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**Below** Map of Peloponnese showing the location of Mt. Lykaion.



**Above** View across the lower sanctuary on the mountain meadow of Mt. Lykaion.

# Cult digs

## The Sanctuary of Zeus on Mt. Lykaion

The mountain-top ash altar of Zeus, and its associated sanctuary, was one of the most famous cult sites in the ancient Greek world. Every four years, the elite, the sporting stars, and the faithful, would gather in celebration of Zeus, father of the Olympian deities, and god of bad weather. But what remains of this important site? **David Gilman Romano** reports.

**Below** Bases for the columns of Zeus in the temenos, or sacred area, of the sanctuary near the altar, looking south.







**Left** Front and reverse shot of the miniature bronze eagle, found by the Greek team over a century ago, in the temenos at Mt. Lykaion.

**H**igh on the southern peak of Mt. Lykaion in Arcadia, at 1382m above sea level (c.4,500 feet), lies the open-air ash altar of Zeus. The sanctuary was (and still is) in a remote area of Greece where the ancient Peloponnesian regions of Arcadia, Messenia and Elis met. During the Archaic and Classical periods, and possibly for centuries previously, dignitaries, athletes and religious pilgrims made the trip to this remote location every four years. They went as a part of a religious celebration of the Pan-Arcadian and Pan-Hellenic festival that included dedications, sacrifices and athletic contests in honour of the mighty Zeus.

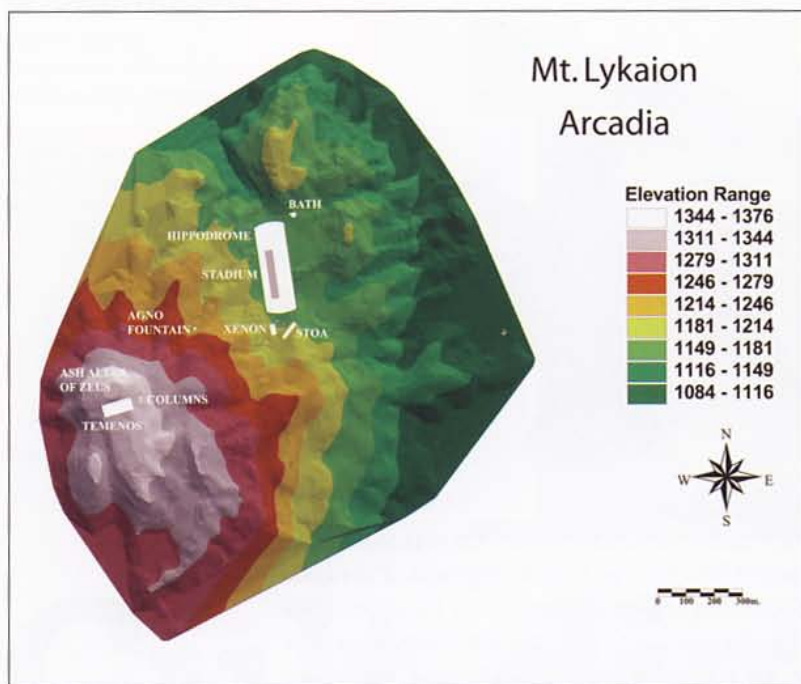
The mountain was a fitting location for the sanctuary. First, this mountain was said to be one of the two (yes, two) birthplaces of the god. Second, it was in a magnificent location, suitable for the god of rain, thunder, lightning and other natural phenomena. Indeed, when the 2nd century AD Roman traveller, Pausanias, visited the site, he commented on its stunning position: *On the highest peak of the mountain is a mound of earth, which is an altar of Lykaion Zeus, from which you can see most of the Peloponnese.*

Pausanias also described the layout of the site, recounting its high altar surrounded by a holy area, or *temenos*, and some of the rituals performed therein. He writes: *In front of the altar there are two columns towards the rising sun; the gilded eagles on them are even older than the* ➞



**Left** The Sanctuary of Zeus, looking south. On the southern peak of the mountain is the ash Altar of Zeus. Further down the slope is the Agno Fountain; while on the lower mountain meadow is the Xenon, (hotel), Stoa (colonnaded building), Hippodrome and baths.





**Left** Digital terrain model of the Sanctuary of Zeus.

the team found a miniature bronze eagle and several miniature bronze figurines of Zeus at the base of the northernmost column. According to Pausanias, the *temenos* at Mt. Lykaion was highly sanctioned, as he warns: *There is a precinct of Lykaion Zeus on the mountain, where no man is allowed to enter. If you disregard this law and go in, it is absolutely certain that you will die within the year.*

Thankfully, Kourouniotes did not die within the year, which meant that he and his team could move 200m down hill from the altar, into the mountain meadow, where they then explored the rest of the site. This meadow was the location of the famed Pan-Hellenic and Pan-Arcadian athletic contests held in honour of Lykaion Zeus. Within the meadow is a Greek hippodrome, bordered by a series of buildings and structures, including a bath facility at the northern end. At the southern end is a 67m long *stoa* or colonnaded building, a 39m long series of seats or steps, an area of statue bases, and a

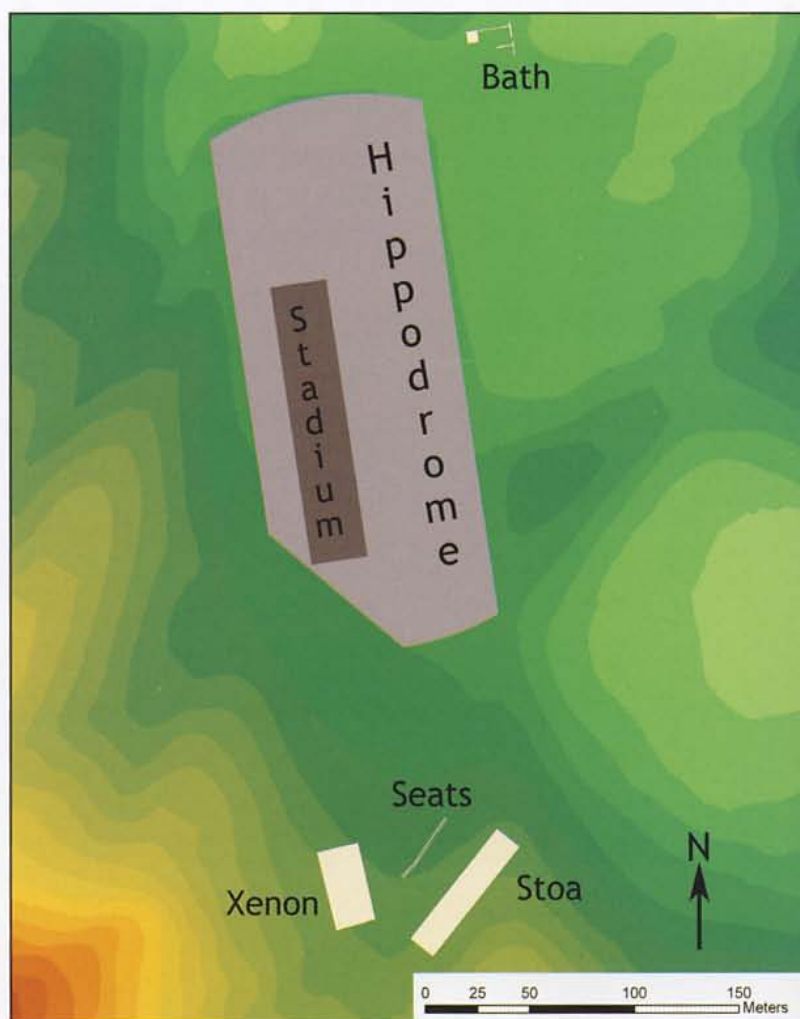
columns. At this altar they offer a secret sacrifice to Lykaion Zeus. I could see no pleasure in pursuing inquiries about this sacrifice; let it be as it is and was from the beginning. Incidentally, the sacrifice that the squeamish Pausanias does not want to describe was a human sacrifice, hinted at by other authors, including Plato and Theophrastus. Our helpful traveller also explains how the site stretches down onto the lower mountain, the location of a Greek hippodrome and several other buildings and structures.

### The archaeologists arrive

Hastened by such tales, the archaeologists arrived at the site in the late 19th and early 20th centuries. The work was led by members of the Archaeological Society of Athens, K. Kontopoulos and later K. Kourouniotes. They worked on the ash altar site and in its neighbouring *temenos*, or sacred area, and in the lower mountain meadow, the location of the ancient Greek stadium, hippodrome, and various other buildings and structures.

At the site of the altar, K. Kourouniotes found several bronze miniature tripods, the earliest of which dated to about 700 BC, as well as bronze and silver coins of the 5th century BC and fragments of metal, iron and bronze. Ash and bone fragments were found together with small and large stones in the altar. In the area of the sacred *temenos*, 15m down from the altar itself, the archaeologists also found two large stone bases. These probably held the columns on top of which, as Pausanias describes (above), were the golden eagles of Zeus. Interestingly,

**Below** Plan of the lower mountain meadow including the hippodrome, stoa, xenon, bath and seats.







**Above left** Pam Jordan, director of the architectural documentation team, drawing at the xenon.

**Above right** Pam gives a talk to the team on the architectural documentation project at the site.

**Below** George Davis, director of the geological survey, at work in the field. In this shot he is exploring a remarkable natural geological distortion of the rocks.

large building that Kourouniotes interpreted as a *xenon* or hotel.

Within this building, Kourouniotes found two stone victor inscriptions from the 4th century BC, which record the names of the winning athletes, their home towns and the events in which they won the contests. The inscriptions indicate that the events included equestrian and human athletic contests in honour of Zeus. They also indicate that the athletes competing in these Arcadian games came not only from Arcadia, Laconia and the Argolid, but also from all over the Greek world. For instance, in 304 to 303 BC there were a number of local victors from Arcadia and the Peloponnesos but the men's *diaulos* winner was Philokrates from Syracuse, while the winner in the two horse chariot race was Nikagoras from Rhodes.

This Greek hippodrome is the only facility of its kind in the entire Greek world that can be visualised and measured in the modern day. With a length of approximately 300m and a width of approximately 100m, it is a huge area and, since 1973, part of the area of the hippodrome has even been used for hosting the modern Lykaion games.

Of further note has been Kourouniotes' discovery of a fountain house and spring, halfway down the slope of the mountain between the altar and the mountain meadow. This is the Agno Spring that Pausanias compares to the flowing of the Danube River, explaining it is of equal volume in winter and spring. Kourouniotes' work was completed approximately 100 years ago.

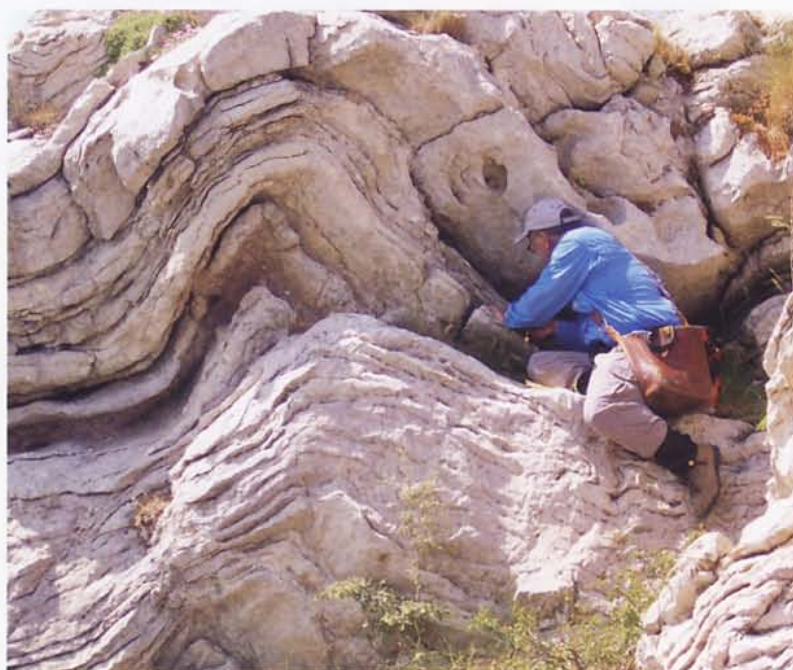
## New work on Mt. Lykaion

In the 21st century, The Mt. Lykaion Excavation and Survey Project, has begun a new and cutting-edge phase of work on Zeus' mountain. Since 2004, our large and collaborative team (please see acknowledgements) has been hard at

work. Our aim is to bring all the latest scientific techniques to the site to gain a full and complete picture of the ancient site and its environs. So, while I am the Field Director of the project and one of the Co-Directors, we have many groups at work simultaneously.

Thus, our topographical team has been locating and drawing all the above-ground architectural features at the sanctuary by means of an electronic total station, and have already surveyed more than 5,000 stone building-blocks. They are working with the architectural documentation team, including 14 architecture students, hand-measuring all of the walls, foundations, and individual blocks (over 3,000 to date!), so that together they can create the first actual-state drawing of the entire sanctuary, both in elevation and in plan view. Ultimately, we want this to lead to an accurate computerised reconstruction of the structures.

While the surveyors and architects have





**Below** The games are being revived, and here we see a shot of the running track: part of the celebrations of the ninth Modern Lykaion Games, August 2005.



**Above** A tiny bronze statue of Zeus discovered by the Greek team around a century ago.

One can almost imagine the altar shaking in antiquity, under the apparent wrath of Zeus!

been focussing on above ground structures, the geophysical team has turned its attention below ground. Because the sanctuary is so large, their aim is to use geophysical techniques to identify possible undiscovered buildings and monuments that could be excavated in the future - as well as places devoid of archaeology and thus best avoided.

Dovetailing with the geophysicists, the geological survey of the area of Mt. Lykaion is endeavouring to describe the structural geology of the region and how it relates to the archaeological monuments and structures. Among various interesting discoveries to date, is an ancient fault that borders, on three sides, the altar of Zeus. One can almost imagine the altar shaking in antiquity, under the apparent wrath of Zeus!

Then there is the historical survey of the general area of Mt. Lykaion, where that team has been locating the roads leading to and from the Sanctuary of Zeus and pin-pointing nearby ancient towns and settlements. They are also investigating the nature of the border region that Mt. Lykaion occupies, close to the region where ancient Arcadia, Elis and

Messenia meet.

But what about the dirt excavations? This has been one of the areas of my responsibility: we have been focussing on the area of the hippodrome, plus several of the other buildings and structures surrounding it, as well as on the altar and the *temenos* on the southern peak of the mountain. These trenches have all been exploratory in nature, in order to learn about the stratigraphy of various parts of the site.

## The new excavations

We began digging in 2006, in the southern area of the hippodrome. We sank three trenches into the hippodrome's floor to investigate its southern and eastern limits, and to go in search of the starting assembly for the horse races. Sadly, all three of the trenches had more than 1.5m of modern fill, which had been brought to the site in order to allow the staging of the modern games at the hippodrome. These *Modern Lykaion Games* are a wonderful occasion and have been held every four years since 1973. The tiny village of Ano Karyes, together with other nearby Arcadian villages and towns, stage a recreation of the ancient Lykaion festival, which includes modern theatrical performances, singing, dancing, lectures, films and athletics. Splendid though these games are, they have meant we



retrieved no archaeological data from the floor area - aside from some dating evidence for the use of the Hippodrome - so we moved elsewhere. Finally, we struck lucky.

We dug a number of trenches during the 2007 campaign, including in the area of the seats, the *xenon*, the *stoa*, as well as in the *temenos* and altar. The altar trench was perhaps the most intriguing. We found it to be packed with rocks, large and small. Some of the rocks showed the effects of prolonged burning and were fire cracked, others less so. There was no stratigraphy to speak of, especially due to the size and quantity of the rocks in the trench. Certain areas were filled with ash that became more compacted and dense with increasing depth. It also contained considerable amounts of pottery and bone together with examples of bronzes, iron, lead and bronze and silver coins. However, some of its most surprising finds were Early and Middle Helladic pottery as well as a Late Minoan II lentoid crystal seal of a front facing bull, suggesting early activity at the site of the altar. Digging this unparalleled site has been a rewarding experience for all concerned.



### Tribute to Zeus

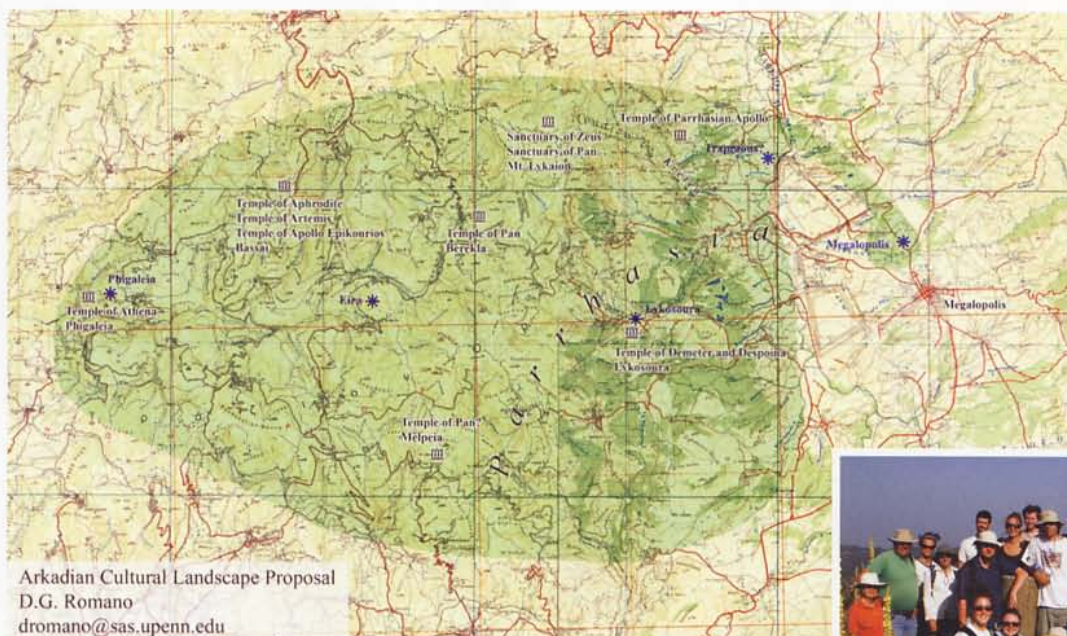
What of our future plans? The Mt. Lykaion Excavation and Survey Project is proposing the creation of a national archaeological park to unify and protect a large number of ancient cities and sanctuaries in the region of ancient Parrhasia in Arcadia. This area, approximately 300km<sup>2</sup>, would include a raft of ancient cities and sanctuaries: in addition to our Sanctuary of Zeus, this will include the Temple of Apollo at Bassai and

**Above** Art Rohn, Emeritus Professor of Anthropology from Wichita State University, talking to students and staff about the area under his direction: the altar trench at the southern peak of Mt. Lykaion. The site is so large, it takes 20 minutes to drive from one end of the excavation to the other, so experienced excavators and staff take specific charge of different aspects.

**Below** View of the local village of Ano Karyes looking northwest.







Left Map of the proposed archaeological park.

Below Team members from the summer 2007 season, at the Altar of Zeus.



the two smaller temples on Mt. Kotilion, Artemis and Aphrodite; the Temple of Athena at Phigaleia; the Temple of Despoina at Lykosura; the Temple of Parrhasian Apollo at Kretea; the Temple of Pan at Berekla; and the Temple of Pan at Melpia! The park will also enclose the ancient cities of Megalopolis, Trapezous, Eira, Phigaleia and Lykosura. Our intention is to improve and create modern roads to link the ancient sites and sanctuaries. More information is on our website [www.lykaion-excavation.org](http://www.lykaion-excavation.org) - and, in the future, we look forward to welcoming you at the site, too.

Zeus would approve! 🌿

## Source:

David Gilman Romano is the Co-Director and Field Director of the excavation and survey project at Mt. Lykaion. He has worked as an archaeologist in Greece for over 30 years. He has a doctorate in Classical Archaeology from the University of Pennsylvania. He is Senior Research Scientist in the Museum's Mediterranean Section and Adjunct Professor of Classical Studies at the University of Pennsylvania. Dr Romano 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 written numerous articles on these subjects, and has authored three books, including the prize-winning *Athletics and Mathematics in Archaic Corinth: The Origins of the Ancient Greek Stadion*.

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We would also like to thank the people of Ano Karyes, whose winter population is only 23 individuals, but who have supported our project in every way imaginable. In particular, we would like to express our appreciation for the efforts of the Patriotic Syllogos of Ano Karyes, and their current president Christos Koumoundouros, who have been so proactive on our behalf.