Articles

A Pedological Investigation and Soil Survey of the Kavousi Region of Crete

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One of the common resources used by people all over the world throughout human history is soil. The soil resource provides the medium for plant growth, raw materials such as clay for ceramics, and the foundation for structures and living areas. The complex mosaic of soils across the landscape has a tremendous influence on the behavior of humans in regard to resource procurement and adaptability. An understanding of the soil resource in an archaeologically important area can provide clues to the behavior of the population in the past.

A team of soil scientists provided support for the Kavousi Archaeological Expedition from 1987 to 1992. Their mission was to provide technical support to the archaeological team in regard to the soils of the research area and the diachronic development of the landscape. These studies were to complement the efforts of other scientists and archaeologists from a variety of disciplines. The soils team’s task was to establish the pedological setting of the archaeological sites of Vronda and Kastro, study the soil resource base of the region, and investigate the relationship between the location of sites and land resources.

Initial investigations in the archaeological sites (Vronda and Kastro) involved sampling selected trench walls. After the first year, it was decided to expand the soils investigation to the soils and landforms in the vicinity of these two sites. A soil survey was implemented on a 25-km² area around the village of Kavousi in Eastern Crete (Fig. 1). Follow-up studies of the region were focused on documenting buried soils in the area and attempting to reconstruct the landscape history of the locale (Morris, 1994; Morris et al., 1997).

Objectives of the soil survey were to investigate soils using standard pedological techniques to expand knowledge of the soils in the region and contribute to reconstruction of the landscapes near these sites. This was accomplished through the use of soil morphology and soil classification techniques. Soil surveys expand knowledge of the resource base and help document the earth history and present-day land use. The results of our examination of the soils and landscapes are reported here.

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