered with soil, but presumably the cement floor covers the entire room. A second cement floor, 0.03 meters higher than the first one, extends from the western wall 0.94 m to the east; this probably marks a raised entrance to the western room.

2) Room Two. The western room is not as clearly defined as the eastern room. The southern wall runs for 6.58 m, with a width varying between 0.48 and 0.55 m and a height ranging from a 0.43 m to 0.05 m (near the midpoint of the wall). The western wall of Room Two extends at least 3.53 m from the southwest corner at a width varying from 0.41 to 0.53 m; the northwest corner is unclear, and therefore, the true north-south dimension is unknown. At the northern end of the course of the wall, a groove (0.58 x 0.06 x 0.10 m deep) was cut into the bedrock roughly parallel to the wall. Any trace of the northern wall is covered by brush and soil, as is the northeast corner. The interior of the room slopes down to the north and is covered by thick weeds.

A few tile and pottery fragments were found inside the rooms as well as in the areas immediately outside them. In 2000, EKAS surveyed the large quarried area (Unit 1080) west of LOCA 9131. The diagnostic pottery dated predominately to the Protogeometric-Archaic-Classical-Hellenistic Periods, although one piece of Late Roman pottery was also observed. The function of LOCA 9131 currently remains unclear. It lacks the distinctive signature (*klinai*, perirhanterion fragments, cut stone blocks) of a dining room as in LOCA 9130.

# **LOCA 9132: Classical-Period Olive Processing Equipment** (DU 1084–1086, 1090, Kromna West map)

Approximately 30 meters to the east of LOCA 9131, EKAS investigated the remains of a unit of three depressions cut into limestone bedrock; these should be interpreted as two pressbeds and a catch basin (LOCA 9132). The first depression, at a higher elevation than the other two, is circular (diameter of 0.84 m and a maximum depth of 0.22 m). A ring of stone directed the oil into the channel, which lies at the eastern edge of the circle. The channel cut is at least 0.10 m deep and runs down for 1.07 m, before emptying into the catch basin below. A rectangular pressbed (1.37 x 0.71 x 0.54 m deep) is adjacent to (0.27 m away) and north of the first depression. On the eastern wall, a channel (0.25 m in length, 0.12 m diameter) cuts through the base of the wall and empties into the circular catch basin below. The circular third depression is a catch basin with a diameter of 0.83 m. At the point where it meets the rectangular basin, the height of the wall is 0.81 m. The height of the walls of the rest of the basin is on average 0.23 m. No other cuttings define the feature.

An EKAS team surveyed units (1084–1086, 1090) containing and immediately surrounding LOCA 9132. The artifacts observed were characteristic of a site of agricultural production: lots of medium coarse wares, pithoi, and transport vessels (amphorae). Only a few pieces of fineware pottery were recovered. With the exception of one piece of modern pottery, the assemblage dated entirely to the Archaic-Classical Period, and this remains the most probable date for the use of the olive press equipment.

### LOCA 9161: Multi-Phase Habitation (DU 2220–2221, Perdikaria North map)

Location: In the area just south of a strip of ancient quarries, south of the East-West dirt road that defines the area known as Kromna, 50 meters east of the paved road running between Rachi Boska and Kromna; in the area known by the toponym Perdikaria.

In 2001, EKAS surveyed two olive groves (DUs 2220–2221) and discovered a significant concentration of pottery and tiles at the northern end of these groves. Most of the pottery was non-diagnostic coarse wares, but there were enough diagnostic pieces to indicate significant use of the area during the Archaic-Hellenistic and Roman periods. Specifically, there were significant amounts of Classical-period fineware (e.g., Korinthian black-glaze) and semi-fine ware, as well as a few amphorae and pithos fragments, and an abundance and variety of Late Roman finewares, storage vessels, and transport amphorae. For the classical period, finewares are predominant, suggesting the use of the area as a habitation/ religious site connected with the settlement / sanctuary of Kromna to the north. The Late Roman pottery is diverse and numerous, suggesting intensified agriculture and settlement in the area beginning during the Roman period.

Additionally, a few pieces of coarse and cooking wares from the Medieval period indicate later reoccupation and reuse.

## **LOCA 9163: Classical Farmstead** (DU 2257–2258, Perdikaria South map)

Location: Two weedy fields in the area west of the paved road running between Rachi Boska and Kromna; 30 meters west of a modern house complex (Survey Unit 2268); in the area known by the toponym Perdikaria.

In 2001, an EKAS field team surveyed a transect west of the road running between Rachi Boska and Kromna and encountered an area containing several cut stone blocks and a dense concentration of ceramic material. Artifacts were concentrated in a relatively small area at the southern end of two survey units (DUs 2257–2258) and on a low rubble pile formed at one end, perhaps by bulldozing.

The assemblage was diverse and characteristic of finds that are typical for a domestic complex: fragments of tiles (Korinthian pan, painted Laconian, other), semi-fine wares, finewares (e.g., black glaze), storage / transport vessels (medium coarsewares, Korinthian A amphora, other amphorae, orange-and-blue core), pithoi, kitchen wares, loomweights, obsidian blade, and andesite millstone. Much of the pottery was diagnostic and suggests one main period of use, Archaic-Classical-Hellenistic Period, with two other periods also represented by one piece each: one Late Roman and modern (from the house 30 meters to the east?). In an adjacent vineyard (DU 2260) and olive grove (DU 2289), fragments of Roman, Medieval, and Modern period pottery were more numerous, but Archaic-Classical-Hellenistic Period material was still predominant by far.

In addition to these small finds, three cut stone blocks were found in DUs 2258 and 2289. In the former, one block measured  $0.40 \times 0.50 \times 0.40$  meters, and a second block contained a square cutting, approximately  $0.10 \times 0.10$  meters.

Altogether, these finds suggest a significant building in this area during the Classical period, and the assemblage certainly suggests an agricultural establishment, a farmstead used for a restricted period of time, perhaps in some relation to the nearby settlements of Kromna and Rachi Boska.

# **LOCA 9164: Classical-Roman Agricultural/Industrial Site** (DU 2278–2280, Perdikaria South map)

Just to the west-southwest of the site of Kromna, south of and overlooking an extensive and deep ancient quarry running along the Examilia-Kyras Vrysi Road; in the western part of the area known as Perdikaria; ca. 350 meters west of the paved road running between Rachi Boska and Kromna.

In the summer of 2001, an EKAS field team surveyed three survey units (DUs 2278–2280) that were part of a large plowed olive grove along south of a long section of ancient quarry. EKAS noted a concentration of artifacts — especially tiles — which were at the northern end of the three units. Artifact densities were highest along the bluff overlooking the quarry and taper off about 40-50 meters to the south of the quarry. The high densities of these survey units in

relation to adjacent ones to the east may be a result of plowing and better visibility. The pottery in these units dated to two main broad periods: Archaic-Classical-Hellenistic and Roman.

EKAS also observed a carved marble molding fragment in DU 2278 and some cut stone blocks on the southern edge of DU 2280.

Altogether, the pottery, tiles, and architecture fragments indicate that a building once stood on this spot. The material remains certainly suggest an agricultural function in antiquity, but the proximity of this area to the ancient quarries may indicate a major industrial component in antiquity. This site may be connected with the larger settlement of Kromna to the east.

## **LOCA 9003: Sanctuary and settlement** (DU 1529–1531, 1542–1544, Kromna East map)

On the ridge east of Kromna, approximately 450 meters southeast of LOCA 9007 and 500 meters east of LOCA 9005, DUs 1529–1531 in 2000 came across a number of cut blocks in several fields on the north side of a farm road. At least one block may be *in situ*. Several blocks had cuttings, perhaps from later reuse. An additional scatter of objects was found south of the road in DUs 1542–1544. The scatters of artifacts on both sides of the road were investigated through the LOCA methodology as LOCA 9003.

Among the items discovered in the DU and LOCA methodologies were Mycenaean fine wares (Late Helladic), terracotta figurines (at least two of which are Late Helladic), and much fine ware of the Geometric and Archaic periods as well as of the Classical and Hellenistic periods. The Geometric and Archaic fine wares are primarily materials one would expect to find in a sanctuary, according to Martha Risser who viewed a small sample (10%) of the material brought into the Isthmia/OSU apothiki. Of significance are the several fragments of perirhanteria (at least two different ones), Korinthian skyphoi, and over 80 pieces of black glaze (ca. 10% of the total objects observed are black glaze). Several lamps of the Archaic–Classical periods and four conical loomweights were identified. Cooking pot wares, storage, and other coarse wares occur in small quantities for the Archaic and Classical periods, and very seldom for the Mycenaean period. The majority of the evidence points to a shrine or sanctuary of the Archaic and Classical periods, with the possibility of a similar function in the Mycenaean period. Some Late Roman material seems to be domestic in nature.

### LOCA 9154: Classical-Roman farmstead (DU 123, 2619, Kromna East map)

LOCA 9154, in the area called Kesimia, lies about 400 m to the SE of the eastern Kromna hill between the two dirt roads in this area, 200 m E of where they intersect (DUs 123, 2619). Most of the artifacts were found in DU 123 (an olive grove), which had been recently plowed and had good visibility; periods strongly represented are Archaic-Classical, Classical-Hellenistic, and Roman. The artifacts of the Greek historical periods include finewares and tiles, and a loomweight fragment. The Roman wares likewise include finewares (particularly red-slipped wares, including African Red Slip imports) and coarsewares. On the northern edge of the vineyard are a number of large blocks, some of which show clear signs of cutting, indicating some kind of architectural articulation to this area in antiquity. Furthermore, to the south of DU 123, the cutting for the dirt road has revealed some *in situ* pottery (of the same type as described) and perhaps some traces of walls.

# **LOCA 9126: Historical multi-period scatter** (DU 1574–1575, 1583–1584, Kromna Center and East maps)

The LOCA consists of an artifact scatter located about 100 meters east of a quarried area (LOCA 9133) at the intersection of a dirt road which runs east from the Examilia - Kyras Vrisi asphalt road. The LOCA is predominantly defined by the spread of ceramic material, though some cut stone blocks were noted in DU 1575, indicating the remains of some built structure. The periods represented are primarily Archaic-Classical, Classical-Hellenistic, and Late Roman. The historical Greek periods are predominantly tiles, fine wares (black glaze), and kitchen wares. The Late Roman wares are mainly kitchen wares, jars, and amphorae, representing a more agricultural assemblage.

## **Isthmia Northwest, Southwest and West subregion**

## **LOCA 9034: Classical-Period Pottery Deposit** (DU 1256, Kyras Vrysi Northwest map)

Location: A scarp exposed from the bulldozing of a dirt road, approximately 180 meters north-northwest of the Examilia-Kyras Vrysi Road; at the base of a vineyard (DU 1818) and north and west of weedy fenced fields (DUs 1242, 1246, 1247), associated with a modern house (DU 1245). The scarp was given the survey unit number DU 1256.

This is an unusual find. Recent cutting back of a road exposed a high concentration of artifacts – almost entirely finewares – in a low crumbling scarp. The stratigraphy is not immediately discernible but it appears that the scarp was dug into at some point, and there is a slight depression in the level ground above. The assemblage is almost entirely Archaic-Classical in date, with predominantly finewares (fragments of black glaze, red figure, and skiffs) but also including a lamp, and some diagnostic medium-coarse and kitchen wares. (One piece of Roman fineware contaminated the deposit). This assemblage of so many finewares from one period in a very concentrated space means that the pottery was deliberately buried as a bothros, perhaps suggesting ritual deposit.

## LOCA 9064: Multi-Phase Habitation (DU 1258, Kyras Vrysi Northwest map)

Location: A long olive grove (DU 1258), directly east of the previously-investigated West Foundation roadside monument; approximately 100 meters north of the Examilia-Kyras Vrysi Road and the large grain processing plant along that road.

In 2000, EKAS walked DU 1258 to the east of the roadside monument and encountered high-density concentrations of pottery, moderate densities of tile, and some cut stone blocks. Most of the pottery dates between the Archaic and Late Roman periods, with one exception, a Late Bronze Age sherd. Ceramics are varied: large amounts of coarse wares, storage/transport amphorae, some finewares (from CL and Roman periods), pithoi, kitchenware, lamps, and tiles. In addition, EKAS noted several fragments of ancient marble revetment.

Although the pottery concentrates at the eastern end of DU 1258, it appears that several units (DUs 1254, 1260, 1834) surrounding it also have moderately-high densities, indicating

more extensive use of the area during the Ancient period, probably in association with the West Foundation monument to the west, and the ancient roadway between Korinth and Isthmia.

## LOCA 9077: Roman Settlement (DU 2118, Kyras Vrysi Southwest map)

Location: An olive grove south of the village of Kyras Vrysi, just above (and to south of) the Greek stadium.

In 2001, EKAS walked DU 2118, part of a well-plowed, large olive grove south of the later Greek stadium. On the eastern end of the unit, the field team encountered high amounts of pottery and tile. The debris is mostly Roman and Late Roman, including medium coarse wares, kitchenware, amphorae (combed ware, spirally grooved, wheel-ridged), finewares (red slip, Eastern Sibilate), and tiles. Other periods were represented —Late Bronze Age, Archaic-CL-Hellenistic, and Modern — but none were as visible as the Roman Period (there was, though, a very obvious concentration of prehistoric ceramics here). This indicates that the most intensive use of the area occurred during Roman times, perhaps in association with other settlement near Isthmia. In conclusion then, LOCA 9077 mostly represents the debris generated from Roman-period habitation in the area.

## LOCA 9076: Mycenaean Settlement (DU 3052, 3056–3065, Kyras Vrysi South map)

A relatively high density of Mycenaean ceramic sherds was identified on Rachi Marias, southwest of the excavated Rachi settlement (see, e.g., V. Anderson-Stojanovic, *Hesperia* 65 [1996]: 57–98) near Isthmia. The material is concentrated mainly on the ridge itself, but also spreads onto the slope and gully southwest of the Later Stadium. Eleven DUs (3052, 3056–3065) were walked on the ridge itself, covering approximately 3.32 hectares; in these units, 61 sherds were assigned with high confidence to the Late Bronze Age. Of these, several could be further identified to form or to phase or subphase. In terms of form and function, there is a relatively equal distribution of coarse, medium coarse, fine, semi-fine, and kitchen wares. Many sherds from tripod cooking pots give examples of kitchen wares, and the most abundant fineware form is the kylix. When subphases can be identified, most sherds can be assigned to LH IIIA or LH IIIB, although a small number belong to LH I–II. In 12 DUs (3066–3077) on the slope and gully below the ridge, comprising 1.73 ha, 22 LBA sherds were identified with high certainty. Although the sample is smaller, the distribution of types is similar.

In both areas, groundstone finds were rare, and obsidian finds very rare. Other units walked in the gully, closer to the Later Stadium, produced almost no Late Bronze Age material at all. This is also true of units to the west of the DUs on the ridge itself. Thus, the concentration of LBA material can be fairly well delimited; however, we did not walk on or immediately adjacent to the excavated Rachi settlement itself. The excavated LBA sherds from the settlement (C. Morgan, *Isthmia VIII: The Late Bronze Age Settlement and Early Iron Age Sanctuary* [1999]: 435–436) number no more than a few dozen and are from disturbed contexts. Morgan was able to identify two LH II alabastron fragments and a LH IIIA2/B kylix sherd.

The paucity of Late Helladic sherds in the gully southwest of the stadium is interesting in light of the presence of several sections of a Mycenaean wall on the slope south of the gully, directly above many of these DUs. Broneer (e.g., *Hesperia* 35 [1966]: 346–362) believed these remnants to be part of a trans-Isthmian wall put up to defend against an attack from the north in

the time of Mycenaean palatial collapse in the latter years of LH IIIB. In our view, the various segments are not all Mycenaean in date, and so the trans-Isthmian wall hypothesis must be rejected on present evidence. Yet the concentrated Mycenaean finds do point to a local settlement, and the walls, whatever their true layout and function, once played an important role in Mycenaean activity in the vicinity of Isthmia.

# **LOCA 9151: The Classical–Hellenistic Trans-Isthmian Fortification Wall** (no DU, not shown on map)

One survey team spent some time making observations on the Classical trans-Isthmian wall on the Agios Dimitrios ridge, mentioned by Herodotus (viii.71) and described in much detail by J. Wiseman, *Land of the Ancient Corinthians* (1978): 59–64; see also Wiseman, *Hesperia* 32 (1963): 255–256, 270–271. The segment of the wall inspected extends from the geodetic marker adjacent to the modern settlement of Agios Dimitrios in the west (just above DU 646), to another geodetic marker some 1.32 km to the east, on the eastern side of the road connecting Agios Dimitrios settlement with Kyras Vrysi.

The survey team confirmed features described by Wiseman (evidence of quarrying very close to the wall, and a long series of towers whose foundations are still visible). A few artifact scatters were observed that may be associated with activities surrounding the building and maintenance of the fortifications. The team also took note of features that seem to have vanished, and recorded information about sections of the wall that may have been destroyed by modern development, or are in danger of destruction. The Agios Dimitrios ridge was once littered with *in situ* architecture and other archaeological remains, as is clear from Wiseman's work, but the majority of these are now irrevocably lost.

# **LOCA 9152: World War II-Era Gun Emplacements on the Agios Dimitrios Ridge** (DUs 2575–2577,

On the eastern end of the Agios Dimitrios ridge, along the southern end of Kyras Vrysi village, lie remnants of gun emplacements and varied earthworks that were employed by the Axis powers in World War II. According to local informants, the ridge was first fortified by the Italians for the purpose of guarding the approaches to the northeastern Peloponnese, and later the fortifications were taken over by the Germans. This LOCA (9152) was first walked as a series of DUs (2575–2577), then investigated by inspection, description, and measurement of the visible features.

The crest of this ridge affords a superb view of the Korinthian Gulf to the north, and from a point just east of the emplacements, the Saronic Gulf comes into view. The visible features are delimited by a perimeter of natural and man-made trenches, approximately 200 meters east-west by 250 meters north-south. The following features, situated from east to west, were identified: four gun emplacements, two facing north and two south; a circular, shallow depression; a rectangular hole in the ground; a rectangular underground room; remnants of a system of tunnels; segments of defensive trenches. All of the above were built during the Nazi Occupation, and probably reused during the Greek Civil War. One local resident informed us that in the years following the Civil War, landowners gradually filled in most of the trenches and other earthworks.

## LOCA 9229: Kyras Vrysi Cemetery – Agios Ioannis Prodromos (no DU, not on map)

The Kyras Vrysi cemetery, with a church dedicated to *Agios Ioannis Prodromos*, is located approximately 1 km. east of the village of Kyras Vrysi, and within the Byzantine – Medieval fortress at Isthmia, a declared archaeological site. A total of 240 graves were counted and recorded following the EKAS Modern Cemetery and Grave Recording procedures, using mapping, photography and the recording of inscriptions. The earliest inscribed date is 1917. According to local information, the older cemetery was located immediately around the churchyard, but it is now cemented all over. The church itself has been recently re-built on what locals claim was the site of a pre-existing ruined church, possibly of Byzantine date. The modern cemetery has been extended southwards of the church in the last 10 years, interfering further with the archaeological site.

## Xylokeriza and modern village of Examilia subregion

## **LOCA 9228: Late Roman farmstead** (DU 527–528, 530–533, 535–539)

A dense concentration of Late Roman material was found in the 1999 south to north transect, where the slope of Mt. Oneion flattens out into the plain, about 300 m. S of the Xylokeriza-Isthmia asphalt road. The site spreads over about 0.5 hectares, with a consistently Late Roman signature in the ceramics. Functional types are dominated by tiles and amphorae, consistent with an agricultural assemblage. Confirming this conclusion is the presence of ceramic beehives and much ground stone, much of which is built into the modern field walls.

### **LOCA 9014: Xylokeriza Village** (no DU, not on map)

The village of Xylokeriza is located on the slope of Mt. Oneion, the southernmost boundary of the EKAS survey area. Along with the villages of Solomos, Ancient Korinth, Examilia and the city of New Korinth, Xylokeriza is part of the Demos of Korinth, established in 2000 as part of the *Kapodistrias Plan* of local administration applied over the whole of Greece. Up until then, Xylokeriza was under the administration of the larger nearby village of Examilia (LOCA 9016). Kenchreai (LOCA 9012) and the small settlement of *Agios Dhimitrios* are both areas traditionally linked to Xylokeriza. A photographic recording of the main features of the village, as well as the collection of local information, commenced in 1999 and continued in 2000.

According to local informants, the name Xylokeriza derives from the Greek word *xylokeratea* (carob tree); the local legend for the origin of the village claims that the first settlers discovered a carob tree with the icon of the Virgin in its hollow. This also explains the importance of the *PanAgia* (Virgin) to whom the entire village is dedicated.

Xylokeriza is a small village with an approximate population of 800 permanent residents, most of them farmers and/or grazers. The main church dedicated to the Virgin (*Koimisis tis Theotokou*), is located in the center of the village (*plateia*). A short distance to the east of the main church is a newer church, dedicated to *Agia Paraskevi*, and possibly built on the existing ruins of an older church.

Most of the houses in Xylokeriza are newly built or have been recently restored and are very well maintained — evidence of the villagers' recent economic affluence — with only a handful of older houses (only two of mud-brick construction were observed) in existence. According to local oral tradition, Xylokeriza is a relatively new village, approximately 150 years old, established by *Arvanites* from the villages of Sophiko and Angelokastro further upland. The initial settlers of the village engaged primarily in herding goats and sheep, as well as fishing as a result of their access to the sea at Kenchreai. The residents of Xylokeriza have also been involved in rigorous exploitation of Mt. Oneion. Alongside the animal pens used for sheep and goats grazing on the slopes, the locals were also engaged in systematic resin collection until at least 50 years ago, to supply merchants in Korinth who used to export the resin for manufacturing.

### LOCA 9015: Xylokeriza Cemetery – Agios Georgios (no DU, not on map)

The cemetery of Xylokeriza, along with the recently renovated church of *Agios Georgios*, is located 1 km. north of the village of Xylokeriza. A total of 167 graves were counted and recorded following the EKAS Modern Cemetery and Grave Recording procedures, using mapping, photography and the recording of inscriptions. The earliest inscribed date is 1900, confirming local claims as to the establishment of the cemetery. According to local tradition, prior to the construction of the Agios Georgios cemetery, the churchyard of the *Koimisis tis Theotokou* in the center of the village, was used as the original burial ground. The churchyard has since been cemented over and there are no longer traces of the early cemetery.

## LOCA 9016: Examilia Village (no DU, not on map)

The modern village of Examilia is located to the north of Xylokeriza and between the settlements of Ancient Korinth in the west, and Kyras Vrysi in the east. Administered by the Demos of Korinth, Examilia consists of approximately 13,400 *stremmata* (unit of land measurement), and has a population of nearly 2000 permanent residents, including 200 Albanians and nearly 500 gypsies. A photographic recording of the village, along with the collection of oral information, commenced in 1999 and continued in 2000.

It appears that the settlement at Examilia has been continuously inhabited, bearing the same name, at least from the end of the 17<sup>th</sup> century, according to Venetian maps from that period and to early travelers during the 18<sup>th</sup> and 19<sup>th</sup> centuries. The settlement itself may indeed be older, as it is considered by locals to date from around the time of the construction of the Hexamilion Wall (5<sup>th</sup> century AD), thus its name.

Examilia lacks a *plateia*. The main church located in the middle of the village, Agios Dimitrios, was rebuilt in 1957–58 on the foundations of an earlier church, present at least since the time of the *Tourkokratia*. There is an oral tradition for yet an earlier church of Agios Dimitrios located a few meters west of the present location. Other churches in the area include that of *Agios Athanasios*, a still functioning Byzantine (16<sup>th</sup> –17<sup>th</sup> century A.D.) church which is now a declared archaeological site, the church of Agios *Ioannis o Prodromos* built in 1979, and, on the western Mt. Oneion, the church of *Analypsi*, the church of *Agios Fanourios* which was very recently built, and the Old Calendar church and Monastery of *Agia Triada*.

Attempts at locating evidence for Samuel Howe's 1827 settlement of Washingtonia in Examilia failed. There was hardly any oral information retrieved in relation to Samuel Howe's Washingtonia project, with the exception of a claim by Mr. ----- that one of the fields in the location known as "Kokkina" is referred to as the Nosokomeio (hospital), the site of a short-lived temporary hospital built by Howe. Another claim by Mr. ----- is that a number of long rectangular structures built by Howe in the middle of the village around the church of Agios Dimitrios to house the displaced Greeks after the War of Independence as part of his Washingtonia project, have only recently been destroyed to make room for modern residential construction. Two Early Modern buildings, one abandoned and one currently in use, fitting the description of Howe's buildings, were located to the north of the village near the primary school. The abandoned building was dismissed as having any connection with Howe's settlement by others who claim it to be owned by a rich land-owner (tsiflikas) who obtained his title through an official declaration (*firmani*) by the Pasha himself. The building is however suspicious in terms of its architecture (not a typical house, especially one owned by someone wealthy) which shows evidence of it being subdivided into at least four separate rooms/houses, fitting nicely with the purpose of Howe's structures to accommodate a number of individual families within each.

## **LOCA 9017: Examilia Cemetery – Agios Theodoros** (no DU, not on map)

The cemetery of Hexamilia, with a church dedicated to the military saint *Agios Theodoros*, is located 1 km. northeast of the village of Examilia. A total of 319 graves were counted and recorded following the EKAS Modern Cemetery and Grave Recording procedures, using mapping, photography and the recording of inscriptions. The earliest inscribed date is 1896. According to local tradition, prior to the construction of this cemetery, the churchyard of *Agios Dimitrios*, in the center of the village, was used as the original burial ground. The churchyard has since been cemented over and there are no longer traces of the early cemetery.

## Kenchreai subregion

## **LOCA 9027: Cummer Tomb** (DU 1147, Kenchreai East map)

EKAS did not investigate this Early Roman funerary monument in the form of a podium as it is a declared archaeological site (published in W.W. Cummer, W.W. (1971). "A Roman Tomb at Korinthian Kenchreai." *Hesperia* 40 [1971], 205–31). It is noted in our records as DU 1147/LOCA 9027.

## LOCA 9028: Early Christian Church DU 1146, Kenchreai East map)

Location: In the area called "Bourtzi" – 1.5 km NE of the modern village of Kenchreai; between the modern Isthmia-Epidauros highway and the Saronic Gulf; and southwest of the Kalamaki Beach Hotel, in an area which has produced evidence for several Roman chamber tombs and funerary monuments and the apse and north aisle of an early Christian basilica, which were previously investigated and published (R. Scranton and E. Ramage, *Hesperia* 36 [1967] 185–6, fig. 16).

In 2000, EKAS walked units to the west, south, and southeast of the Cummer tomb and found significant artifact concentrations as well as architectural fragments indicating the presence of subsurface structures and associated cultural debris. The survey unit (1146) directly west of the tomb exhibited very high artifact densities. The assemblage was almost entirely ancient in date, and most of the sherds belonged to coarse storage vessels. At least some of the pottery dated to the Archaic-Classical (Orange and Blue Core) and Late Roman (Combed Ware) periods. The team also recorded ancient pavement plaques and several cut blocks of high quality marble or other decorative stones, and though highly fragmentary, must have belonged to impressive buildings. Considering the frequent presence of graves in the vicinity, it is most likely that these structural remains originally belonged to Roman funerary monuments, comparable in form to the Cummer tomb but designed on a smaller scale. Significantly, the previously excavated portion of the Christian basilica contained several graves, demonstrating that it too was used at least in part for burial. EKAS also documented a Roman hypogaeum located ca. 300 m south of the Cummer tomb. This looted and poorly preserved tomb has been well known for many years (cf. R. Scranton, J.W. Shaw, L. Ibrahim, Kenchreai I [Leiden 1978] p. 12). Another possible chamber tomb that is largely collapsed and severely weathered was located along the adjacent shoreline. The DUs in this area south, southeast and west of the Cummer tomb and the Christian basilica (1135, 1139, 1141–1143, 1145) exhibited relatively high ceramic counts, included a diversity of types dating from Archaic-Classical to Modern.

## LOCA 9031: Hellenistic Tower (?) and Surrounding Area (DU 1162, Kenchreai East map)

Location: A hilltop, approximately two hundred meters to the east of the modern settlement (*oikismos*) of "Panorama;" 1 kilometer north of the ancient harbor of Kenchreai; 200 m. west of the modern highway; overlooking a small gully that runs east to the modern Isthmia-Epidauros road.

In 2000, EKAS investigated the remains of a rectangular structure on a ridge to the north and west of the highway running between Kenchreai and Isthmia. This site has been previously identified as a "tower" along a Hellenistic fortification wall (Wiseman 1978, 62, fig. 70). EKAS recorded, sketched, and photographed two walls *in situ*. The structure appears to measure 10 m. x 10 m., and traces of internal walls are visible in orthogonal arrangement. The composition, scale, and plan of the walls do not indicate that this building was erected for use as a heavily fortified tower. It might have served as either a lookout position in an elevated line of defense or simply a farmhouse on an attractive site.

## LOCA 9124 – Ancient-Period Artifact Cluster (DU 1131, Kenchreai East map)

Location: In the area known as Bourtzi, north of the modern village of Kenchreai; 50 m. southeast of the highway running between Isthmia and Epidauros; approximately 250 m. north of the Cummer Tomb (LOCA 9027).

In 2000 EKAS discovered a high-density artifact concentration in a flat citrus grove, just below the modern highway. The visibility was excellent and recent plowing exposed a significant amount of artifacts: 304 sherds, 53 tiles, and several pieces of glass and marble revetment. Most of the material was ancient, with Classical and Late Roman sherds

predominating. There were several pieces of classical-period black glaze fineware; Late Roman amphorae fragments; numerous cooking and coarse-ware sherds; and ancient marble revetment and marble architectural molding. Other periods were represented by a few sherds: Late Bronze Age, Geometric-Archaic, and Modern. The finds—at least for the Classical and Roman periods—probably represent the debris of habitation associated with the ancient town of Kenchreai.

### LOCA 9032: Roman (?) Settlement (DU 1209, Kenchreai West map)

Location: A high-density artifact cluster in a young olive grove, approximately 1.8 kilometers northwest of the ancient harbor of Kenchreai, just north of the modern village, 200 meters south-southwest of and below the Agios Dimitrios ridge, in an area known by the toponym "Kokinia."

In 2000, an EKAS field team surveyed units below and on top of the Agios Dimitrios ridge, north of Kenchreai. In LOCA 9032 (DU 1209) fieldwalkers discovered a significant concentration of pottery and tile, especially medium coarse wares, kitchen wares, and storage/transport vessels, as well as a few fragments of fineware and a lamp. The pottery dates between the Archaic-Classical and Late Roman (the greatest quantity) periods — with low quantities of Medieval and Modern period sherds. The pottery probably represents habitation in the area during these periods, and must constitute either an urban or suburban sector of the ancient city of Kenchreai. Because survey unit 1209 was recently plowed, and because few units adjacent to 1209 were surveyed, the extent of LOCA 9032 is unclear; it seems probable, however, that the high densities of artifacts continue to the west and east, and that this represents only one small area of urban debris from the ancient city.

## **LOCA 9012: Kenchreai Village** (no DU, not on map)

The modern settlement of Kenchreai, located on the coast and near the ancient harbor of Kenchreai, is administered by the Demos of Korinth (Kapodistrias Plan 2000). Prior to 2000, Kenchreai was part of the Koinotita of Xylokeriza, which accounts for the close connection between the two villages. Recording during the 2000 EKAS season involved photographing the main features of the settlement (church, houses, landuse) using standard slide photography as well as digital photography, and the collection of oral information from local residents.

The settlement is at least as old as 1886 (inscription on the bell at the Church of Metamorfosis tou Sotiros; see LOCA 9013). It is a small settlement, with approximately 100 permanent residents. The village church and cemetery are the only public buildings in the village, while the land comprising the archaeological site and the military base has been expropriated by the Greek state in more recent times (early – mid 20<sup>th</sup> Century). With the exception of a couple of seaside tavernas and a Petrol Station, there is no other commercial activity in the village. According to local informants, S. and G. ------, the Markellos clan held claim over most of the land surrounding the settlement. The land up to the harbor was used as vegetable gardens until at least the middle of the 20<sup>th</sup> century, showing evidence of the abundance in water supply originating from the Oneia Mountains. Mr. ------ recalls the time when large boats used to come and dock in the ancient harbor and fill large containers with water, which was then taken to Piraeus in order to supply Athens and Aegina. Ever since the

establishment of deep well digging in the area (1960s–1970s), especially around the fields in Xylokeriza, water has become scarce and the vegetable gardens have now been abandoned. This drastic change in water supply has resulted in the exploitation of land to the west, (Kesimia, Hatoupi) previously unutilized by the residents of Kenchreai, and now cultivated with apricots, olives, vineyards and citrus trees. In the last 20 years, a number of Athenians have built holiday homes on land sold by the Markellos family, and some have also moved there on a permanent basis.

### LOCA 9013: Kenchreai Cemetery – Metamorfosis tou Sotiros (no DU, not on map)

The cemetery of Kenchreai, along with the church of the Metamorfosis tou Sotiros, is located in the middle of the modern village. It contains a total of 27 graves, all of which were recorded during the EKAS 2000 season, using a procedure devised by EKAS for recording (including photographing) general cemetery information, as well as individual monuments and their inscriptions. The earliest inscribed date found on a grave monument in this cemetery is 1937. The church bell bears the inscribed date of 1886, and according to local informants, this marks the date of the re-building of the church on the site of a pre-existing church. The Church has since been refurbished in the last 10 years.

## Agia Paraskeve subregion

## LOCA 9121: Agia Paraskeve (DU 3078–3089, Agia Paraskeve map)

The site of Agia Paraskeve is located just below the northern slope of Mt. Oneion (directly north of the Summer Fun campground), south of the road between Kenchreai and Xylokeriza.

Investigation involved 12 DUs laid out in 2001, with a total area of 40,724 sq. meters. The 1:50,000 map showed a ruined church of Agia Paraskeve in this area and local informants said that transhumants had lived seasonally at this point until fairly recently. They also say that they can remember the church always being in ruin. There are no ruins that are clearly from the church, although the considerable quantities of tiles and cut blocks in DU 3078 may well be the location of the church.

Densities were quite high in the whole area, although the greatest concentration is at the south end, in the area where the church may have been. Brief examination in the unsurveyed area to the northwest suggests that there may have been an early modern settlement there.

The finds are broadly spaced through time. There is considerable material of classical date, along with Late Roman, medieval, and early Modern. In addition, there are many pieces of millstones and large quantities of tile, suggesting that this was indeed a settlement, perhaps from antiquity until less than 100 years ago, when the site was abandoned.

## Mt. Oneion subregion

**LOCA 9008: Late Classical-Hellenistic Fortifications** (DU 5000, 6001–6013, Mt. Oneion map)

## Eastern Korinthia Archaeological Survey 1999-2001

Extensive survey work in 2000 examined the several north-south passes through Mt. Oneion between the Isthmia and Hexamilia basins and the territory of Rhyto and Athikia. These passes were presumably important militarily in various periods of Greek history. Fortifications at Stanotopi above Loutra Elenes on Mt. Oneion had been published in detail by R. Stroud ("An Ancient Fort on Mount Oneion," *Hesperia* 40 [1971] 127–44) and he mentioned other fortifications farther west (p. 129). In 1999 EKAS explored the pass at Marista (Trypio Lithari) and discovered a large complex of walls, constructed of unfinished rubble and standing to a maximum height of ca. 1 m. There is a large enclosure at the highest point, overlooking the pass, and many spur-walls that must have served to block attacking forces from approaching the enclosure. Pottery and tiles associated with these fortifications are all from the late Classical-Hellenistic period (4<sup>th</sup>-3<sup>rd</sup> centuries BC).

Another series of fortifications was also found, further down the northern slope of Mt. Oneion. These fortifications, one in the Stanotopi Pass, the other in the Marista pass, have been mentioned by scholars (J. Wiseman, *Land of the Ancient Corinthians (SIMA* 50) [Göteborg 1978]: 54–55 figs. 53–55; Fowler, *Corinth* I, i, 104–106; and Bon, *Corinth* I, iii, 153–155, 268–27), but they have never been properly studied. These two fortifications are built of rubble set in mortar and they must presumably be assigned to the Venetian period (1687–1715).