Suggested Citation: Pettegrew, David K. "DU Team 1 Final Report, 2000." Ancient Corinth: The Eastern Korinthia Archaeological Survey, 2000.

DU Team 1 Final Report, 2000

Eastern Korinthia Archaeological Survey

David K. Pettegrew

August 2000

Final-Season Report: June 27, 2000 to July 28, 2000

Team Leader: David K. Pettegrew

Geomorph Intern: Carrie R. Bruno

Fieldwalkers: Seth L. Button, Mark S. Duffy, Ryan E. Lucas, Stacey A. McGarity, Katherine Panagakos

Overview

During the EKAS 2000 field season, DU Team One covered approximately one square kilometer in three major areas: 1) Kromna - the area thought to incorporate the ancient settlement of Kromna, in the region of the quarries between Hexamilia and Kyras Vrysi (along the Hexamilia-Kyras Vrysi Rd.); and 2) Kenchreai - the areas to the north and northwest of the Roman harbor, beginning in the coastal area and rising slowly to the plateau lying north of Kenchreai (part of the same plateau as the Agios Dimitrios ridge), including transects on and across the plateau; and 3) Kyras Vrysi - the area between Kyras Vrysi and Kromna, thought to incorporate the ancient East-West road from Isthmia to Kromna to Ancient Korinth.

The season lasted five weeks, June 26 to July 28, a total of twenty-four days of fieldwork (excluding the training day). We covered 291 discovery units, about twelve units per day.

Fieldwork for the season occurred on the following days:

-Training Day: Monday, June 26

-Kromna: Tuesday, June 27 to Tuesday, July 11

-Kenchreai: Wednesday, July 12 to Friday, July 21; also the afternoon of Tuesday, July 25

-Kyras Vrysi: Monday, July 24 to Friday, July 28

I was present during all twenty-four days of survey and oversaw the work of the team. Carrie Bruno was also in the field every day except for a few days when she visited other teams. She worked closely with the team, making decisions about geomorphic changes and the defining of Geomorphologic Units. Carrie and I regularly returned to the field in the afternoons to lay out GUs and DUs for the following day of fieldwork. The five fieldwalkers were present in the field everyday except for a few days when they visited the LOCA team. In exchange, we received LOCA team members. The regular fieldwalkers included Seth L. Button (SLB), Mark S. Duffy (MSD), Ryan E. Lucas (REL), Stacey A. McGarity (SAM), Katherine Panagakos (KP). Visiting fieldwalkers included James A. Muspratt (JAM), Sarah-Lynn, Evie K. (EK), and Andrew J. Davis (AJD). Carrie S. Bruno (CSB) and I (DKP) also served as fieldwalkers at times.

1. Kromna (Tuesday, June 27, to Tuesday, July 11)

The DU teams (One and Two) spent most of the first half of the season in the area surrounding the Classical-Hellenistic Period settlement known as "Kromna" (James Wiseman designated the area as "Kromna" based upon an inscription). The surveyed area lies between Hexamilia and Kyras Vrysi, along both the east and west sides of the Hexamilia-Kryas Vrysi Road. Two parallel gravel roads demarcate the southern and northern boundaries of the survey area. I have given these roads rather unoriginal names: the Southern Kromna Road and the Northern Kromna Road. These two roads run east and west of the Hexamilia-Kyras Vrysi Road and converge on the west at a dump (the Southern Kromna Road is paved on the west side of the Hexamilia-Kyras Vrysi Rd.), not far from the Roma Camp. The roads also converge approximately 1 km to the east of the Hexamilia-Kyras Vrysi Road. The Kromna survey area is thus a long crescent, divided in the middle by the Hexamilia-Kyras Vrysi Road which runs just west of the quarries (at this strip of the road). On the east side of the Hexamilia-Kyras Vrysi Road, the Southern Kromna Road runs alongside olive groves and vineyards (From W to E: DUs 1059-1057, 1014-1009) to a fork in the road, which marks the eastern boundary of Team One's transect and the western boundary of Team Two's transect. The gravel road continues to the east, demarcating the southern boundary of Team Two's transect. There is also a gravel access road between the Southern and Northern Kromna Rd., accessible from the Hexamilia-Kyras Vrysi Rd and running between two quarried areas (DU 1080, 1091). This road gives access to a vineyard and groves in the quarry area, but does not continue very far to the east. I have called this gravel road the "Middle Kromna Road."

Kesimia : Kromna

1001-1091, 1150, 1502-1614

This is the area south and east of the Hexamilia-Kyras Vrysi road and west of Horafia Tsigkou (toponym on 1:5000 army maps). To the south are Perdikaria and the Agios Dimitrios ridge. It is bounded on the north by the Hexamilia-Kyras Vrysi asphalt road and on the south by a dirt road (the Southern Kromna Road) which intersects the Hexamilia-Kyras Vrysi Road. A number of farmers informed Dimitri and Lita of the toponym, and one told us that the name derives from the name of the local Turkish authority, Kesmbeïs.

Area 1, South of the Southern Kromna Road (DUs 1001-1008)

Tuesday, June 27: The first area we surveyed was a triangle-shaped area southeast of the fork in the Southern Kromna Road, directly to the west of the olive grove where Team One's transect

ended in the 1999 season. The northern part of the triangle is a grain stubble field (DUs 1001-1006), interspersed with a few olive trees; a low ridge divides the grain stubble field from a 15 m. wide strip of olive trees (1007, 1008) running along the road which forks to the south. Jay Noller identified a narrow and flattened strip of earth as a road which runs from the olive grove on the east along the southern edge of the stubble field to the fork in the road on the west. The artifact data does not really help define the nature of this "road" (although I am not really sure what the artifactual signature of a road would look like), but the visibility is poor (30-50%), and so artifact densities were low (note that we did find a few pieces of marble revetment in this field). Although there were isolated cut-stone blocks in the field, none were along the "road" and so it is difficult to say more about the dating of this feature. One could perhaps look at Daniel Pullen's ChronoType data to ascertain the periods of use for this area. The artifact densities in the 100% visibility olive groves were not substantial, although crusting was heavy.

Area 2, Non-quarried DUs East of the Hexamilia-Kryas Vrysi Road (DUs 1010-1090, 1150, not including the areas of limestone outcropping)

Wednesday, June 28 - Thursday, July 6: Area 2 includes all the area bordered on the west by the Hexamilia-Kyras Vrysi Road, the south by the Southern Kromna Road, the north and northeast by the Northern Kromna Road, and the east by the boundary between the transect of Team One and Team Two. This area includes olive, citrus, apricot, and almond groves, along with grain and grain stubble fields. Visibility was excellent (90-100%) in the plowed fields to the south and west, fair (50%) in the citrus and apricot grove (DUs 1051-1055) to the south, and poor in the weed, grain and grain stubble fields on the eastern half of the transect (DUs 1041-1044, 1046-1049, 1077-1078, 1084-1088). Nonetheless, there was a continuous carpet of artifacts in this area, mostly Classical, some Late Roman, and occasionally, other periods (Prehistoric, Byzantine, Modern). Even where visibility is poor, some nice Classical period pieces were found and it is expected that densities would be high in DUs 1044, 1046-1049, if the field were freshly plowed and visibility were better. The DUs with higher than normal artifact concentrations (DU 1012, 1028, 1036-1040) were nominated to be LOCAs (N-2000-I-1, N-2000-I-2), and the LOCA team has investigated the first of these. Additionally, cut-stone blocks are ubiquitous in this area, as well as in the quarries, and are often found on the borders of fields where farmers have pushed them. We chatted with one local farmer who said that he knew of several fine blocks which local people had incorporated into their homes.

A fault runs East-West through the southern part of Area 2, north of DUs 1150, 1039, 1049, 1036, 1013, and 1028. The fault is most pronounced in the eastern half of Team One's transect, where a 1 to 3 meter ridge separates an olive grove (DUs 1036-1040), apricot grove (1150), and vineyard (1013) from a grain stubble field (DUs 1041, 1043). We surveyed this ridge as an independent DU (1056) and discovered (besides cut-stone blocks) a series of shaft graves, which are severely robbed and eroded. Joe Rife has investigated these and said that they date broadly to the period of Classical to Middle Roman. He also suggests that these graves faced out on to a road. This might make sense of a number of anomalies along this fault: high artifact concentrations below the fault (DUs 1012, 1036-1040, 1028), high quarried walls (DU 1161) in the southwest edge of one outcropping, a Roman tomb across the Hexamilia-Kyras Vrysi Road (DU 1098). I suggest that this area below the fault might have been the location of a road cutting

just south of the "Kromna" area, running approximately fifty meters north of the modern gravel road (the Southern Kromna Road).

Area 3, the Limestone Outcroppings and Quarries (DUs 1060-1076, 1079-1083, 1091).

Tuesday, July 4 - Thursday, July 6: This includes all DUs within the two large areas of limestone outcropping just east of the Hexamilia-Kyras Vrysi Road. We chose to lay out small units which would follow geostratigraphic boundaries. However, because this area has been extensively quarried, it is geomorphologically complex and was difficult to map. Additionally, it is nearly impossible to digitize such small DUs into GIS. In retrospect, therefore, I think it would be best to survey the entire quarried area as one Geomorphologic Unit. However, having so many small DUs is not without its advantages. We have excellent spatial control of artifact densities, quarrying, and architectural features.

Visibility was generally poor in this entire area, most often between 30 and 50%. The land was usually obscured by phrygana, lichens, maquis, and weeds, and the most visible spots were either trails that ran through the maquis or the limestone itself. Soil was generally thin and covered with vegetation.

Artifact densities were low in this area and I think the reasonable explanation for this is that the quarries were principally used as quarries, not habitation. We found a few cuttings (DU 1066, 1067) which look suspiciously like rooms, but generally there was little indication of settlement in the outcropping area. Although visibility was poor in the quarry areas, there is little topsoil and we should have found more tiles if the area was used for habitation. As it was, artifact densities were low, usually between one and five artifacts. The artifacts were usually coarse red, non-diagnostic body sherds.

On the other hand, there were a number of nice architectural features in the quarries, some of which were nominated as LOCAs:

-a column (DU 1060)

-cut-stone blocks with lifting holes (DUs 1060, 1075)

-dining rooms (DUs 1074 / N-2000-I-3; 1080 / N-2000-I-4). On the eastern side of 1080, near the gravel road (Middle Kromna Road), we found an area that appears to have been used as a dining room. One side is slightly raised which would suggest the placement of a *kline*. I went out to visit this again at the end of the 2000 season and discovered that there is another room which extends 8 meters to the west of the first one. The south and west walls of this room are preserved and there is a groove in the west wall. The floor of the second room is still covered over with dirt so it is difficult to say more about this.

-This area has been extensively quarried. Quarry cuttings were visible in the following DUs: 1060-1061, 1063-1064, 1066-1067, 1069-1070, 1072-1076, 1080-1082, 1091)

-Modern inscription on the limestone (DU 1072). Three letters (initials?): Delta Gamma, Theta. Also some modern graffiti to the right of this inscription.

-Olive Press (DU 1082 / N-2000-I-5)

-Wheel ruts (DU 1091 / N-2000-I-6)

-Unfinished sarcophagus (DU 1091)

-Quarried areas which exhibit two corners. It is possible that these areas were used as rooms after the quarrying. Someone should examine these DUs: 1066, 1067, 1080 (the dining room along the Middle Kromna gravel road).

-High quarried walls (1061), possibly road? (see above)

Boulberi : Kromna 1092-1130, 1615-1628, 1855

This is the area northwest of the ancient quarries and the Hexamilia-Kyras Vrysi road. More specifically, it is defined by two roads which intersect and its northwestern point (i.e., the area is triangular in shape). These two roads continue eastwards and roughly define the Kesimia:Kromna transect (as their northern and southern boundaries). A local farmer (who loves Germany) informed Dimitri of the toponym. He was aware of the other toponyms EKAS has been using (Kesimia, Perdikaria, Rachi Boska) and used Boulberi in the same way (that is, Boulberi is a "peer" of those toponyms).

Thursday, July 6 - Tuesday, July 11: Over a three and a half day period, Team One and Team Two crossed the Hexamilia-Kyras Vrysi Road and covered all the area to the west, as far as the diaper dump. This was exciting survey action for Team One and included the discovery of The Cave of the Furious Dogs, a nap in the Enchanted Vineyard, a trip through The Wasteland, and a Collaborative Cookie Break with Team Two. Team One covered the southern and eastern half of this survey area. The northeastern corner of the area, along the Northern Kromna Road, west of the Hexamilia-Kyras Vrysi Road, was occupied by private gardens and homes, and consequently, unsurveyable.

Overall, the visibility was excellent (80-100%) in this land across the way. The exceptions were a few weedy fields (DU 1099, 1104, 1115-1116, 1125). But it should be relatively easy to compare artifact densities between DUs since so much of this area is plowed and has excellent visibility. As it stands, the highest artifact densities for this area were in the southwest corner of Boulberi:Kromna, on the ridge (DU 1099) associated with the Roman grave and in the vineyards to the southwest. One should remember, however, that several large DUs in this area were inaccessible and unsurveyed and will have to factored out of the density maps.

The areas of interest in this survey region included:

-The Roman Tomb (DU 1098) - Joe Rife has examined and documented this

-A nominated LOCA (DU 1099 / N-2000-I-8): high densities of roof tiles and artifacts, not far from the Roman tomb. The LOCA team is currently investigating this.

-A large conglomerate millstone (?) on a ridge (DU 1094) between two vineyards

-A large underground cavern, recorded as a feature for DU 1119.

2. Kenchreai (Wednesday, July 12 - Friday, July 21; the afternoon of Tuesday, July 24)

DU Team One spent the third and fourth weeks of the season in the area of Kenchreai. We surveyed two transects in Kenchreai, one which begins half a kilometer north of the Roman harbor at the coast (Bourtzi/Kenchreai) and proceeds across the highway to the north, running upslope through phrygana-covered landscape (Panorama/Kenchreai) and finally onto the ridge (Spilio/Kenchreai). This transect is approximately 1 km. long. The second transect begins .7 km northwest of the Roman harbor and proceeds north along a gravel access road (Kokkinia/Kenchreai), rising gently to the ridge on the north (Rachi Simitra/Kenchreai). The transect stops at the ridge (because it is very steep there) and begins again .25 km to the west where the ridge is less steep. The transect continues across to the northern side of the plateau.

The objectives for Kenchreai were twofold: 1) to investigate the location of the ancient road(s) which ran from the harbor to Isthmia, and 2) to ascertain at what point urban artifact densities become rural artifact densities.

Bourtzi : Kenchreai 1131-1147

This is the coastal area of Kenchreai, northeast of the Roman harbor. It begins at the sea 400 meters northeast of the ancient harbor and extends to the east, in the direction of the Kalamaki Beach hotel. It includes DUs on both sides of the Kalamaki Beach road. The west/northwest border is the modern highway which runs to Epidauros and Isthmia. This area includes a number of graves and tombs, including the Cummer Tomb, and the remains of a probable Early Christian basilica nearby. This toponym was taken from the 1:5000 Greek army maps.

We covered this area in a two day period, Wednesday, July 12, to Thursday, July 13. Seth went to Mt. Oneion on July 12 and we received Lee Anderson in exchange. Carrie Bruno went to help the LOCA team on July 13.

Generally, this area was not optimal for obtaining representative artifact densities. Most of the discovery units were overgrown with phrygana and weeds, and some were covered with pine needles. Visibility usually ranged between 10 and 40% and soil was nearly always compacted. The exceptions include a plowed grove (DU 1131) with excellent visibility and several DUs (1142, 1143, 1145) near the Cummer Tomb which had looser (although unplowed) soil. The density maps show that the highest densities were recovered from these four units mentioned above. Thus, highest densities came from the few units which had better visibility and less compact soils. This should be considered in the final analysis. It is worth noting that sherds were found wherever the ground was visible, and every unit contained pottery (DU 1132 should be excluded from density analysis since visibility was so poor (10%) and since it was apparently bulldozed.). Thus, there was an unbroken carpet of ceramic material here. These are densities appropriate for an urban area. It seems likely that visibility and soil conditions are a reasonable explanation for the higher densities near the Kummer Tomb monument.

The poor visibility conditions will allow one to compare most of these units to each other and even to some of the units across the highway (Panorama), but perhaps not to the agricultural fields in the survey area (such as Kokkinia) where visibility is excellent and soil is loose.

Features / finds in this area (JR means that Joe Rife has examined these):

1135 - 2 classical coins, one Ottoman coin (I believe that it was from this unit, check the processing team notes) found on gravel parking area.

1136 (JR) - Cist grave, Archaic-Hellenistic

-A local named Petros (who lives in Kokkinia in a house along the road within the second transect) told Tim Gregory and Lita D. that there is a cistern (?) in the cliff southwest cliff face below this unit.

1140 (JR) - Well-built chamber tomb

1146 - The area just southwest of the Kummer Tomb and the early Christian Church - high artifact densities, nice architectural members (Dana has recorded) - area nominated for LOCA (N-2000-I-9).

1147 (JR) - The Kummer Tomb, a declared site

Panorama: Kenchreai

1148-1149, 1151-1167, 1171

This is an area of Kenchreai lying west of the Isthmia-Epidauros highway. The highway forms the eastern border of DUs 1148, 1149, 1151, and 1158. The southern border of this area is marked by the Georgiou Koniari Road (before it turns to the southwest). The western border of the transect in Panorama is arbitrary and has no distinct edge, at least for the southern DUs (1148, 1149, 1151). The northwest part of the transect is marked by two houses and a fenced citrus grove. The transect begins at Georgiou-Koniari Rd. on the south and proceeds .5 km to just below the ridge. There is a gravel road here, running east-west below the ridge. The transect in Panorama is 400-500 meters wide. We obtained the toponym "Panorama" from a settlement (*oikismos*) lying a couple hundred meters to the west of our transect. DUs 1168-1170, which were also part of the survey transect, have a different toponym (Spilio).

We covered this area in a four day period, Thursday, July 13 to Tuesday, July 18 (excluding the weekend). We began at the south at DU 1148 and worked our way north toward the ridge (Spilio). It is a climb uphill to the north.

Most of the DUs shared similar terrain and vegetation patterns: rough and rocky, sloping, phrygana, weeds, some gullies (DUs 1149, 1157, 1158), compacted earth. Visibility usually varied between 30 and 50%. The exceptions to this general trend were the plowed units (1153, 1156) at the top of the slope and three units with loose soil (1162, 1163, 1167) incorporating and surrounding the Hellenistic tower; these five units had visibilities ranging from 50 to 80%. If one looks at the density maps for pottery for the Panorama area, one will notice that all but one (1167) of these units had higher than normal densities. Again, good visibility and soil conditions explain much of the high densities for the area. Nonetheless, there were several areas with only

modest visibility which produced high pottery densities: the unit (1159) to the west of and below the Hellenistic Tower, the gully (1157, especially 1158) south of the tower, and the gently sloping unit (1152) south of the plowed stubble field. DU 1164 is a weedy grove that should not be considered for densities because of poor visibility; DU 1165 has probably been disturbed extensively by bulldozing and should also not be considered.

Surprisingly, a lot of cultural material was found on the slope (1151, 1152) leading up to the grain stubble field. My sense about artifact densities is that we have urban densities continuing across the modern highway north through Panorama. There is break in densities in the quarried gully (1149), but densities increase as one heads up the hill (1151) to the flat stubble field (1156). I would hypothesize that we have urban settlement up to the quarried gully, and that many of the artifacts on the slope north of the gully have washed down from habitation areas to the north (DUs 1152 and 1156). I would suggest the same for the high densities in the other gully (1157, 1158) to the north, that they have washed down from settlement on the flatter areas to the northeast (which was unsurveyed). I suggest this because the artifact densities are highest at the top of the slope near the flatter areas and because it is difficult to imagine a lot of habitation units on the steeper slopes. Generally, the highest densities tend to be in the area south and southeast of the Hellenistic tower. In the large grain stubble field (DU 1156), artifacts were concentrated in the southern half, nearest the slope. I am suggesting that the ancient settlement of Kenchreai continues through the Panorama area up to the Spilio Ridge, but that the intensity of habitation is not necessarily continuous but splotchy, and this is certainly related to the topography (people settling on flatter areas, and closer to the slope of the hill). Perhaps we are getting houses associated with small plots of agricutlural land? One should look at the density data by period.

It is curious that so few tiles were found in the Panorama area. I am not sure what this suggests about habitation. Perhaps a cultural explanation (tiles reused)??

Features / finds in this area:

1149 - extensive quarrying

1151 - perhaps some areas have been quarried

1152 - Byzantine coin

1158 - quarry cuttings on E. end, 15 meters from highway

1162 - "Hellenistic Tower overlooking the Roman harbor" mentioned by Wiseman - this area nominated for LOCA N-2000-I-10. Dana has recorded the tower.

Spilio: Kenchreai 1168-1170

This toponym includes the ridge (1168) and the quarried plateau (1169, 1170) half a kilometer to the northwest of the intersection of Georgious Koniari Rd and the new highway. The ridge marks the southern border. A forested pine tree area marks the western border of our transect, and a fence marks the northwest / north border. A slight rise in slope marks the eastern border of our transect. The area of Spilio continues to both the north, east, and west, and we surveyed only a part of the area. The plateau has been extensively quarried.

We took the toponym from the 1:5000 Greek army maps. The word Spilio ______ (illegible second word) is the label on the map for a geodetic marker on the plateau, just north of the cliff. We made that geodetic marker the east/west boundary between DUs 1169 and 1170 by projecting a line due north from it. We surveyed this area in one day, Tuesday, July 18.

Visibility, vegetation, and soil conditions the same for the three units: 40% visibility, rocky, phrygana covered, soil compacted. DU 1168 should be excluded from density maps since it is a steep ridge and very geomorphologically unstable (artifacts are not likely to stay long on the ridge).

There is some cultural material on the plateau, but most of the plateau in our transect was extensively quarried. The artifacts were concentrated on the west side of DU 1169, west of the quarried area. More pottery than expected and nine lithics (primarily chert flakes, perhaps from local chert in conglomerate outcroppings on plateau) were recovered. It seems that this area was inhabited at some points in Kenchreai's history. One would need to look at the chronotype data to decide when. The Spilio plateau is the probable stopping place for the settlement of Kenchreai to the north. Unfortunately, this is not possible to prove since we did not survey more than one hundred meters past the edge of the bluff. It would pay to walk a long thin N-S transect from the point at which we stopped.

If there is an E-W road from Kenchreai to Isthmia that takes a northern route, the most likely place would seem to be the flat area below the Spilio Ridge, in the area of the grain stubble field where the modern gravel road runs. I am still not sure what the artifact signature of an ancient road would look like so I can say nothing more about this question. However, the topography in this area is best suited for land travel, although one would still have to make a northern trek uphill from the sea to get to this road. Perhaps one could conjecture a road based on the Hellenistic Tower in this area?

Kokkinia: Kenchreai 1172-1210

The toponym Kokkinia is the area due north of the Roman harbor and north of the modern village of Kekries, east of the village of Philotheii and south of the Rachi Simitra plateau. We surveyed a transect in this area which begins 400 meters north of the Roman harbor where Georgiou Koniari Rd. turns from E-W to N-S. A paved road runs straight north from this pont to the steep ridge below Rachi Simitra. We walked a transect approximately one hundred meters on both east and west sides of the road. The road changes from paved to gravel as it proceeds to the north. It runs by a house, greenhouses, agricultural fields, forest, and finally into a large citrus grove before turning sharply to the west (sixty meters to the south of the bluff). We began a separate N-S transect 200 meters west of the citrus grove which includes DUs 1209 and 1210. This area is also included under the Kokkinia toponym. We obtained the toponym from the 1:5000 Greek army maps.

We surveyed this area from Wednesday, July 19 to Friday, July 21.

Visibility and field conditions varied considerably. There are lots of vineyards and groves and many of the fields have been plowed. Visibility is often over 50% and soil is loose. Occasionally, there are a few plowed units (1172, 1199) with poor visibility. There are also a number of units (1183, 1184, 1191, 1198, 1200, 1204, 1205, 1206-1208, 1210) with moderate visibilities (20-70%) and compacted soil. Two units (1176, 1177) had such poor visibilities (<20%) that they should be excluded from density maps. A number of units show evidence of extensive bulldozing and scraping of soil and this should be considered when creating artifact densities. Cf. the DU forms as well as Carrie Bruno's notes and forms for this kind of information. Several units had really excellent visibility, plowed soil, and geomorphic stability. These units (1174, 1178, 1185, 1209) had the highest artifact densities and probably represent urban habitation. Once again, the high artifact densities are at least in part the result of better visibility and soil conditions.

A monumental cut stone block (1200), marble architectural molding (1205), and fragment of fluted column (1194) were found in this general area. Petros, a local man, said a grave was "excavated" (luted?) in DU 1172. Cf. the field notebook for more detail.

One DU (1209) was nominated as LOCA N-2000-I-11 based on high artifact densities. Unfortunately, the artifact bags were stolen before the processing team could get to them. Nonetheless, they processed some of the pottery that they saw while out there.

Rachi Simitra: Kenchreai 1211-1215, 1249-1250

This is the bluff and plateau north of Kokkinia. Most of this area is gently sloping or flat, and covered with phrygana, maquis, and recently planted eukalyptis trees. A few gravel roads wind through the plateau and there are dumps in a number of places along these roads. There are also some linear features which presumably represent modern roads fallen into disuse. The plateau narrows to the west (two hundred meters across N-S) before expanding again (north of Philotheii). The plateau widens to the east (approximately one kilometer across N-S) and eventually connects up with the quarried plateau known as Spilio. There are two residential units at the bottleneck: a house with sheep pin on the sourthern edge of the plateau, and one on the north (with small fenced olive grove). We walked a N-S transect just to the east of these houses where the plateau is 300 meters across (N-S). The south and north borders of the transect is clearly demarcated by the bluffs. We also walked E-W transects along the southern and northern bluffs, extending east from the N-S transect. Rachi Simitra lies above Kokkinia and the settlement of Philotheii. We obtained the toponym from the 1:5000 Greek army maps.

We surveyed this area on one day, Friday, July 21, and returned in the afternoon of Tuesday, July 25.

The important thing to note for this area is that, with the exception of the ridge, this is very stable geomorphic area. Artifacts are unlikely to travel by natural means. Artifact densities are highest along the south and north bluffs of the plateau. Artifacts seem to be sparser in the middle of the plateau. This would suggest that the settlement at Kenchreai stopped on its N. boundary at the Rachi Simitra ridge. Some habitation apparently occurred just onto the southern ridge as well as on the far northern ridge. The southern ridge (DUs 1249, 1250) appears to face toward Kenchreai, while the northern ridge (1214, 1215) faces the agricultural land away from

Kenchreai. It seems that settlement activity was less intense in the center (1212, 1213) of the plateau. From the transect that we did, it is possible to say that the ancient urban settlement of Kenchreai does not continue north of the southern ridge (DUs 1249, 1250).

Finally, it is worth noting that there were several linear features on the Rachi Simitra plateau in DUs 1214, 1215, 1249, 1250. These usually have low mounds on one or two sides and probably represent modern roads now in a state of disuse. On the eastern border of DU 1249, several of these roads come together at an intersection. These features have been described in the geomorph field notebook as well as in the comments section of the DU forms.

There are two circles of whitewashed stones 20 meters in diameter in this area. The function of these circles is unknown but may represent landing pads for army helicopters. Another possibility is that the stones mark property boundaries. Today, the plateau is unused except for the dumping of trash. There are also two residential structures on the western edge of the N-S transect. There is also a large cistern along the northern bluff in DU 1214. Finally, there is evidence of modern quarrying 20 meters to the east of the eastern border of DU 1215.

3. Kyras Vrysi - Kromna Road

The objective of surveying in this area was to ascertain the location of the Isthmia-Kromna-Korinth road. Team One walked all transects from east to west in an attempt to obtain some subtract density data. The exceptions to this were fields which could only be walked from north to south (e.g., some vineyards with trellises). I am still not sure what the artifact signature of an ancient road would be and whether our subtract data is useful in locating the road.

This entire area is geomorphologically simple and landuse was most often agricutlural. This means that many fields were plowed, with loose soil and excellent visibility.

<u>Kyras Vrysi</u> 1216-1248, 1251-1268, 1794-1844

This is the area extending west from the village of Kyras Vrysi. It southern boundary is the Hexamilia-Kyras Vrysi road, and it extends from it approximately 500 meters to the north. The western boundary is the shallow gully 1400 meters west of the intersection of the Hexamilia and Korinthos roads at the western edge of the village of Kyras Vrysi. The gully is also 150 meters west of the West Foundation. This gully, though small, is visible on the aerial photos and the 1:5000 maps. This toponym was taken from the 1:5000 Greek army maps.

Monday, July 24 to Wednesday, July 26

We nominated several LOCAs in this area:

N-2000-I-12: DU 1256 - a deposit of fine ware pots, may be ritually deposited. The artifacts were collected by the processing team.

N-2000-I-13: DU 1258 and some DUs in Team Two's swath - The area east of the West Foundation roadside monument. High artifact densities, cut stone blocks.

<u>Agios Kosmas : Kyras Vrysi</u> 1269-1291, 1845-1854

This is the area surrounding the settlement (*oikismos*) of Agios Kosmas. Its eastern boundary is the gully 150 meters west of the West Foundation. Its eastern boundary is the "triple intersection" near the ancient quarries. It is bounded on the south by the Hexamilia-Kyras Vrysi road. The settlement of Agios Kosmas is relatively recent, and hence the toponym does not appear on the 1:5000 Greek army maps.

Thursday, July 27 to Friday, July 28.

N-2000-I-14: DU 1277 and 1278 - A north-south linear feature, perhaps a road with wheelruts, and the citrus grove surrounding it. High artifact densities.

Suggestions for Future Work

Overall, I think the fieldwork for our team went really well and I am glad to have played the part as team leader. It was quite useful for me to have to make decisions in the field and I enjoyed the responsibilities and the work.

Geomorphic Units: We need to come up with a happy medium about how small GUs should be. I suggest that we use the broad categories: 1) stable - cultural material has not moved; 2) slightly unstable - cultural material has moved only a little bit; 3) unstable - cultural material has definitely moved away from its place of origin. As the season unfolded, we found that happy medium but I would venture to guess that our first endeavors created GUs that were smaller than necessary. If any of the geomorphs return next year, this will not be a problem for us and I think it would be wise to have the inexperienced geomorphs go out with the experienced geomorphs during the first week. On the flipside, small DUs didn't cost too much time, since we commonly walked two or three small DUs at the same time.

On the other hand, DUs should be no larger than one hectare. We had several large DUs in Panorama/Kenchreai area which were simply too large. It is too difficult to control artifact densities with units so large. I recorded notes on artifact densities for these large units, so one could gain some information on the location of the highest densities within these units.

Notebooks: Someone should be assigned to record important information on a more regular basis. We did so this year, but less frequently than we could have.

Forms: DU/GU numbers: I think the biggest problem for us is that Carrie and I didn't often exchange information about discovery units / geomorphological units. The geomorphs and team leaders should regularly exchange DU / GU numbers. GU numbers should be written on the forms as we go along.

Visibilities were always taken by the team leader and I think this gave reliable results. Good idea.

Plowed? Soil Loose? Soil Compacted? There are some problems with these fields. Are they mutually exclusive categories? At the end of the season, Dimitri and I realized that we had filled in this field differently. I checked the "Plowed" box if I saw any evidence of furrows, no matter how old. I reserved the Soil Compacted box only for areas which were very hardpacked (Dimitri said he did something similar). There should have been a middle category between Soil Loose and Soil Compacted. If I had a question, I went with the default "Soil Loose." This means that the Soil Loose category is more meaningless than the Soil Compacted, since I checked the latter only when it was definitely compacted, while I checked the former when there was any amount of looseness. What are we doing to do about these categories?

Sherd Crusting: there should have been a middle category, Moderate. When I had a question about this, I went with the "Light" box.

Surface Clast Composition was a meaningless category. Rocks and Organic were always checked.

The feature form should have a box for Quarries.

LOCAs

I think LOCAs could be nominated and defined after the fact from the density data. If we wanted, we could create density maps based on period and nominate LOCAs by period. That would be really fun.

Features

The following is a quick reference to the many features that we encountered during the 2000 season. Many of these features were photographed with the digital camera.

Quarrying

The following DUs in the Kromna area show evidence of quarrying:

1057, 1058, 1060-1064, 1066, 1067, 1069, 1070, 1072 (a modern inscription in the limestone: Delta Gamma Theta; also some graffiti), 1073, 1075 (channel cut into rock, more than quarrying marks?), 1076, 1080, 1082,

Quarrying in Kenchreai area: 1149 (the entire area has been quarried), 1151, 1158, 1169, 1170, 1215 (circular quarried area, 6 meters in diameter, appears to be modern quarry cuttings); Also, the ridge 50 meters south of 1174, 1175, the location of the abandoned army camp. Although we did not survey this, Carrie Bruno, Sarah King, Bill Caraher, Dimitri Nakassis, and I walked around the area on several occasions, and there is evidence of quarrying throughout. Some is likely modern and connected with its use as an army camp, while other parts may be premodern

The following areas had two visible corners from quarrying. If one were to suggest structures built into the quarry areas, the following would be good candidates:

1066, 1067, 1080

<u>Mortuary</u> (JR = Joe Rife has already documented these)

1056 (JR) - Six shaft graves cut into fault scarp. Graves date from CL to middle Roman period.

1091 (JR) - Sarcophagus, probably unfinished.

1099 (JR) - Two Roman chamber tomb monuments

1136 (JR) - Cist grave, Archaic-Hellenistic

1140 (JR) - Well-built chamber tomb

1147 (JR) - The Kummer Tomb, a declared site

1172 - A local homeowner, Petros, said that a grave was "excavated" (looted?) in this grain stubble field by someone he knew, but there is no visible trace of this today. See Team 1 field notebook.

1264 - The West Foundation, a declared site (is this a mortuary feature?)

Architecture

Cut Stone Blocks in Kromna area: 1003, 1005, 1012, 1014, 1019, 1023, 1024, 1031, 1041, 1042 (one block is concave on one side), 1050, 1056 (groove cut into block), 1059 (rounded?), 1060 (with clamp holes), 1065, 1069?, 1070, 1074 (monumental), 1075 (with clamp holes), 1076, 1080, 1081, 1082 (monumental; block with applied surface, perhaps stucco?), 1089 (carved lines, taken back to Isthmia), 1090 (monumental, with one corner lower than the other), 1107 (a large pile of cut stone blocks which presumably have been cleared from local fields), 1113, 1115, 1116 (groove on one side), 1118

Cut Stone Blocks in Kenchreai area: 1158, 1161 (one block has a semi-circular cutting approximately .06 m. deep), 1166, 1200 (monumental), 1205 (piece of marble architectural molding, I assume this was brought back to Isthmia),

Cut Stone Blocks in Kyras Vrysi area: 1258, 1271 (three blocks, one of which appears to have some kind of mudbrick (?) attached to it; I assume modern; photos taken), 1273, 1276?.

Column: 1060 (unfluted), 1194 (fragment of a fluted column found on gravel access road),

Dining Room: 1074 (kline, lustral basin?), 1080 (raised floor for kline, concrete floor)

Part of an early Christian church, near Kummer Tomb, unsurveyed: 1147

Square structure, 10 m. x 10 m., the "Hellenistic Tower": 1162

Modern unused residential structures: 1232, 1244, 1248?

Roadside Monument: 1264 (The West Foundation)

Roads

DUs 1001 (raised flat strip of earth), 1091 (wheel ruts), 1215 (a linear feature, presumably modern road), 1249 and 1250 (four linear features, presumably the remains of unused modern

roads), 1264 (the West Foundation, declared site), 1279 (N-S linear feature, perhaps a road of indeterminate date)

Other

Olive Press: 1082,

Conglomerate round stone, 1.3 m in diameter, millstone?: 1094

Underground Cavern, used as animal pen: 1119,

Circle of stones, 15 meters in diameter, whitewashed, presumably marking property: 1250 Fineware pottery deposit in a scarp wall, perhaps votive deposit?: 1256

Discovery Unit Considerations

Unsurveyed	Poor Visibility (< 20%)	<u>Missing / Contaminated</u> <u>Artifact Bags</u>
1083	1009	1134
1091	1046	1152
1112	1047	1209
1124	1050	1217
1130	1059	
1138	1073	
1139	1079	
1144	1080	
1147	1082	
1150	1115	
1154	1116	No Artifacts Found
1155	1119	1050
1171	1125	1059
1173	1132	1243
1179	1164	1244
1180	1176	1262

1181	1177
1182	1241
1188	1243
1197	1246
1202	
1218	
1221	
1226	
1235	
1237	
1240	
1245	
1251	
1252	
1256	
1263	
1264	
1269	
1280	