The Zakynthos Archaeology Project 2006-2010

Preliminary Report of the 2006 season

The Zakynthos Archaeology Project aims to integrate several types of research in order to gain more insight in the archaeology of the island of Zakynthos. The Netherlands Institute acquired a permit from the Greek Ministry of Culture for a cooperation project with the 35th Ephorate of Prehistoric and Classical Antiquities. The permit allowed for reconnaissance survey, for intensive archaeological survey on the Vasilikos peninsula, for the analysis and ground truthing of aerial photographs and satellite images and for geomorphologic work. The permission to conduct test trenches in the area of Kalogeras was unfortunately not given.

The ZAP 06 team worked in Zakynthos from Monday 26 June to Saturday 29 July 2006. The team consisted of 17 students from several Greek and Dutch universities. In addition, 5 staff members were present, while three experts visited for shorter periods, as did colleagues from the Greek archaeological Service. The team was directed by Dr Gert Jan van Wijngaarden from the Dutch side and Mr. Andreas Sotiriou from the side of the Greek Archaeological Service.

Reconnaissance Survey

During the reconnaissance survey known archaeological sites on the island are visited. In addition, visits are made to areas where local informants indicate that there may be archaeological remains or to areas that simply appear promising for such archaeological remains. In these areas field walking is conducted in a systematic manner, without collecting finds. The aim of the reconnaissance survey is to provide the wider geographical and archaeological context in which the more localized researches take place. In addition, the information from the reconnaissance survey will help to evaluate the validity of the results of the survey for the island as a whole. By repeating these visits over an extended period of time, the pace of erosion of archaeological sites in different settings may be determined.

During the 2006 summer season, 19 sites were visited within the framework of the reconnaissance survey. Eight among these were known from the archaeological literature, four were ruined churches, while others were sites discovered during the pilot survey of 2005. Outside of the survey area, four new sites have been discovered. At a plateau on the mountain of Skopos, near the Antennas, several concentrations of pottery were attested. Near a section that was cut in the road, probably Geometric finds were attested in situ. Field walking around the Venetian wells at Agalas indicated that these wells have been used in other periods as well: pottery as well as lithic.
artefacts indicate use in the Neolithic and Bronze Age, as well as in later periods. The pottery scattered around the (destroyed) monastery of Dermatoussa, indicates Classical and roman use of the site. Substantive quantities of archaeological material were discovered on a hill to the west of the town of Argassi. The hill had been subject to bulldozing terracing and in the sections burnt patches were discovered in which prehistoric pottery was present (fig. 1). The terraces and slopes revealed high densities of pottery and flint, indicating a clear archaeological site that has been partially destroyed, but where remains in situ can also be expected. The archaeological service allowed us to collect a selection of material from this site.

From all the sites discovered in the reconnaissance survey exact coordinates were taken by GPS and a report of their condition was made. This report has been given to the Greek Archaeological Service so it can be used to protect the newly discovered sites.

Archaeological pick up survey

In the course of five campaigns, three different areas on the island of Zakynthos will be surveyed. Each of these areas covers 2000-3000 ha. and they encompass a variety of landscapes and geological settings. By comparing the spatial pattern of archaeological remains in these transects, the relations between archaeology and processes of landscape formation may be assessed.

In the 2006 season two surveying teams concentrated at the peninsula of Vasilikos in the South East of the island. The survey teams were led by Mrs. Martine Hogervorst and Mrs Nienke Pieters, both experienced fieldworkers. The site of Kalogeras, where Sylvia Benton excavated a probable Mycenaean settlement, is situated in the middle of the survey area. The area has also been subject to earlier investigations that focussed mainly on the lithic finds. The area is densely populated and very fragmented due to field boundaries, fences and vegetation changes. In addition, building for tourism progresses in a fast pace, rapidly destroying the natural landscape. In these difficult circumstances, the survey teams in 2006 managed to cover some 1500 ha. (fig. 3). Due to the nature of the landscape, tracts were generally small and field walkers were spaced 5 m. apart. Within their line of walking field walkers were asked to do full collecting of archaeological artefacts.
The survey confirmed the abundance of lithic artefacts, especially in the southern part of the transect, near Cape Gerakas. At the southeast and to the northwest of the cape, in tracts 2006 and 3006-3309 respectively, substantial quantities of flint artefacts, some obsidian and prehistoric...
pottery were discovered indicating Neolithic and/or early Bronze Age occupation of the site. Eroding sections show that a stratigraphy is still present at both sites – albeit eroding in a fast pace. The prehistoric activities in the area probably are related to the occurrence of natural high-quality flint in the area. The exploitation of these sources constitutes a valuable field of additional research for the project. The presence of small quantities of lithic artefacts in almost all of our tracts indicates the intensity of this exploitation. The first typological investigations by V. Tournalis indicate that the lithic artefacts date primarily to the Neolithic and early Bronze Age, but that material from the Meso- and Palaeolithic are available as well. Other concentrations of finds in the area indicate human occupation during the Archaic period, during Hellenistic or Roman times and during the medieval and early modern periods. The study of the artefacts is coordinated by Prof. Dr. V.V. Stisis and it is still in its initial stages. The extremely wide distribution of finds in the artefacts suggest that many sites have been destroyed by soil movements and the significance of find concentrations ought to be re-evaluated in later seasons.

The tip of the Gerakis peninsula is no longer accessible by foot, due to the intensive erosion of the limestone coast. The area is heavily disturbed by (early) modern quarries, where the local limestone has been quarried. Archaeological surface finds confirmed the picture on the other parts of the cape in the fact that small quantities of worked flint were present everywhere. An interesting discovery was a structure resembling a built grave that has great resemblance to the Mycenaean tomb at Keri on Zakynthos. Whether this structure is also a tomb should be confirmed by further investigation. During the October campaign, tracts elsewhere in the transect were revisited in order to test the influence of seasonal factors such as visibility on the quantity of archaeological finds that are visible. No finds were collected during the October research. Mrs., Nienke Pieters, one of the project’s survey team leaders, has been awarded a 3-month UTOPA scholarship by the Academic Council of the NIA. In the winter of 2006–2007, she will make a first evaluation of the biases that are present in the current method of data collection. The results of her project may lead to adaptation in the survey technique of coming seasons.

**Analysis of aerial and satellite images**

The analysis of aerial photographs and satellite images constitutes the Master’s graduation project of Mrs Anke Stoker at the University of Groningen. In addition to the SPOT satellite picture that has been acquired for the project, a series of Greek army photographs were acquired from different periods: 1945, 1960, 1972 and 1986. The research areas, therefore, can be viewed in different periods and, most importantly, in different degrees of vegetation growth. In all of these pictures, features are identified that are subsequently visited and surveyed. Likewise, find concentrations and sites that are identified in the field are sought for on the images in order to see if they can be spotted in one of the photographs. If this is the case, the feature is identified and actively looked for in areas that are now overgrown and inaccessible to the survey teams. This part of the research is still in its initial stages.
Some successes can already be noted, however: while inspecting some unclear features in the hills just outside the survey area, large numbers of prehistoric and historic pottery were discovered. The subsequent systematic survey indicated the extent of this site. In the coming years additional photographs should be acquired, notably also from lower altitudes.

**Geo-archaeological research**

Three geo-archaeologists from the Vrije Universiteit at Amsterdam joined the Zakynthos programme in 2006, one of them being Miss Katar Abed, who is responsible for setting up the GIS environment in which the project will be carried out. Miss Annelies Storm, was responsible for an detailed geo-morphological description of the research area near Vasilikos. During the summer campaign, she described soil samples that were taken by corings and she described exposed sections on meso and micro level. Together with Digital Elevation Models, her work will result in a detailed geomorphologic map of the area with indication of erosion patterns. This may then be related to the pattern of archaeological finds in the area. Miss Melek Tenduruk as part of her training as a researcher began to make a first plan on how to investigate the role of seismic activity with regard to the formation of archaeological sites. Her descriptions and measurements of erosion visibly caused by earthquakes and her literary research should result in a research plan that may be implemented in coming seasons.

The presence of natural sources of flint in the research area opens up a research path that has not previously been thought of before. The geo-archaeologist, together with our specialist for the early prehistoric periods Vangelis Touloukis, visited several of the possible sources and have begun comparing samples of natural flint and artefacts. In the future, this line of research will be explored further.

**Concluding remarks**

The 2006 campaign constituted the first real season of fieldwork for the Zakynthos Archaeology Project. Any conclusions at this stage necessarily are only preliminary. Nevertheless, some general conclusions can be made after this campaign:

- The area of Vasilikos has a relatively high density of archaeological finds. This is in stark contrast with the area that was the focus of the 2005 pilot survey near Keri. The causes of this difference, probably should be sought as much in
patterns of landscape use in the past as in the geomorphologic formation of the present landscapes

- The importance of the earlier prehistory for the area of Vasilikos has been confirmed. Preliminary study of the finds indicate that ancient use of the landscape was particularly intensive during the Neolithic and/or Early Bronze Age, but that earlier periods are certainly represented.

- The presence of natural sources of flint has been of great importance for the human presence, especially in the earlier prehistory.

- The Mycenaean site at cape Kalogeras that was excavated by Silvia Benton is confined to the cape itself. Significant concentrations of Late Bronze Age material have, so far, not been attested in the area.

- The presence of archaeological finds in the landscape of Vasilikos indicates that many sites may have been destroyed: finds are relatively widely distributed and concentrations are vague and difficult to detect.

- The landscape at Vasilikos has been subject to intensive erosion. This is clearly visible at the degradation of the coasts. The degree of erosion in the interior will also be great and its effect on the remaining archaeology is unknown.

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