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EXCAVATING MT. LYKAION, GREECE EXPLORING THE PAST IN CHATRIKHERA, INDIA VISUAL FIELD NOTES FROM VIETNAM

## EXCAVATING AT THE BIRTHPLACE OF

The Mt. Lykaion Excavation and Survey Project by david Gilman Romano and Mary E. Voyatzis

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<image>

# IN THE 3RD century BCE, the Greek poet Callimachus wrote a *Hymn to Zeus* asking the ancient and most powerful Greek god whether he was born in Arcadia on Mt. Lykaion or in Crete on Mt. Ida.

My soul is all in doubt, since debated is his birth. O Zeus, some say that you were born on the hills of Ida; others, O Zeus, say in Arcadia; did these or those, O Father lie? "Cretans are ever liars."

These two traditions relating to the birthplace of Zeus were clearly known in antiquity and have been transmitted to the modern day. It was one of the first matters that the village leaders in Ano Karyes brought to our attention when we arrived there in 2003. We came to discuss logistical support for our proposed project to initiate a new excavation and survey project at the nearby Sanctuary of Zeus. Situated high on the eastern slopes of Mt. Lykaion, Ano Karyes, with a winter population of 22, would become our base of operations, and the village leaders representing the Cultural Society of Ano Karyes would become our friends and collaborators in this endeavor. We were asked very directly if we could prove that Zeus was born on Mt. Lykaion. In addition, village leaders raised another historical matter related to the ancient reference by Pliny, a 1st century CE author, who wrote that the athletic festival at Mt. Lykaion in honor of Zeus was older than the games at Olympia. Could we find archaeological evidence to support this ancient reference? There was no doubt that the inhabitants of the local village were very proud of their heritage, and that we had our work cut out for us. Although our scientific objectives for the project were considerably different from the interests of the local people, little did we know that within only a few years we would have results that the village, as well as the archaeological community, would find relevant and intriguing.

This visit was not Romano's first to Ano Karyes or to the Sanctuary of Zeus. In 1996 he organized a computerized architectural and topographic survey project there with a small group of students from Penn, and succeeded in creating the first precise map of the important sanctuary. Earlier, in 1978, he carried out some of his Penn Ph.D. dissertation work at Mt. Lykaion. Romano was impressed with the beauty and majesty of the site, and it was his sincere hope to return one day to do fieldwork and excavation.



Voyatzis' link with the area was even stronger, as her father John had been born and raised in the nearby town of Andritsaina, until he emigrated to the United States in 1952. The old Voyatzis house still stands in Andritsaina, below the town square, and the family is still known to the residents of the area. Mary Voyatzis, a 1978 graduate in Classical Studies at Penn, was a frequent visitor to this area as a child, beginning in 1960. Now a resident of Tucson, she is still considered by the locals as FROM Andritsaina.

On July 20, 2003 we visited the village of Ano Karyes for the festival day of Agios Elias, having been invited because the village wanted to entertain us on their most important feast day. The small church of Agios Elias is situated on the southern peak of the mountain just 100 m away from the ash altar of Zeus.

The day began with a morning church service on the mountaintop, followed by a luncheon at the lush and shaded Lykaia fountain on the mountainside below the sanctuary. The meal consisted of wine, bread, cheese, and boiled goat, the latter of which had been prepared in huge cauldrons on outdoor fires the night before. It was a very hot day, probably over 100 degrees by early afternoon, but by 4 pm, the clouds had gathered, and there was thunder and lightning, followed by heavy rain and hail. By late afternoon the temperature had dropped into the 40s...in mid July! The villagers were heard to say only one word 'O Dias,' ZEUS!

After all, Zeus had many epithets in antiquity including "cloud gathering Zeus," "the shepherd of the clouds," "master of the bright lightning," "the bringer of rain," "the bringer of storms," and perhaps most notably "Zeus of the thunderbolt." It is often suggested that Zeus was likely to have been originally worshiped as a weather god by the Greek tribes, and the original meaning of the Indo-European word Zeus may be related to "bright sky." It was clear to us that Zeus was alive and well in the village of Ano Karyes on Mt. Lykaion. Agios Elias, or St. Elias, is often seen as the Orthodox Greek successor to Zeus, and his churches are typically located on mountaintops in Greece.

The year 2003 fell almost 100 years after Konstantinos Kourouniotes of the Archaeological Society of Athens had excavated in a series of campaigns at the Sanctuary of Zeus at Mt. Lykaion. He had discovered an ash altar of Zeus and a *temenos* (sacred precinct) at the southern peak of the mountain at 1382 m above sea level. He also discovered a hippodrome, stadium, *stoa*, bath house, hotel, and several fountain



#### CHRONOLOGY

**Final Neolithic** 4500-3200 BCE Early Helladic 3200-2050 BCE Middle Helladic 2050-1550 BCE Mycenaean/LHI-IIIB 1550-1200 BCE Mycenaean/LHIIIC 1200-1100 BCE Sub-Mycenaean 1100-1050 BCE Protogeometric 1050-900 BCE Geometric 900-700 BCE Archaic 700-480 BCE Classical 480-323 BCE Hellenistic 323-31 BCE

houses in a mountain meadow some 200 m lower on the mountainside. The site of Mt. Lykaion, in the west-central Peloponnesos, was famous as a Pan-Arcadian and Pan-Hellenic sanctuary with sacrifices and athletic contests in honor of Zeus, and for an impressive open-air altar where human sacrifice was rumored. Pausanias, the 2nd century CE Greek traveler, provided a good deal of information about the site. He mentioned that athletic games to Zeus Lykaios had once been held in the mountain meadow and that a sanctuary of Pan was located nearby. He also described the ash altar of Zeus saying,

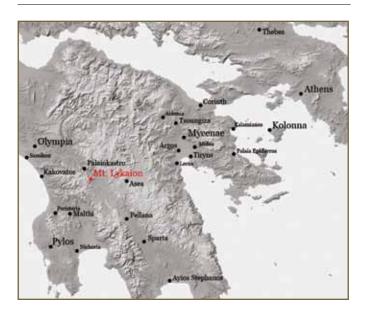
On the highest point of the mountain is a mound of earth, forming an altar of Zeus Lykaios, and from it most of the Peloponnesos can be seen. In front of the altar on the east stand two columns, on which there used to be golden eagles. On this altar they sacrifice in secret to Lykaion Zeus. I was reluctant to pry into the details of the sacrifice; let them be as they are and were from the beginning.

When Kourouniotes excavated the southern peak of the mountain, he discovered that approximately 1.5 m of fill above bedrock was composed of the ash of burned sacrifices, bone, pottery sherds, stone, and dedications of various kinds, including coins and fragments of metal. Although Kourouniotes found many bones, most were goat and sheep, and he identified no human bones. The earliest evidence for cult activity from the altar consisted of two bronze tripods of the late 8th or early 7th century BCE. Some 20 m lower in the vicinity of the nearby *temenos*, he discovered a number of bronze figurines, many depicting Zeus. Some of these bronzes are now on exhibit in the National Archaeological Museum in Athens.

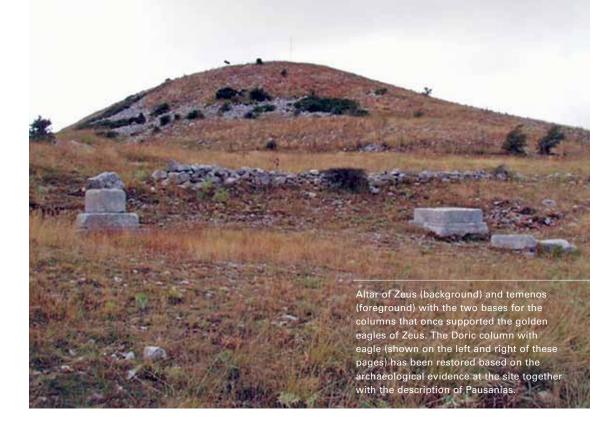
We had many scientific objectives when we began our excavation and survey project. Among them were the following: When did the religious cult of Zeus begin on the mountaintop, and how long did it last? What were the origins of the athletic contests at Mt. Lykaion, and how long did they survive?

Who were the visitors to Mt. Lykaion, where did they come from, and what did they do when they were at the site? What was the economic basis of the sanctuary during the centuries of its development? When exactly were the buildings constructed in the lower sanctuary, who paid for them, and who maintained them?

By ancient or modern standards, the Sanctuary of Zeus at Mt. Lykaion is in a remote location. Although the peak of Mt. Lykaion is not as high as Mt. Mainalon (the highest peak in Arcadia) or Mt. Taygetos (located between Laconia and Messenia), both of which are visible from the altar, it is a prominent peak in the central region of the Peloponnesos and can be seen



Map of the Peloponnesos showing the location of Mt. Lykaion. Other Bronze Age (*ca.* 3200–1100 BCE) sites are indicated on this map.



from many locations. The region of Arcadia, located in the mountains of the central Peloponnesos, was known in antiquity as a pastoral region of Greece; consequently, the Arcadians were thought to be somehow less sophisticated than other Greeks, preserving ancient customs and a very old dialect. In Homeric times, the southwest part of the region, including Mt. Lykaion, was known as Parrhasia, and, as was recorded in the Iliad, the Parrhasians were given ships by Agamemnon to fight in the Trojan War.

When we began our excavations at the ash altar of Zeus in 2007, the top levels yielded a mix of material from the Hellenistic as well as earlier finds from Classical and Archaic Periods; a great deal of pottery turned out to be very early indeed: Late Helladic (Mycenaean), Middle Helladic, Early Helladic, and Final Neolithic. Although the top half of the trench was found to be without clear stratigraphy,

probably due in part to bioturbation (the mixing of soil), when we excavated lower, we discovered that the bottom half of the trench had much clearer stratigraphy. In the top unstratified levels, we found a Late Minoan II (ca. 1450-1400 BCE) rock crystal lentoid seal of a bull, giving us our first glimpse of what was likely to have been a dedication in the Bronze Age. Lying directly on the bedrock, we discovered a large number of broken Mycenaean kylikes (stemmed drinking cups) and other Late Helladic-type vessels that had been deposited together with several Mycenaean terracotta animal figurines and the fragments of at least one terracotta human figurine. Curiously, examples of Middle Helladic, Early Helladic, and Late Neolithic pottery were also found on the bedrock as well as in other levels. When we expanded the trench to the north, we found more examples of the Mycenaean pottery at the lowest levels. Considerable evidence suggested Mycenaean cult activity on the southern peak of the mountain, something we had not expected to find.

Many questions remain about the nature of the earlier material, but the discovery is significant and suggests ritual activity from at least the 14th century through the 11th century BCE. Zeus is attested in Linear B documents from Crete and the mainland from 1400–1200 BCE; in addition, this early form of the Greek language



Rock crystal lentoid seal of a bull, Late Minoan II date, found in the ash altar of Zeus. This seal stone was very likely made in Crete.





also includes the word for "temenos," as well as a word for "fire altar" that might describe the ash altar at Mt. Lykaion.

In the level immediately above the lowest (Mycenaean) level, we have identified what we believe to be a Protogeometric (PG) layer consisting of regional PG ceramics and an iron double axe; the axe may date to the later 11th through 10th centuries BCE. In higher levels in the same trench, we have found Geometric and Archaic pottery and a series of miniature bronze tripods. These tripods likely date to the 8th century BCE and are dedications to Zeus. Many other votive dedications were discovered including mini-vases, lead wreaths, iron spits, as well as a bronze hand holding a silver lightning bolt, probably broken from a statuette of Zeus. Some of these objects were found in the context of a high intensity burning area that we excavated within the trench. We have also found a series of coins, mostly silver, and in very good condition. Several of these are Arcadian League coins, showing the head of Artemis or Despoina on the obverse and a seated Lykaion Zeus on the reverse.

A considerable amount of animal bone has been discovered in all of the levels of the altar trench, and most of it is burnt. From our faunal analyst, Britt Starkovitch, a Ph.D. candidate at the University of Arizona, we learned that most (close to 98%) of the bones are from sheep and goat, primarily the patellas,





Top, an iron double axe was found together with Protogeometric pottery above the Mycenaean material in the ash altar. Bottom, more than 20 bronze tripods have been found in the ash altar. Many of these date to the 8th century BCE and were dedications to Zeus. femurs, and tail bones of the animals. Most of the bones (close to 98%) are burnt. Other animals are represented in very low percentages and, importantly, no human bones have been identified. From our micro-morphologist, Susan Mentzer, a Ph.D. candidate at the University of Arizona, we have learned that the fill of the altar is almost entirely formed from decomposed bone. The examination of the bone fragments has already revealed that the kinds of animal sacrificed and the specific parts that were selected for dedication remained constant over centuries, suggesting that the cult practice was part of an ancient ritual. These discoveries may help us better understand the development of Greek ritual practices. Furthermore, the evidence from the altar trench suggests that the cult of Zeus was continuous from the Late Helladic (Mycenaean) period through to the Hellenistic period, another very unusual and significant circumstance in the Greek world.



A miniature bronze hand (of Zeus?), found in the ash altar, holds a silver lightning bolt. The lightning bolt was one of Zeus' most common attributes and was related to his epithets "Master of bright lightning" and "Zeus of the thunderbolt."

George Davis, a geoscientist at the University of Arizona, has been studying the geology of the sanctuary and the region and has made some interesting observations. The southern peak of Mt. Lykaion is surrounded on three sides by a geological fault, and one spur of the fault appears to approach the southern peak itself. In 2009, Davis initiated a trench in search of evidence of this fault, and we anticipate important results based on this work. It was George Davis who first identified the glassy-like substance found in the ash altar as fulgurite. Fulgurite is formed when lightning strikes sandy soil and vitrifies. Since the ash altar does not contain sand, it is likely that the fulgurite was brought to the altar as a dedication.

Fulgurite was also found in the ash altar of Zeus. Fulgurite is formed when lightning strikes sandy soil and vitrifies.

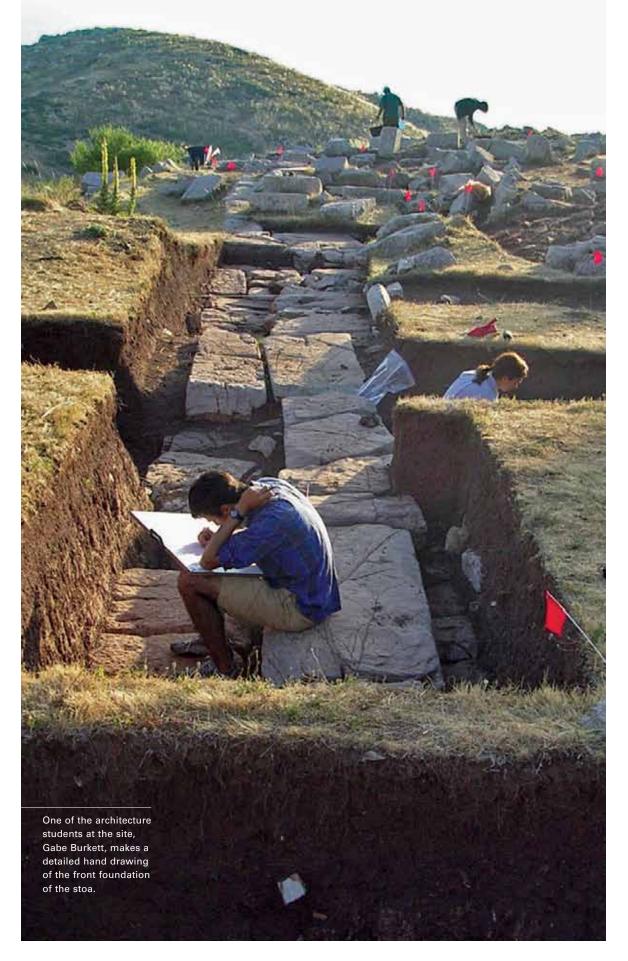
In the lower mountain meadow, where the ancient Lykaion Games were held, we have been involved in an architectural documentation project since 2004. We are creating the first stone-for-stone, actual-state drawing of the entire sanctuary, where every stone is precisely located with an electronic total station, and hand drawn by one of a team of architects who have worked at the site. We are supported in this work by the

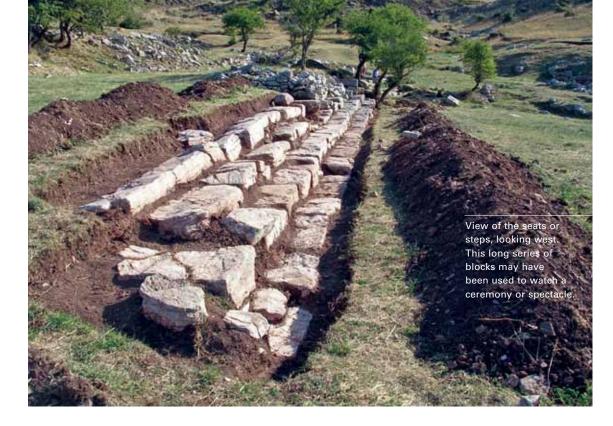
Samuel H. Kress Foundation, which has funded architecture students from the University of Pennsylvania's School of Design since the inception of the project. Ximena Valle, a 2006 graduate of the School of Design, and Director of Architecture of the Archaeological Mapping Lab, has been in charge of the fieldwork for most of the summer seasons. The architectural students make detailed measured hand drawings of all of the significant blocks at the site.

Excavations in the lower sanctuary have been undertaken in the areas of the *xenon* (or hotel building), seats or steps, the stoa, and related areas, as well as in the hippodrome and the possible site of the stadium. It appears that the lower sanctuary was designed on a series of terraces facing, in part, the large expanse of the hippodrome and stadium.

A long (67 m) colonnaded building, or stoa, appears to have been the southern limit of the sanctuary and faced northwest. This ancient building was largely excavated by Kourouniotes in the early 20th century, and we have undertaken to clean the building and expose the foundations Arcadian League silver stater, with Artemis or Despoina on the obverse and seated Lykaion Zeus on the reverse. Zeus holds a scepter in his left hand and an eagle in his right hand; 5th century BCE.







in order to better understand its architectural plan, its history, and its use. This building, together with a number of others at the site, is likely to be from the 4th century BCE, although a secure date for its construction remains to be confirmed.

The long series of seats or steps are found to the north of the stoa, but at a lower elevation, and below a terrace. Curiously these seats or steps are straight except for a subtle curve at their far western end. Were they used as seats for spectators to watch an event or a spectacle of some kind? Or were they built as a staircase or as a retaining wall? Archaeological evidence suggests that a pathway or a *dromos* ran opposite the seats from east to west; a portion of a terracotta water channel was recently discovered in the surface of this pathway.

The building that Kourouniotes identified as the xenon is adjacent to the series of seats to the west. This building, 38 m x 22 m and enclosed by massive walls, was found by the early 20th century excavator to include several rooms. It was in this building that Kourouniotes found the two victor inscriptions that date to the late 4th century BCE, which give us vital information about the ancient Lykaion Games. From these inscriptions, it is clear that some of the victors came from great distances—from Syracuse in Sicily and from the island of Rhodes—suggesting that the Lykaion Games must have enjoyed Pan-Hellenic status during at least part of their history. Outside the building, on its east side, is an interesting subterranean corridor, open to the air, leading towards the northeast. Excavation in this corridor over the past few years has revealed a large amount of Hellenistic pottery fragments, largely from dining contexts. We are interested in learning where the corridor leads and what the relationship of the corridor is to the neighboring xenon building. Perhaps the xenon is rather a sanctuary administrative building where dining was held?

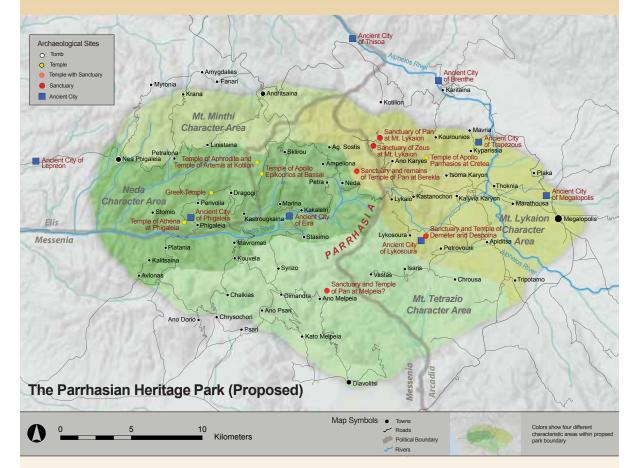
The hippodrome is by far the largest structure in the lower sanctuary; its length is roughly 300 m and its width is 125 m. It is of great significance since it is the only hippodrome in the entire Greek world that can be seen and measured. Its importance lies in the fact that no hippodrome has ever been excavated, and, although there are some literary accounts, we do not know what the architectural features of a Greek hippodrome are. Does the hippodrome resemble in any way the Roman circus, of which there are many examples in the ancient world? We have recovered from the neighboring fields what are likely to be the turning posts of the hippodrome, two tapering columns that once probably stood on stone foundations, as well as a portion of the surface of the hippodrome floor. Starting line blocks from a Greek stadium, found by Kourouniotes, suggest that a Greek stadium may have been situated within the limits of the hippodrome, a unique situation in the Greek world.



## PARRHASIAN HERITAGE PARK

One of the project's most ambitious and important proposals is to create a heritage area in the Western Peloponnesos. The idea of the park is to unify and protect a large area of land, approximately 300 square km. The creation of the Parrhasian Heritage Park is proposed to protect an area of cultural significance, outstanding natural beauty, and rich archaeological sites, while encouraging local communities to continue living and working within the protected landscape. This "living park" approach encourages natural, cultural, and scenic resources to be managed for both long-term vitality and for use as essential parts of local livelihoods and traditions. Success for the park will mean the enhancement of local residents' pride and sense of stewardship, support for ongoing cultural activities, increased economic strength in the region, and the protection of the natural, archaeological, scenic, and recreational resources for future generations. Costas Cassios, Emeritus Professor of Physical Geography in the School of Surveying and Rural Planning of the National Technical University of Athens, and Mark Davison, Park Planner for the State of Oregon and Director of Historical Landscapes at the Archaeological Mapping Lab, have been leading our efforts in this area.

The name of the park—Parrhasian— refers to the ancient legends of Arcadia associated with the heart of the area of the proposed park. In antiquity the Parrhasia was considered to be the most ancient region of Greece. This name precedes the later regional divisions of Greece and provides a name for us today that connects and unifies these areas for the purpose of protecting their rich heritage. The area of the proposed park includes important ancient sanctuaries and cities in southwest Arcadia and parts of modern-day Messenia and Elis. The idea of the park is to create trails to connect ancient cities and sanctuaries throughout the area, to create hostels for visitors to spend the night, and to enhance the experience of the tourist by creating signs, maps, and information relating to the natural, physical, environmental, and cultural attractions.



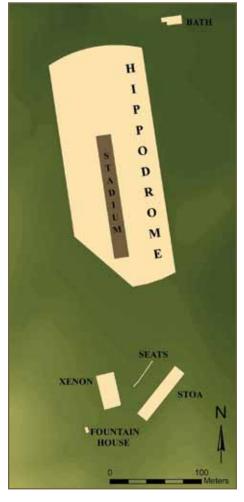
Sites that will be included in the park are indicated on the map above as red circles (ancient sanctuaries) and blue squares (ancient cities).

Modern Lykaion Games, August 9, 2009. The modern track is located above a portion of the surface of the ancient hippodrome and stadium. The athletes and spectators come from Arcadia as well as from other parts of Greece.



We have also learned about the modern Lykaion Games that have been held on the surface of the ancient hippodrome every four years since 1973. These are modern track and field events organized by the Cultural Society of Ano Karyes and are based on the ancient athletic festival in honor of Lykaion Zeus. The modern games are secular, although they do have a beautiful torch ceremony at the mountaintop at dawn on the day of the games, which may suggest an ancient religious context. The events attract hundreds of athletes from the region, and offer activities for athletes of various ages, beginning with very young boys and girls and continuing through to the Master's category for some events. As a participant in the distance race, the ancient *dolichos*, in the senior men's category, Romano found himself among stiff competition both in 2005 and 2009.

The ancient Lykaion Games were contemporaneous with those held at Olympia (in Elis) throughout much of their histories, and the two sanctuaries were only 22 miles apart, as the eagle flies. Although we do not yet know when the athletic games originated at Mt. Lykaion, there are a number of hints to suggest that the games, as well as the cult at Mt. Lykaion, are very old. In antiquity, political and military conflicts occurred between the people of Arcadia and those of Elis, and one wonders what the relationship was between these two prominent and neighboring sanctuaries of Zeus. Since the earliest material found relating to the cult of Zeus at Olympia dates to the 11th century BCE, and we are finding evidence from the earlier Mycenaean period on the altar at Mt. Lykaion, perhaps the Sanctuary of Zeus at Mt. Lykaion influenced the developments at the Sanctuary of Zeus at Olympia.



Plan of hippodrome and lower sanctuary, showing the cluster of buildings to the south of the hippodrome, including a stoa, a series of seats, a fountain house, and a xenon or hotel building. To the northeast of the hippodrome is a bath building.



Our excavation and survey work at the Sanctuary of Zeus will continue in Summer 2010, to be followed by several summer study seasons that will provide us with time to contemplate and write about what we have found. We anticipate that we will want to continue our excavations in future seasons.

The Cultural Society of Ano Karyes generously allows us to use the former schoolhouse in the village, now the Cultural Center, as our lab, workspace, and storage facility. Under the direction of Nick Stapp, Director of Geo-Spatial Studies of the Archaeological Mapping Lab, we have set up a wireless network within this lab and we provide internet access for our team. Next summer we anticipate other technological advances for our project including the introduction of a wireless database.

Our village colleagues have been greatly interested in our results thus far. When told that our evidence from the mountaintop now goes back to the Final Neolithic period and that there is a Mycenaean altar there, they were not surprised, but greatly proud and pleased.

When we released to the Greek news media that our research had found evidence of an early Bronze Age shrine to Zeus on the mountain-top, one headline proclaimed "Arcadia Steals Zeus from Crete." The myths of Zeus still live!

DAVID GILMAN ROMANO is Director of Greek Archaeological Projects in the Mediterranean Section of the Penn Museum and Adjunct Professor of Classical Studies at the University of Pennsylvania. He has been involved in archaeological work in Greece for 35 years and is a specialist in the Ancient Olympic Games, Greek and Roman cities and sanctuaries, ancient surveying, and modern cartographic and survey techniques to reveal and study ancient sites. He has directed the Corinth Computer Project since 1988, and he is the Director of the Archaeological Mapping Lab in the Mediterranean Section. Romano is the Field Director and Co-Director of the Mt. Lykaion Excavation and Survey Project.

MARY E. VOYATZIS is currently Professor of Archaeology in the School of Anthropology at the University of Arizona. She also served as the Head of the Department of Classics for eight years. She has been doing archaeological field work in Greece since 1980 and specializes in ancient Greek sanctuaries, with a focus on the region of Arcadia. From 1990 to 1996 she was a Principal Investigator in the Norwegian excavations at the Sanctuary of Athena Alea at Tegea. She is the Co-Director of the Mt. Lykaion Excavation and Survey Project.

#### Acknowledgments

One of the most exciting aspects of the project has been the friendly collaboration that we enjoy between the  $\Lambda\Theta'$ Ephoreia of Prehistoric and Classical Antiquities, Tripolis, representing the Greek Archaeological Service, and our team from the United States—from the Penn Museum, the University of Arizona, and the American School of Classical Studies at Athens, under whose auspices we work. The project has been conducted under the direction of the  $\Lambda\Theta'$ Ephoreia. Our Ephoreia colleagues Michalis Petropoulos, Anna Karapanagiotou, Anastasia Panagiotopoulou, and

## OUR SUPPORTERS

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Nicholas and Athena Karabots and The Karabots Foundation in honor of Constance Chrisomalis Karabots from Anavriti, Sparta (which overlooks Mt. Lykaion) and Georgios Karambotsios of Malandreni, Argos. The Karabots Foundation has provided important Leadership Gifts to the Mt. Lykaion Excavation and Survey Project since 2004 and now has pledged to support the future Museum in Megalopolis, the proposed Parrhasian Heritage Park, as well as the ongoing Mt. Lykaion Excavation and Survey Project.

Annette Merle-Smith has been supporting the Mt. Lykaion Project since 1996 when she gave important financial support to the cartographic survey of the site. She has been a loyal supporter since that time and has made multiple dedicated gifts towards the long-term success of the project. She was instrumental in planning the highly successful Museum Women's Committee tour to Greece, "Circumnavigation of the Peloponnesos," a joint Penn–University of Arizona trip which took place in Spring 2008, and which came to Ano Karyes and Mt. Lykaion.



Luncheon in honor of Athena and Nicholas Karabots, Ano Karyes, August 1, 2006. From left to right: Athena Karabots, Nicholas Karabots, Mary Voyatzis, Nikos Kostopoulos (former President of the Cultural Society), David Gilman Romano.



Circumnavigation of the Peloponnesos Tour at Mt. Lykaion, May 5, 2008. Annette Merle-Smith standing third from left. The mountains of Arcadia are in the background.

others, have been extremely collegial and cordial, and as a synergasia we work well together as a team. We are also greatly indebted to the Cultural Society of Ano Karyes and to its President, Christos Koumoundouros, for friendly, collegial, and important collaboration at all levels. We would also like to thank Professor Yannis Pikoulas of the University of Thessaly for his important early support of our project as well as his collaboration on the ongoing historical aspect of our research. Our international and interdisciplinary team each summer numbers between 45 and 60, and we thank all of our students, staff, and colleagues for their dedicated work. The Project website is lykaionexcavation.org.

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