Saronic Harbors Archaeological Research Project (SHARP)

2010 Study Season Report

The Saronic Harbors Archaeological Research Project (SHARP) carried out a study season from 25 May to 9 July 2010, as a project of the American School of Classical Studies, with a permit from the Greek Ministry of Culture. We would like to thank the $\Lambda Z'$ E Π KA and the 25th Byzantine Ephorate. Our research continued to focus on the Mycenaean settlement at Korphos-Kalamianos and the surrounding territory.

In 2010 our main priorities were the following:

- 1. Completion, correction, and editing of documentation of architecture found at Kalamianos and at Stiri in the 2007-2009 field seasons.
- 2. Completion, correction, and editing of documentation of sites and architecture found in the regional archaeological survey in the 2007-2009 field seasons.
- 3. Study of the finds collected in 2007-2009 from Kalamianos and the archaeological survey, now housed in the Isthmia Museum, including drawing and photography.
- 4. Editing and correcting of all data generated in 2007-2009 for inclusion in database and GIS.

Architectural Documentation

A systematic checking of all wall and feature identifications, documentation, and photography was carried out by Donna Nagle to make certain there was no duplication or missing information. This data was then compared to the GIS. The GIS, the survey database, and the paper forms were all updated (paper forms were rescanned for archival purposes). We were able to eliminate duplicate wall numbers and systematize the data collected for all features at Kalamianos and off-site.

GIS and Survey Database

Great improvements were made in both the GIS and in the survey database in 2010. The content of both was checked against the documentation available, and updated. Miriam Clinton and Sarah Murray revised the organization and content of the GIS, and Charlie Harper revised the organization of the survey database. These two components are now linked dynamically, resulting in many useful tools that will be used for analysis of the data. Likewise, the finds database is now also dynamically linked into the GIS so that a chronological component can be added to analysis. We have been able to assign certainty values to the wall documentation based on the type of documentation; provide polygons for rooms and walls in addition to the overall structures; and to add values for date, function, etc., to the walls in the GIS.

Architectural Survey

One of the main goals of the 2010 study season was to finish the documentation of the architecture at Kalamianos and at Stiri through field checking and detailed stone-by-stone drawings ("state plans"). Phil Sapirstein and Giuliana Bianco supervised a number of students in

drawing structures discovered in 2007-2009. A number of the wall outlines generated by the architectural survey have already been incorporated into the GIS to provide the most accurate representation of the architecture at Kalamianos. The accompanying maps of Kalamianos (Figure 1) and Stiri (Figure 2) highlight those structures that have been documented by the stone-by-stone drawings.

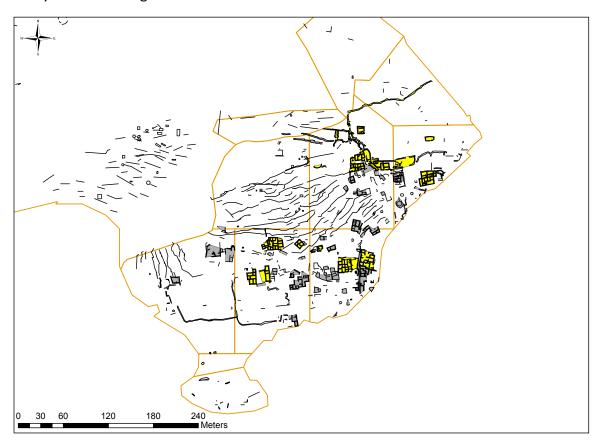


Figure 1. Kalamianos architecture. Yellow highlights stone-by-stone drawings of buildings.

Differential GPS (DGPS) and Kite Photography

Ben Gourley and Michael Charno returned in 2010 map off-site features with DGPS and to photograph the Stiri Bronze Age sites from the air using a kite. During their four-day stay, they were able to map Mycenaean terrace walls at the Kalamianos saddle site; terrace walls, cairns, and stone enclosures on the Pharonisi peninsula; and the stone enclosure at Sarakina. They were also able to plot points in other areas to assist Giuliana Bianco in drawing off-site features. Despite less-than-ideal wind conditions, the kite provided many useful aerial photographs of the Stiri sites, as well as at Kalamianos, where some of the balloon photographs of 2009 did not show exactly what we needed.

Mapping Mycenaean Terrace Walls

Lynne Kvapil returned in 2010 to continue her mapping and analysis of Mycenaean terrace walls that occur in several places in the survey area, including Kalamianos, Stiri, Pharonisi, and the Kalamianos saddle site. Lynne has developed a systematic method of observations, which

has allowed her to make convincing arguments for a Late Bronze Age date for these terracing systems. This work is providing crucial evidence for the use of the productive landscape by the Mycenaeans in the 13th century B.C.

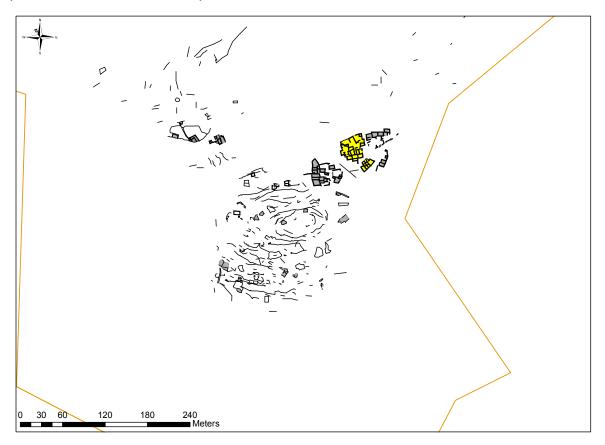


Figure 2. Stiri architecture. Yellow highlights stone-by-stone drawings of buildings.

Oral Histories

Lita Tzortzopoulou-Gregory continued her oral history project by interviewing residents of Korphos and Sophiko. A particular interest this year has been to ask questions about maritime life in Korphos and the relationship between the Korphiotes and those dwelling on the islands and shores of the Saronic Gulf.

Off-site Revisits

A small team consisting of Tom Tartaron, Miriam Clinton, and Sarah Murray systematically revisited architectural features beyond the main sites at Kalamianos and Stiri (Figure 3). The main agenda of this work was to: (1) to evaluate the original documentation of the architectural features, for accuracy, completeness, and interpretation; (2) to clarify aspects of the architecture, namely morphology, chronology, function, and relationship to the wider natural and human landscape; and (3) to gather additional information about the architecture and its setting as appropriate. With three years of experience and the benefit of hindsight, we discovered that many of our original observations, especially those made in 2007 and 2008, were in need of revision. During the revisits we took four kinds of actions: (1) confirmed that

the original documentation was essentially correct; (2) changed information that was thought to be inaccurate or misleading; (3) made additional observations and measurements that were not made in the original documentation, but considered important; and/or (4) removed features from the database that were deemed not to be walls or features. In many cases our experience allowed to redefine the morphology or functional designation of a feature; for example, small, elliptical stone features that we now believe to be of Early Bronze Age date were often not recognized as single architectural features in the early days of the survey. Revisiting allowed us to add three or four previously unrecognized enclosures.

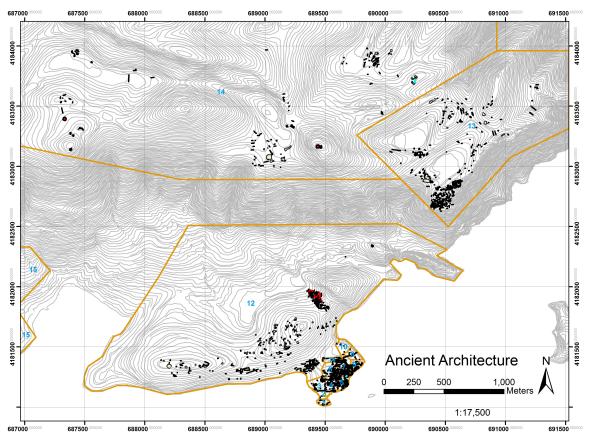


Figure 3. SHARP architectural remains in survey zones outside of Kalamianos.

We were able to determine that the Early Bronze Age is characterized by three main types of architecture in the survey area: (1) settlement structures (buildings); (2) elliptical stone enclosures; and (3) stone cairns. For the Mycenaean period, we have recognized: (1) settlement structures (buildings); (2) large walled enclosures; and (3) terrace walls.

The result of this work is an inventory of off-site features that reflects a much more thorough and informed documentation of their distribution, date, and potential range of functions. It also allowed team members to get a much more holistic sense of how the settlement systems of the Bronze Age might have functioned, leading to interpretations with a stronger basis in robust data.

The Finds

Amy Dill continued to lead a team studying the approximately 3,040 items (2250 sherds, 730 stones, 60 shell and other materials) from the 2007-2009 field seasons housed in the OSU/Gregory apothiki at the Isthimia Museum. These 3,040 items represent only a fraction of the approximately 13,600 items documented in the field. The primary goal of the 2010 study season was to complete the documentation through photography and drawing of the ceramics and other finds. Over 1100 drawings have been created of the sherds and other ceramic objects retained in the Isthmia apothiki, and nearly all items photographed. Copies of the drawings and photographs have been supplied in previous years.

Calcium Carbonate Concretions on Ceramics

Jonathan Dupree, a student from Florida State University, conducted a study of the variation and spatial distribution of calcium carbonate concretions on ceramics. He measured the calcium carbonate on over a hundred sherds collected from the walls and rooms of buildings on Kalamianos and Stiri. We hope that his results will aid in the determination of the life histories of the buildings, including giving an idea of how long some of the structures as we see them today would have been exposed to the elements.

Examination of Shell

Tatiana Theodoropoulou, currently at the Wiener Laboratory of the American School of Classical Studies at Athens, visited the Isthmia apothiki for one day to examine the shell objects that we collected during the survey in 2007–2009. Much of the shell we collected comes from the rubbles cores of Mycenaean walls; thus, this material, along with fragments of pottery and ground stone, was included in the gravel used to fill the interior of the walls. Tatiana reports that a limited number of species are represented, mostly collected dead, which raises interesting questions about this selective exploitation. We look forward to Tatiana's final report.

Examination of Lithic Objects

Bill Parkinson and Nick Kardulias examined the flaked stone objects from the survey at the Isthmia Apothiki. Dori Kékegyi drew the flaked stone objects. Raw nodules of Melian obsidian were imported at Kalamianos, and processed on site near the shore. Subsequently, they were distributed to interior locations mainly as flakes and blades. Bill also did a preliminary examination of the ground stone objects, but these will need further study.

Future study seasons

We envision a study season in 2011 that will focus primarily on the analysis of the finds from the project that are housed in the Isthmia apothiki. Appropriate permits will be sought during the forthcoming year.