The Plakari Archaeological Project
Preliminary report on the sixth field season (2015)

JAN PAUL CRIELAARD,¹,² XENIA CHARALAMBIDOU,³ MARIA CHIDIROGLOU,⁴ MAAIKE GROOT,⁵ SJÖRDB KLUIVING,² FILIZ SONGU⁶ & SIMON TROELSTRA⁷

Abstract

The final fieldwork campaign in 2015 at Karystos-Plakari (southern Euboia) we devoted to completing the previous year’s excavations of the terrace on the northeast side of the hill top and the Final Neolithic remains that had come to light there. Furthermore, we resumed the excavations on Terrace 1 on the west side of the hill top where during previous campaigns we identified a large open space, flanked to its north by a multi-room building complex. The open space could accommodate relatively large groups of people, probably attending rituals that took place on the slightly more elevated Terrace 2. In the northwest of this excavation area, a monumental entrance building was uncovered that during the late 5th and 4th centuries BC provided the main access to the sanctuary.

In the Rigias estuary east of Plakari the programme of geoarchaeological research was continued. One of the foci was to obtain more organic material for further analysis from a peat layer that was located in 2014 at a depth of 4 metres below sea level. Radiocarbon dating of the 2014 material indicates that it was formed between cal BCE 4610 to 4460 and 4040 to 3960 around the paleo-groundwater table. Pollen analysis of the same material shows that this peat layer contains the first Cerealia type pollen as well as Vitis, which can be related to FN farmers settling in the area. A decline in oak pollen values in the top of the peat layer could be an indication that cereal cultivation was accompanied by progressive deforestation.

Keywords

Karystos-Plakari – Early Iron Age to Classical sanctuary – Final Neolithic settlement – palaeoenvironmental and zooarchaeological research – arrival of earliest farmers

¹ Correspondence to: Prof. J.P. Crielaard. Email: j.p.crielaard@vu.nl.
² Faculty of Humanities/CLUE+, Vrije Universiteit Amsterdam.
³ Fitch Laboratory, British School at Athens.
⁴ National Archaeological Museum, Athens.
⁵ Vrije Universiteit Amsterdam / Universität Basel.
⁶ Allard Pierson Museum, Amsterdam.
⁷ Faculty of Earth and Life Sciences, Vrije Universiteit Amsterdam.

Pharos 23(2), 67-90. doi: 10.2143/PHA.23.2.3287559
© 2017 by Pharos. All rights reserved.
Introduction

The Plakari Archaeological Project is a collaboration between Vrije Universiteit Amsterdam (VU), represented in Greece by the Netherlands Institute at Athens, and the 11th Ephorate of Prehistoric and Classical Antiquities (IA’ EPKA, Euboia; now EFA). The project was directed in the field by Prof. Jan Paul Crielaard (VU) and Mrs Maria Kosma (archaeologist of IA’ EPKA), until her sudden and untimely death in July 2015 (see ‘In Memoriam’ below). Dr Kostas Boukaras took over part of her duties as EFA archaeologist for southern Euboia.

Plakari is a low hill (85 m a.s.l.) located on the coast about 2.5 km west of modern-day Karystos. The site was first occupied during the Final Neolithic (ca. 4300-3300 BC). A second habitation phase commences in the Early Iron Age (11th or 10th c. BC) when a cult place was established on a terrace immediately to the west of the summit (Figure 1: TW2). The accompanying Early Iron Age (EIA) to Archaic settlement was situated on the slopes to the south and north, and probably on the adjacent hill to the west.8 Plakari was most likely the location of Early Iron Age and Archaic Karystos until the late 6th century BC, when the inland site of Palaiochora gained in importance and became the civic centre during the Hellenistic and Roman period.9 Ca. 325 BC the sanctuary became deserted, probably due to a disastrous event.

The Plakari Archaeological Project is multidisciplinary in scope, combining systematic excavations with geo-archaeological landscape research, palaeoecology, archaeobotany, zooarchaeology10 and the study of marine faunal remains. The project has two main aims: to understand the nature of the human occupation of the Plakari hill top and its direct environs, and to investigate how in various periods Plakari functioned within its wider geographical setting.11 From 2011 to 2013, the focus lay on the EIA to late Classical occupation of the site with its sanctuary and associated cult, and the sanctuary’s position and functioning within local, regional and inter-regional contexts. In 2014 and 2015, we excavated intact Final Neolithic (FN) layers on a terrace on the north-eastern flank of the hill top.12

---

8 Chidiroglou 2003-2004; Crielaard et al. 2011-2012, 94, 100, with further refs.
10 Groot 2014.
11 For the Plakari Archaeological Project’s aims and methods, and results of the 2010 topographical survey, see Crielaard et al. 2011-2012, esp. 95-100.
In memoriam Maria Kosma

During our 2015 field season we received the sad news that our colleague Maria Kosma had passed away. Maria had worked since 2006 for the 11th Ephorate of Prehistoric and Classical Antiquities as archaeologist responsible for southern Euboia. Maria had been involved in the Plakari Archaeological Project from the beginning, first as representative of the 11th Ephorate, and from 2012 as co-director of the Plakari excavations. An important milestone in the protection of the site of Plakari was the decision to set aside the hilltop as a communal area assigned to the community of Karystos. This decision was effectuated in 2011 thanks to the perseverance of Maria. From this point in time the area was secured from further building development and became available for archaeological research.

One of Maria’s achievements during her work in Euboia was her excavation of an Early Helladic cemetery at Nea Styra that is generally recognised as a discovery of great cultural and scientific significance. In May 2015, she felt fit enough to give a lecture at the Archaeological Society of Athens on the Cycladic figurines in the context of her Nea Styra excavations. However, in July her health rapidly deteriorated and she was hospitalised. She died of cancer on 23 July at the age of 45. With her passing, we have lost a good friend, a fine colleague and a dedicated archaeologist.

The 2015 excavations

The present preliminary report concerns the sixth field season, which lasted from 8 July to 8 August 2015. Fieldwork activities were concentrated in four trenches (Figure 1: green areas), namely Trench 13, which was located on the north-northwestern part of Terrace 1 on the west slope of the hill, and Trenches 10-12, which were laid out on a small terrace on the north-eastern slope of the Plakari hill top.13

---

13 Jan Paul Crielaard was project coordinator and field director. The trench supervisors were Iris de Fuijk (Trench 10), Merel van der Wees (Trenches 11-12) and Dorinde Bergmans (Trench 13). Stefan Kooi and Ruben Brugge acted as assistant site supervisors and were responsible for the 3D photogrammetry and low altitude aerial photography using a drone. Jaap Fokkema oversaw the survey work and the mapping and drawing of the architectural remains. Environmental archaeological research was carried out by Dr Sjoerd Kluiving (geo-archaeology) and Dr Maaike Groot (zooarchaeology). The work in the museum was undertaken by Filiz Songu (coordination, data recording, study of ceramics and small finds), Dr Xenia Charalambidou (EIA ceramics), and Dr Maria Chidirogloou (Classical pottery). Bert Brouwenstijn was responsible for drawing and photographing the archaeological finds. A team of students from Vrije Universiteit Amsterdam (13) and the University of Thessaly, Volos (1) assisted in the field and the museum. Tamar Davidowitz (MA PDRes) supervised the conservation and restoration of metal and terracotta objects carried out by a team of three postgraduate trainee students of the Conservation and Restoration Department of the University of Amsterdam.
These three trenches are situated in a relatively flat area on the northern flank of the hill top, where in some places the natural rock comes to the surface (Figure 2). The area is delineated to the south by the steep northern face of the summit and to the north by the A1 road. The scarp of this road already indicated the possible presence of ancient wall remains in combination with a thick stratum preserved over several metres containing prehistoric pottery, flint and obsidian. In 2014, we started working in Trenches 11 and 12, where we brought to light flimsy remains of an FN domestic structure sitting on a terrace retained by a large wall that was visible in the scarp. In a later period, probably during the EIA, a substantial wall was constructed on top of this FN terrace, a situation that is reminiscent of that on the south side of the Plakari hill top.\textsuperscript{14}

This year we continued our excavations in Trenches 11 and 12. Our main aims were to obtain more information about the above structures, the stratigraphy (in particular the strata visible in the road scarp\textsuperscript{15}) and the various chronological

\textsuperscript{14} Crielaard et al. 2016, 31.

\textsuperscript{15} Crielaard et al. 2016, 28, Fig. 11.
phases represented by the structures on this terrace. As for the southern parts of Trenches 11 and 12, we intended to excavate the layers down to bedrock in order to find out more about the small structures set in the bedrock cavities and the activity areas possibly related to these structures. At the same time we wished to enlarge our sample of ceramics and lithics in order to gain insight into Plakari’s material culture during this first phase of human occupation in the region.

In the northern part of Tr. 12 (Figure 3), we started by removing a part of the 2014 baulk covering the prehistoric terrace wall (un. 267). Overlying this wall was a thick layer of stones (un. 264), probably part of a tumble related to the EIA wall (un. 253/262), and several wash layers. On the basis of information from the north scarp, we had hypothesised that the prehistoric terrace wall (un. 267), in fact, consisted of two superimposed walls, separated by a thick wash layer containing archaeological material. When we excavated the area between the prehistoric terrace wall and the EIA wall, it became clear that this was incorrect. The wash layers (dubbed un. 372 and 381; Figure 4) yielded large quantities of pottery and lithics; the pottery fragments are not very worn and hence do not seem to have been transported over a long distance. Underneath these wash

Figure 3. Plan of Trenches 11 and 12.

Figure 4. Trench 12 with un. 382, from southwest; the prehistoric terrace wall (un. 267) is to north of un. 382, the EIA wall (un. 253/262) to its south.
layers we came upon a compact layer of stones (un. 382), at the same level as the presumed second ‘terrace wall’ visible in the scarp. However, these stones appeared to be part of a layer of debris rather than a wall construction. Below this we encountered a stratum containing sherds (un. 383) lying on the bedrock in a horizontal position. In short, instead of a wall, un. 382 and un. 383 seem to represent an earlier occupation phase, prior to the phase when the prehistoric terrace wall (un. 267) was constructed. In between these two phases there must have been a period of abandonment, represented by the thick wash layer containing lithics and pottery. Future analysis of the ceramics may indicate whether there are differences between the pottery assemblages from these phases due to chronological variation. The possible domestic structure (un. 369) and associated features (un. 368: surface; un. 384: possible hearth; large pot, lying upside down) were found on top of the bedrock, which could indicate that they belong to the earliest occupation phase.

Further excavations in the north-western part of Tr. 11 and the northern part of Tr. 11 (Figure 5) yielded much material but were otherwise not very informative. The area showed clear signs of erosion and other kinds of disturbances. Most of the area south of the strip of protruding bedrock in Trenches 11 and 12 was excavated down to bedrock. The findings confirmed our earlier interpretations of this area. In one of the cavities more darkish material (un. 278) was found, which again yielded small fragments of burned bone, but hardly any other material.

By laying out Trench 10 we expanded the excavation area in a north-westerly direction with the aim of verifying whether remains of FN habitation or other activities continued into this area. More in particular we hoped to expose a larger section of the possible domestic structure found in Tr. 11 or other structures or activity areas in the vicinity. The focus of our investigations was on the eastern half of Tr. 10, and during the last week of the campaign a 2 × 2 m test trench was dug against the trench’s west border (see Figure 1: Tt) in order to find out if this particular part of the trench contained archaeological remains.

The excavations in the eastern part of Tr. 10 (Figure 6) produced an abundance of FN material, but unfortunately no architectural features or intact cultural layers. Tr. 10 did, however, provide important clues for the understanding of site and soil formation processes and post-depositional processes. Most of the strata that could be distinguished appeared to be wash layers or to consist of material formed by natural processes. Most of the latter were composed of disintegrated bedrock alternated with layers of loamy material. This also relates to a narrow loamy area (un. 283; Figure 6: southeast corner of trench) that was identified in 2014 in Tr. 11

Crielaard et al. 2016, 29.
Figure 5. View of Trench 11, from southwest.

Figure 6. View of Trench 10, from south.
as a foundation trench belonging to the FN domestic structure. This year a continution of this material was found in Tr. 10 where it could be identified as erosive material.

A stony area located in the north and centre of Tr. 10 (un. 281 and 286; Figure 6) may be considered to consist of building debris that had washed down the hill slope. In between these stones, we found large quantities of FN pottery fragments, including diagnostic sherds belonging to incised ware, burnished ware and cheese pots, as well as pieces of obsidian and stones and pebbles that seem to have been used as tools (Figure 7).

The test trench in the far west of Tr. 10 yielded several wash layers, almost without exception rich in archaeological finds, mostly ceramics dating to the Classical period and possibly the Early Iron Age, while some sherds and lithics can be attributed to the prehistoric period. Underneath these layers were large stones (Figures 8-9), probably part of a large wall (un. 293). Their size and shape bring to mind the blocks used for the EIA wall (un. 253) in Tr. 12. The abundant prehistoric pottery and obsidian found in Tr. 10 confirms that this part of the hill top was inhabited, although it remains unknown where these occupation or activity areas were located. It is highly likely that these were to be found on the hill top or on the slope beneath the top. These finds have considerably enlarged the
Figure 8. Test trench in West part of Trench 10, from southwest, showing part of large wall (un. 293).

Figure 9. Plan of Test trench in west part of Trench 10.
The Plakari Archaeological Project

FN dataset for Plakari, which awaits further analysis in the 2016 and 2017 study seasons. Dr Tracey Cullen and Dr Laurie Talalay have agreed to study and publish the FN pottery from Trenches 10-12 (Figure 10), and Eleni Chriazomenou Christina Papoulia the stone tools and obsidian and flint.

Trench 13

Trench 13 is situated immediately south of Trench 3a and west of Trench 3b where in 2011 part of Late Classical building complex (Building B) came to light, and directly north of Trench 6 where in 2014 a large levelled area as well as the corners of two structures were excavated (in the northern half of the trench, which is TR. 6N). Our aims for this year were to test our hypothesis that these two corners of walls

---

Figure 10. Final Neolithic pottery from Trenches 10-12.

---

18 Crielaard et al. 2013, 48-49.
protruding from the Trench 6 east and north baulks belong to an entrance or gateway building, to establish how these walls are related to the Late Classical Building B in Trench 3, to determine how all this relates to the general layout of the sanctuary area and to determine the chronological development of this part of the site.

Already during the first two weeks of the campaign it became clear that the walls found in 2014 in Tr. 6 are actually the corners of two walls, each approximately 1.5 m wide (Figure 11). The south wall (un. 418) has a northwest-southeast orientation and makes a right angle with Terrace Wall 1 (un. 419), to which it is connected (the point where they connect is hidden under the later wall un. 424/427 (Figure 12), which also partly overlies Terrace Wall 1). The east wall (un. 416) is part of a tripartite wall that covers the eastern and northern parts of the trench. It makes a right angle in relation to north wall un. 417, which runs northwest-southeast (Figure 13). To the west it curves towards wall un. 428 (Figure 14), which lies in line with Terrace Wall 1 (un. 419). The open area between these walls and just outside them is covered with large blocks, which will be discussed below. This opening between

Figure 11. Stone plan of monumental entrance building in Trench 13; wall un. 424/427 is of later date.
Figure 12. Detail of Trench 13, from southeast: entrance with walls un. 418 and un. 417/428, and later wall un. 424/427 blocking the entrance.

Figure 13. Trench 13 with walls un. 416 and un. 417 under excavation, from northwest.
Figure 14. Trench 13: wall un. 417/428 from south.

Figure 15. Trench 13: ramp (un 424/430), from north.
Terrace Wall 1 and wall un. 428 is about 3.5 m wide and forms the entrance to Terrace 1 and the (larger) temenos that defines part of the sanctuary (see Figure 1). The very substantial walls appear to form a monumental entrance building, thus confirming our earlier hypothesis. A number of large blocks due west of the opening can be interpreted as the foundations of a ramp (Figure 15). Like almost everywhere at Plakari, no tile fragments were found in our excavation of this area; the monumental size of the entrance, however, makes it unlikely that this entrance building would not have been roofed.

A second aim for this campaign was to find out how the corners of the walls in Tr. 6N were connected to Building B. In order to do so, we first had to address the relationship between wall un. 167 in Tr. 3 and the north wall (un. 417) in Tr. 13. As mentioned, un. 167 and un. 151 are considered to be one and the same wall. Un. 151 forms the south wall of Building B, whereas the function of un. 167 is unclear. The two were thought to connect in the area of Tr. 13, but it turned out that the two wall segments are not actually segments of one wall, but of two walls. Un. 151 in Tr. 3A was named the north wall in Tr. 13 and is some 1.5 m in width, much wider than was expected in 2011, to which it may be added that in 2011 the wall’s south face was never exposed. Un. 167 in Tr. 3B is built against the north wall un. 417 (and east wall un. 16) and is a mere 0.80 metres wide (see Figures 16-17).

The above shows that the continuation of one of Tr. 6N’s walls forms the south wall of Building B. However, it likely predates the building, as the east wall of Building B was built against the north wall (un. 417). The latter was first and foremost constructed as part of the entrance building. In addition to this, the partial wall, the continuation of the north wall, has a double function too and is likely to be the west wall of Building B. Proof for this is the great amount of pottery collected from (misnamed) wash layer un. 429, which was found in the area delineated by the east face of wall un. 428, the north face of north wall un. 417 and the east baulk of the northwest extension of Tr. 13. Many amphora fragments were found here lying in a horizontal position. The pottery shows clear similarities with the pottery recovered from Building B, making un. 429 the likely continuation of the building’s floor surface. In 2011, almost 5,500 amphora fragments, probably attributable to the second half of the 4th century BC, were found in the two rooms of Building B, suggesting that it had a storage function, possibly for wine used in cult practices in the sanctuary.

A third aim was to find out how the findings from Tr. 13 are related to the rest of the sanctuary. The entrance building is preliminarily dated to the Classical period, based on sherds that were found within the north wall (un. 102), suggesting

Crielaard et al. 2016, 19.
Figure 16. Trench 13: orthophoto of monumental entrance building.

Figure 17. Trench 13: stone plan of monumental entrance building.
that it was contemporary with Building A on Terrace 2. The size of the walls and the bend in the passageway blocking the view from the outside all worked to highlight the importance of defining the sacred area. Visitors to the sanctuary would ascend to the terrace via the ramp. They would be directed to the entrance via the curved side of the north wall (un. 428). Walking through this entrance must have been an experience, going from light to dark and light again (assuming that the entrance building was roofed), and during this passage an individual probably became mindful that he or she was leaving the profane and entering the sacred. The entrance gave way to an open space. There is no clear entrance leading to Terrace 2, but perhaps most visitors were not supposed to go there, and instead assembled on Terrace 1 to attended the rituals that were performed on the slightly elevated Terrace 2.

Our last aim was to determine the different phases in this area of Plakari. Note that the phasing of this part of Plakari is only possible in conjunction with the findings from Tr. 3 and Tr. 6. The first phase that can be determined is the leveling of the bedrock in the eastern area of Tr. 6N. This was probably accomplished during the late Archaic/early Classical period. Soon after, floor surface un. 469/un. 470 was created in this area. Contemporary with this floor are the east wall (un. 416), which was built on bedrock, and the south wall (un. 417). At the same time, the north wall (un. 417 with un. 428), Terrace Wall 1 and the possible ramp were constructed. This phase can probably be dated to the Classical period. The third phase is marked by the construction of Building B. At approximately the same time, the terrace was enlarged with the deposition of the fill, delineated by the south wall (un. 418) and Terrace Wall 1. North wall un. 465 in Tr. 6N was built on top of and against this fill. Wall un. 167 must also have been constructed at or around this time. Sometime later, the sanctuary fell into disuse and colluvial deposits covered the remains of the walls. After an unknown period, a wall (un. 424 and un. 427) was built, apparently to close off the entrance. Note that this wall was built using a different construction method: the upper layers of stones are placed on their short sides, very much like modern field walls.

Two questions remain. Now it has become clear that wall un. 167 is not the same as the north wall (un. 417), the function of the wall segment that came to light in Tr. 3b is not easy to establish. It continues further to the east, where a few stones can be seen protruding from the topsoil. The second question concerns the date of Terrace Wall 1. In Tr. 13 it is likely part of a Classical construction. During the 2011-2012 excavations, however, the part of Terrace Wall 1 situated directly south of Tr. 1 was dated to the EIA, as the open-air sacrificial refuge area in this part of the site was found to run up against the inner face of Terrace Wall 1.

Crielaard et al. 2016, 22.
We do not know where the entrance to the sanctuary during the EIA and Archaic periods was, but it seems that with the construction of the Classical entrance building either a break was made through the older Terrace wall or an existing entrance was enlarged (Figure 1).

One last discovery deserves to be mentioned in this report on Tr. 13. When the top-most layers in the southwest part of the trench were removed in order to expose the two sides of Terrace Wall 1 (un. 419) we found part of a mortar made of local cipollino marble (SF3; Figure 18). It lay directly on top of Terrace Wall 1, so unfortunately it did not have a well-datable archaeological context. What is interesting about this find is that it shows that cipollino marble was exploited well before the Roman period and was sometimes also used for making domestic items.

Geoarchaeological research in the Rigias estuary

In 2011, a programme of sedimentological and palaeoecological investigations was started in collaboration with Dr Sjoerd Kluiving, Dr Simon Troelstra and Dr Sjoerd Bohncke of the Faculty of Earth and Life Sciences of Vrije Universiteit Amsterdam. It encompasses intensive coring in the coastal areas west and east of Plakari in order to investigate the subsoil stratigraphy and take soil samples for micropalaeontological, palynological, lithological, grain-size and thermogravimetric analysis. The
research programme addresses the following questions: How did the landscape and vegetation in the area develop over a long-term period? What information can the microfauna (foraminifera, ostracods) provide about the marine or terrestrial environment? What can pollen tell us about the ecology and subsistence economy? And how can the observed changes in the ecology be related to the available geomorphological and geoarchaeological data?

The preliminary results show that over a long period of time, the coastal landscape to the east of Plakari was highly dynamic due to complex interactions between erosion activity, stream discharge, sea level fluctuations, sea incursions and tectonic movements. The Rigias river, which lies to the east of Plakari, discharged alluvial material and created marshy areas and lagoons in the western part of the coastal zone. On the basis of this information it can be assumed that in antiquity the coastline lay considerably further inland.

In 2014, a peat layer located 4 m below sea level proved to be a highly informative feature. Radiocarbon dating shows that it was formed between cal BCE 4610 to 4460 and 4040 to 3960 (95% probability) around the paleo-groundwater table. Pollen analysis carried out in the spring of 2015 at Vrije Universiteit Amsterdam’s laboratories shows that this peat layer contains the first Cerealia type pollen as well as *Vitis*, and also contains the highest *Quercus* (oak) values (40%). The top of the peat layer, however, shows a decline in oak pollen values. Evidently, wetland vegetation developed in the valley and cereals were cultivated, at the expense of the oak vegetation. Overlying layers contain *Chara* and ostracods, pointing to periodic freshwater pool conditions. The sequence is topped by fine-grained fluvial sediments in which cereal-type pollen was present. These fluvial sediments progressively became more energetic and coarser, which also means that the sedimentation rate increased. This change was most likely triggered by the increased human impact on the area (e.g. in the form of deforestation), attested from the level of the peat formation onwards, which caused more sediment supply to the river.

During the 2015 campaign Floris Philipsen — a Master’s student at the Faculty of Earth and Life Sciences of Vrije Universiteit Amsterdam, who was supervised in the field by Dr Sjoerd Kluiving and during his phase of data processing and writing up by Dr Simon Troelstra — carried out sedimentological and palaeo-ecological fieldwork in the Rigias estuary. A total of 17 cores were taken in different locations (see Figure 19). One of the foci was the peat layer in order to obtain more organic material for further analysis; in addition, the angle of inclination of the peat layer can provide information about (micro) tectonic movement within the Karystos basin. The results of the 2015 and previous campaigns will be

---

23 Lab. nos Beta-397474 and Beta-397473, respectively.
incorporated and synthesised in a chapter in the final publication on the Plakari Project by Simon Troelstra.

Study of EIA Pottery

The so-called open-air sacrificial refuse area — which was located directly south of the sanctuary proper on Terrace 2 and was excavated between 2011 and 2013 — produced ca. 32,000 pottery fragments, both fine and coarse wares, as well as over 400 small finds. The earliest metal finds (pins and fibulae) date to the 11th century BC, while the latest datable small finds put the lower limits of the chronological range of this deposit in the third quarter of the 6th century BC. The pottery finds peak during the Middle Geometric II and Late Geometric periods, suggesting that during the 8th century the Plakari sanctuary was the locus of cult that involved elaborate communal eating and drinking.

In 2015, Dr Xenia Charalambidou continued her research into the EIA pottery, combining macroscopic, typological examination and quantitative analysis. She examined and recorded different aspects of the Plakari pottery wares: fabric groups, manufacturing techniques, vessel shapes and types, and vessel surface decoration. She continued with the systematic inventory and compilation of her Early Iron Age pottery catalogue in preparation for the publication of this class of
material. She also quantified selected Early Iron Age pottery assemblages from Trench 1 units according to a significant number of variables, also in order to test the potential of such an approach for a larger number of pottery assemblages from the Plakari sanctuary.

Study, conservation and restoration of small finds

Filiz Songu continued the analysis, description and cataloguing of the small finds from various trenches. Paired with the analysis of this material was a programme

![Image of small finds]

Figure 20. Selection of restored bronze items from open-air sacrificial refuse area: a. elongated fibula with large catch plate (2012 Tr. 2c /67/ #119 SF107 MK1987); b. boat fibula with large catch plate (2012 Tr. 1b /1/ #47 SF218 MK2751); c. leaf fibula (2012 Tr. 1b /1/ #662 SF383 MK2915); d. bronze bead (2012 Tr. 2a /1/3/ #313 SF253 MK 2639).
of conservation of especially bronze and iron finds, which is a necessary initial step towards studying and publishing the find material; besides, the conditions in the Karystos Museum storerooms are far from ideal, which requires prompt and prolonged action. During its three-week stay, the team of metal conservators under the supervision of Tamar Davidowitz managed to stabilise, clean and restore 105 metal objects. Of these, 34 items date to the EIA; the remainder date to the Archaic and Classical periods. They include rings, fibulae, knives, pins, diadems and other objects of sheet bronze, an iron obelos and a weighing beam (for a selection of conserved items, see Figure 20).

The restoration team also checked the condition of previously restored objects. Some of them were repacked with added silica gel. The team produced a detailed report documenting the treatment of the objects before, during and after treatment, and describing the methods used. The report also contains a list of objects that have priority for future treatment and a protocol for the storage, packing and handling of both treated and untreated objects.

Zooarchaeological research

The open-air sacrificial refuse area has yielded not only votive offerings and specific types of pottery used for (cultic) eating and drinking, but also large quantities of animal bones. The faunal remains, which are studied by Dr Maaike Groot, provide important information not only about cult practices and the nature of the cult, but also about animal husbandry and the rural economy of Early Iron Age Karystos.

Some of the research questions for the zooarchaeological analyses of the Plakari assemblage are:

- Was there a selection of particular animal species for cult activities?
- What information do the animal bones provide about sacrifice and ritualised consumption?
- How do the species spectrum, mortality profiles, butchery, frequency of burning, etc. of the Plakari assemblage compare to those of other contemporary settlement sites and sanctuaries?
- Is it possible to reconstruct the role of animals in cult activities at the Plakari sanctuary?

Faunal remains from the first two seasons of excavation were studied by Dr Groot in August 2012 and a first, preliminary report has meanwhile appeared in Pharos.24

Faunal remains from the last three excavation seasons (2013-2015) were analysed by Dr Groot in August 2015. These comprised nearly 20,000 fragments, of which only 779 could be attributed to species, due to the extreme fragmentation of the material. The collected data will be further studied in 2016, but preliminary results confirm the conclusions based on the material analysed in 2012. Fragments from sheep or goat dominate the assemblage, followed by cattle and pig. Some of the animal bones are burned, with some skeletal elements (femur, patella, caudal vertebrae) more likely to be burned than others. While foetal or neonatal medium-sized mammals were already identified in 2012, the 2015 analysis indicates that most are pig rather than sheep or goat.

Acknowledgements

We wish to express our thanks to Dr Pari Kalamara, director of the 11th Ephorate of Prehistoric and Classical Antiquities, for helping and supporting our project. We want to warmly thank Dr Donald Keller, director of the Southern Euboea Exploration Project (SEEP), for his generous assistance and advice; Evangelia Athanassiou and Sofia Stambelou, guards at the Archaeological Museum of Karystos, for their hospitality and help with all kinds of practical matters; and the director of the Netherlands Institute at Athens, Dr Winfred van de Put, and his staff for their assistance, support and advice.

We also wish to express our gratitude to the Faculty of Humanities of Vrije Universiteit Amsterdam, and the Institute for Aegean Prehistory (INSTAP), Philadelphia, for their financial support, without which the excavations at Plakari would not have been possible.

References


