

TAESP

Troodos Archaeological and Environmental Survey Project

Report on the Fifth Season, November 2003

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1. Introduction

The Troodos Archaeological and Environmental Survey Project (TAESP) is studying the relationship between people and their environment from the Neolithic to the Modern period. Its 159 sq km survey area, on the northern slopes of the Troodos Mountains in central Cyprus, stretches from Skouriotissa and Kaliana in the west to Potami and Xyliatos in the east. TAESP is directed by Dr Michael Given (University of Glasgow), Dr Vasiliki Kassianidou (University of Cyprus), Prof. A. Bernard Knapp (University of Glasgow), and Prof. Jay Noller (Oregon State University).

Between 3 and 22 November we held a small season with a single field team, with the very specific goal of carrying out transect survey in parts of our survey area which had always been covered by stubble and straw during our main summer seasons. The participants were Hugh Corley, Michael Given, Yianna Ioannou, Sarah Janes, A. Bernard Knapp and Jackaline Robertson.

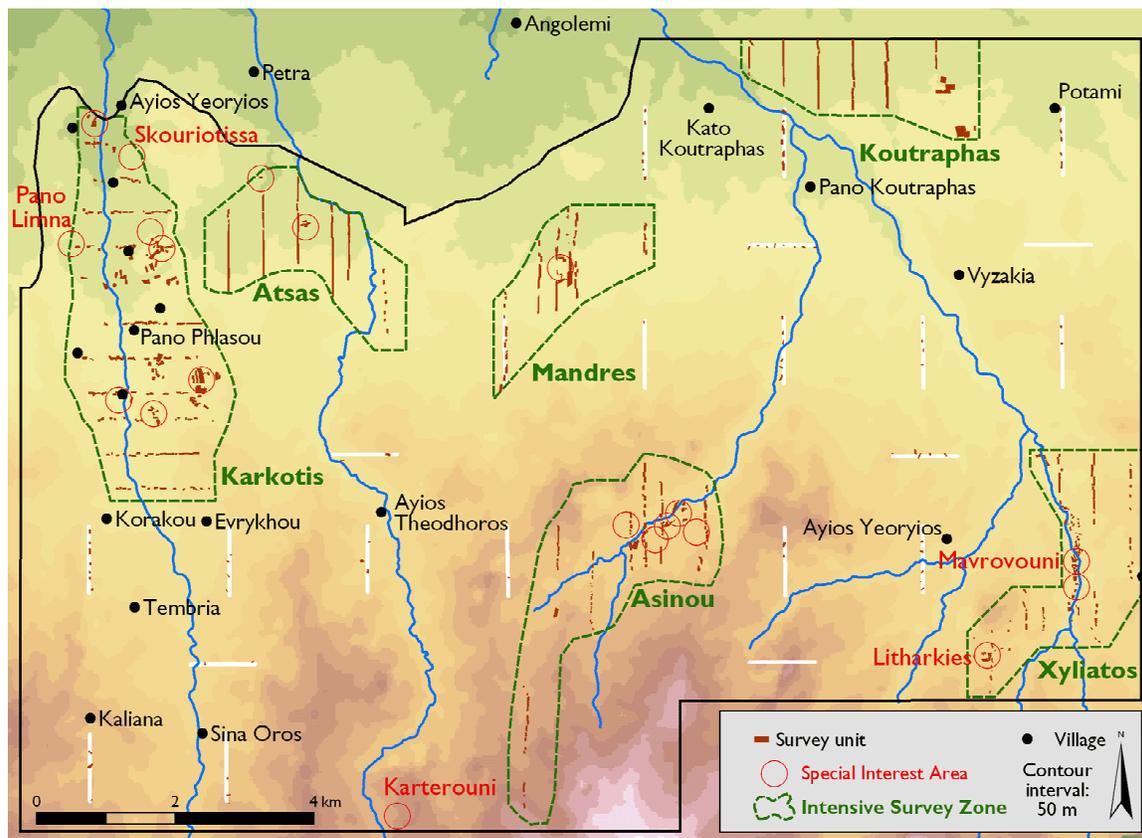


Figure 1. Map of the TAESP Survey Area, showing transects and Intensive Survey Zones

TAESP is very grateful to the Department of Antiquities, and in particular to its Director Dr Sophocles Hadjisavvas, for permission to carry out this survey. We would like to thank Mr Pantelis Andreou Iakovou, the Mayor of Katydata, and Mr Georgios Papacharalambous, the Mayor of Tembria, for their generosity in allowing us to use the Katydata and Tembria schools. This season was funded by the Council for British Research in the Levant and the Arts and Humanities Research Board. As always, we benefitted greatly from the support of the Cyprus American Archaeological Research Institute, and we were pleased to welcome director Tom Davis, administrator Vathoulla Moustoukki, and librarian Diana Constantinides, who came out to work with us in the survey area.

We worked in the two areas where in the past we had the greatest problems due to visibility: the Mandres and Koutraphas Intensive Survey Zones (Figure 1). In the Mandres zone, where we started, a few fields were yet to be burnt and ploughed, but even they had good enough visibility to be worth fieldwalking. In the Koutraphas zone all fields had been burnt and ploughed, and the farmers were hard at work sowing. This gave us uniformly excellent visibility, and superb fieldwalking conditions. The pottery will be analysed in the summer 2004 study season, so the following report is based on our own non-expert identification (with the exception of Kato Koutraphas *Mandroudhēs*; see below).

2. Mandres Intensive Survey Zone

The Mandres Intensive Survey Zone (ISZ) lies at the foot of the Troodos Mountains on a series of Middle Pleistocene alluvial terraces. The pillow lava bedrock is mostly overlain by alluvial deposits, many of which have accumulated calcium carbonate. It is drained by steep-sided gullies leading northwards out of the Troodos Mountains, and other than the gully sides most of it is cultivated with grain.

The ISZ is named after the 19th and 20th-century seasonal settlement of Kato Koutraphas *Mandres*, which has been mapped, surveyed and analysed in previous seasons. Our 'Team Central' carried out two transects in summer 2001 (TT495750E, TT495500E), which had extremely poor visibility because of straw and stubble, and a third transect with better visibility in summer 2002 (TT495900E). In November 2003 we replaced, supplemented and extended these transects by a further three.

TT495000E

This transect was 1.4 km long, running from the forested foothills in the south to the main Nicosia-Troodos road in the north. The most striking find was the small Late Bronze Age settlement of Kato Koutraphas *Mandroudhēs* (TP239; see below). There was noticeably less pottery in the south of the transect, though we did record evidence for wells and check dams from the Ottoman or early British colonial period. The sherd counts noticeably increased towards the north, peaking as we crossed the track leading to Mandres.

TT496000E

Our central transect, which was 1.2 km long, showed very similar characteristics, with a clear increase in pottery as we approached the settlement of Mandres. The transect actually ran right across the threshing floor of an outlying building of the settlement (Kato Koutraphas *Vromoneron*; TP027; BU0016). Even though this was not collected in earlier seasons, we found no threshing sledge blades on the threshing floor or in its vicinity. At the very north end of our transect, by the main road below Koronia hill, there was a very clear increase in pottery. Most of this seemed to be Roman, with self-slipped material similar to that at the Late Roman farmsteads of the Atsas area 4 km to the east. Time prevented us from continuing this transect northwards across the road.

TT497000E

This transect was limited to 450 m in extent due to an army firing range in the south, a pig farm in the north, and a severe rainstorm on our last day of survey there. We found one area very rich in jasper, although it was of relatively poor quality and little of it was worked (Kato Koutraphas *Khalospidhia*; TP240). There was a light scatter of pottery throughout the entire transect, with one apparent concentration of small worn sherds.

Kato Koutraphas Mandroudhes (TP239)

Mandroudhes lies on Pleistocene alluvium, just where it joins the pillow lava of an earlier valley wall. This is a landscape far older than the Bronze Age material which lies on it. The rate of erosion has been low and disturbance through ploughing relatively benign, so the materials are still more or less *in situ*. A steep-sided gully bounds the eastern side of the POSI.



Figure 2. Gridding Kato Koutraphas Mandroudhes

Mandroudhes was discovered during the survey of Transect TT495000E, and the survey unit (SU3005) had to halt abruptly because of the clear increase in pottery. We spent one day with a team of seven people mapping, gridding and sampling this POSI by means of 26 five-metre squares and four 'grabs'. The pottery and ground stone were analysed in a preliminary fashion by Louise Steel and Carole McCartney respectively.

Given the relative stability of the surface, there seem to be three distinguishable activity areas across the POSI. To the east, along the edge of the gully, there may have been more storage, reflected in the quantities of pithos sherds found in this area. The main concentration of pottery around the centre and slightly to the west is primarily light utility and table wares with some ground stone artefacts. The main concentration of ground stone, however, is to the west of this, and could be indicative of a working area of some kind.

Preliminary examination of the pottery indicates that it is mainly from late in the Middle Bronze Age and from the Late Bronze Age. The majority of it is Late Bronze Age, but there is also a large quantity of Red Polished sherds. From the sample collected, there are more than twice the number of open Red Polished vessels as opposed to closed. Combined with the ground stone rubbers, quern stones and hammer stones, this suggests that Mandroudhes was a settlement. Ten sherds of White Slip pottery were collected, three of which are painted. Seven sherds were identified as light utility Chalcolithic wares, including both Red on White and Red Monochrome wares. A large percentage of the sherds collected were light utility and table wares. Heavy utility vessels are also represented, particularly pithoi, with piecrust and raised banded decoration.

3. Koutraphas Intensive Survey Zone

The aims of our work in the Koutraphas ISZ were to examine the neglected northeast low-lying part of our survey area, which includes the oldest soils in the area. In the 2002 and summer 2003 seasons the stubble and straw were so dense that our 'Team Central' only managed to survey two 'keyholes' in the entire area. This was enough to demonstrate that in the eastern part of the ISZ, near the road to Vyzakia, there was surprisingly little pottery but substantial numbers of perhaps Aceramic Neolithic ground and

chipped stone. The most striking concentration of lithics was collected as TP095 (Nikitari *Kambos tou Lemonari*).

Our five transects in the November 2003 season were limited to the western part of the zone. This was partly because there was a very clear drop-off in pottery as we moved east, and partly because we wished to put into context the large amounts of Roman pottery found in our first transect (TT499000E). The ground visibility was superb (Figure 3).



Figure 3. Fieldwalking in the Koutraphas Intensive Survey Zone

Prehistoric

There were reasonable numbers of ground and chipped stone in the eastern part of the area, particularly in TT499000E. One bitruncated blade of butterscotch chert may be Aceramic Neolithic. Much of the ground stone looked rougher than the Bronze Age material from Mandroudhes and Koutroullis, more like the probably Aceramic Neolithic material from TP095. The spread was not continuous, however. TT500000E and TT500500E both contained almost no cultural materials, showing a clear gap between what we found this year and TP095 to the east. It is possible that this lithic material derives from patchy, seasonal agricultural by Aceramic Neolithic groups from more major settlements near the chert sources (similar to Politiko *Kelaidhoni* and Agrokippia *Palaeokamina* in the SCSP area).

Roman

The major surprise of the season was the extent of Roman material in the western part of the Koutraphas ISZ, especially after finding nothing at all in earlier work in the eastern part of the area. This spread of Roman pottery covered an area of well over 500 m. The great majority of the pottery mapped in Figure 4 probably dates to the Roman period, apart from the material in the northwest corner, which is mostly Medieval-Modern. At first we thought it was a totally even 'carpet' of pottery, most likely from manuring. However, it did have relatively well-defined edges, and one major peak in TT499500E (TP245; Nikitari *Sanidhia*). As well as the large number of utility wares and fine wares (including Phocian), we recovered one striking ground stone loomweight.

The most noticeable aspect of the rest of the spread of pottery was its endless similarity: relatively thick self-slip body sherds and double handles. We will need to see the pottery analyses and distribution maps before we can begin to interpret this material. It may be a substantial agricultural estate or village surrounded by a halo of manuring material. Alternatively, it might be a series of farmsteads, like those we found in the Atsas ISZ, sitting within a carpet of manuring material from their extensive agriculture. *Sanidhia* would in that case be one of several such farmsteads.

It is interesting that all this material lies on the western edge of the Koutraphas plateau. This links it in to the Atsas farmsteads, Skouriotissa, the Karkotis Valley and Soloi, rather than to Tamassos to the east. This ISZ also lies conveniently on the route from the Alestos and Mavrovouni copper production areas

and the port on Morphou Bay. If this route went along the Vyzakia river valley, as seems reasonable, it would have passed immediately below this agricultural area.

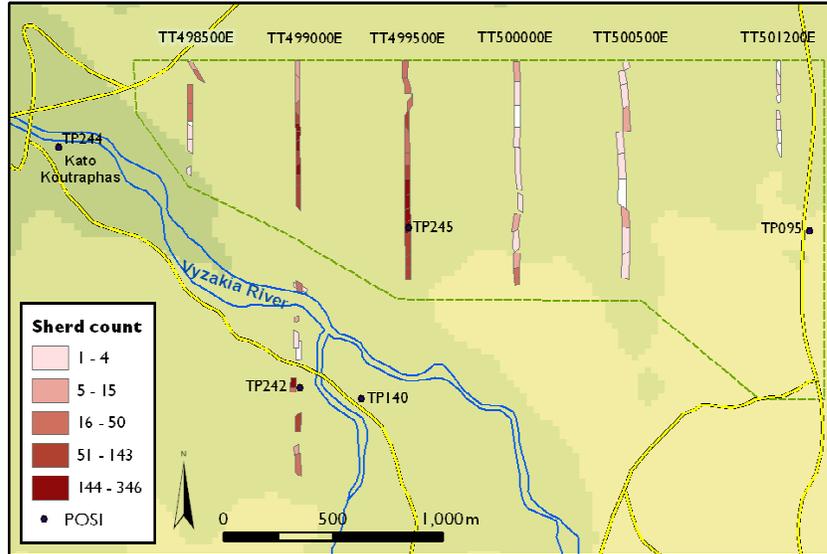


Figure 4. Sherd density map of Koutraphas ISZ

Medieval to Modern

Our eastern transects showed virtually no Medieval to Modern pottery, just like the transect and block survey that Team Central did in previous seasons. The westernmost transects did, however, show a light scatter of Medieval to Modern pottery that is likely to be associated with the villages of Pano and Kato Koutraphas. It is not quite so simple as a 'halo' round the villages, however. We continued two transects (TT489500E and TT499000E) down onto the slopes above the Vyzakia River. As soon as we crossed the break in slope, the material dropped off very sharply. It seems that the villagers were choosing to pass by the nearer slopes, and cultivate the flatter ground on top of the plateau.

The northern end of TT489500E showed unusual quantities of very fine 13th and 14th century sgraffito. We know that Kato Koutraphas was an estate in the 16th century. There is no continuous halo of this material from the village, as just discussed, but we may have touched the edge of another estate or a subsidiary of the one at Kato Koutraphas. We checked the church of Panayia Chryseleousa in the village (TP244; Kato Koutraphas Village). There are clearly re-used fragments of marble, but we found no clearly medieval features or pottery.

Nikitari Petrera (TP242)

We decided to resurvey TT499000A, in the Vyzakia River valley just south of Kato Koutraphas. Our 'Team X' had already surveyed this transect in Summer 2003, but ground visibility was extremely poor. This transect was a direct southward continuation of our TT499000E, so it was also useful for relating the Koutraphas ISZ to the river valley along its southwestern edge.

The most striking find in this transect was a major concentration of ground stone and pottery (TP242; Nikitari Petrera). Because of time pressures (this was the last day of fieldwork), we surveyed it as two contiguous survey units (SU3097 and SU3100). Apart from the same light scatter of Late Roman pottery found all across this area, the pottery was coarse in fabric and in general very unfamiliar (Figure 5). It included three very distinctive slotted handles, of which two other examples have been found elsewhere in the survey area but not yet identified.

The collection of ground stone from this POSI was very impressive indeed, including nine pieces from one small survey unit. They consisted of saddle querns, some of them massive, rubbers and grinders of various sizes, and hammer stones. The most unusual find was an almost complete *senet* gaming board (Figure 6).



Figure 5. Sample of pottery from Nikitari Petrera



Figure 6. Senet board from Nikitari Petrera

4. Other work

Although the principle aims of the season were to carry out transect survey in the Mandres and Koutraphas Intensive Survey Zones, we also took the opportunity of doing some minor tasks in other parts of the survey area.

Because of the 100% ground visibility at Katydhata *Laonarka* (TS09), we decided to grid the central field where we carried out geophysics in 2002 and summer 2003. In 24 grid squares measuring 5 x 5 m and three grabs, we counted 170 sherds, almost all of them Red Polished. This gives us a much greater sample for analysing the function of this POSI, which we are suggesting is an Early Bronze Age settlement associated with the cemetery excavated by Markides in the 1910s. It also demonstrates that there is a real concentration of material at the northern edge of the field, right against the base of the hill, in spite of the geophysics that show linear features across all of the field.

We revisited several POSIs to check on details required for the preliminary analysis and publication, on which we are currently working. These visits included the Roman settlement at *Xyliatos Mavrovouni* (TP104) and the probable Aceramic Neolithic ground stone scatter at *Nikitari Kambos tou Lemonari* (TP095).

One new POSI that we investigated was a late Ottoman or early British colonial rural structure in the foothills between Mandres and Ayios Theodoros (*Ayios Theodoros Pano Atsa*; TP241). This unusual structure consisted of one enclosed room and a row of three smaller rooms open at the front. Mr Chrysostomos of Ayios Theodoros village, to whom we owe the knowledge of this structure, identifies it as a goatfold. There is currently no trace of an enclosure, and it may also have had other functions during its life.

5. Conclusion

Carrying out an extra field season in November was extremely worthwhile. Our timing was perfect: in the Mandres area the farmers were just finishing their burning and ploughing, and in the Koutraphas area they were still sowing. In the majority of areas we had long stretches of 100% visibility. Apart from one single morning when we were rained off, the weather was ideal for pedestrian survey. Better conditions for carrying out field survey in agricultural land could hardly be imagined.

It was very satisfying to find two new prehistoric settlements. The small agricultural settlement of Kato Koutraphas *Mandroudhes* is a very useful addition to our increasing knowledge of rural Cyprus in the Late Bronze Age. Nikitari *Petrera* is more intriguing, and holds many as yet unanswered questions, particularly as the material has not yet been examined by our specialists. The Roman material east of Kato Koutraphas adds a very important element to our reconstruction of the TAESP landscape in what is clearly one of its most elaborate and complex periods. In particular, it confirms the importance of intensive agricultural settlements and farmsteads in the region of Skouriotissa mine, controlled presumably by Soloi, and connects that area with the inland copper-producing area of Xyliatos *Mavrovouni*.

TAESP has now finished all its fieldwork, and is moving into a phase of analysis and publication. Between now and summer 2004 we will be auditing our data and carrying out the artefact distribution analysis which is fundamental to our research. In June/July 2004 we will hold a four-week study season in Cyprus for all specialists and team leaders, to finish the artefact analysis, revisit areas which need checking, and continue the interdisciplinary discussion which is central to our interpretation of the TAESP landscape. The following year will be devoted to the writing up of the final publication.

6. Gazetteer of POSIs

POSI	Village	Locality	Easting	Northing	Plot	Description
TP239	Kato Koutraphas	Mandroudhes	495030	3880660	322	Bronze Age settlement
TP240	Nikitari	Khalospidhia	497058	3882098	362	Raw jasper source
TP241	Ayios Theodoros	Pano Atsa	494050	3879710	86	Ottoman/Modern rural building
TP242	Nikitari	Petrera	499009	3883499	102, 385	Prehistoric settlement
TP243	Katydhata	Laonarka	489971	3882010	448	Gridding of EBA settlement
TP244	Kato Koutraphas	Village	497902	3884598	Village	Church and threshing floors
TP245	Nikitari	Sanidhia	499500	3884230		Late Roman settlement or estate