The Proyecto Arqueológico Norte Chico (PANC) is a long term project focused on the prehistoric occupation of a group of four valleys on the Peruvian coast: Huaura, Supe, Pativilca, and Fortaleza - known locally as the "Norte Chico". The initial focus on the project is looking at the origins of the first signs of urban centers with monumental architecture to arise in the Andean region in the 3rd millennium B.C. (see Shady, et al. 2001). The broader goals of the project, however, extend to a more inclusive reconstruction of the entire cultural sequence of this region. The Norte Chico played an important role in Andean prehistory as something of a transition zone between northern and southern spheres of influence. It is also a transition zone in terms of flora and fauna and the occurrence of El Niño events (Haas and Dillon 2003; Billman 2001).

To provide a solid foundation for the longer term goals of the project, we are building a Geographical Information Systems (GIS) database for the entire Norte Chico. Funding for this GIS database has already be obtained and includes a Total Station, high-resolution Global Positioning equipment and a dedicated workstation with associated accessories and software. It will start with digitized satellite images and aerial photographs of all four valleys. High resolution aerial photographs taken by the Peruvian Air Force in the late 1960s and early 1970s provide a base that precedes much of the recent construction in the area. More limited aerial photographs from earlier flights will also be incorporated into the data base as available. Ultimately this database will be
further expanded to include current information about irrigation, land use, agricultural production, as well as native plant and animal communities.

A major part of the GIS database will be data from a complete survey of all the archaeological sites in the Norte Chico region. Today, there is some survey information available for 3 of the valleys (Fortaleza, Pativilca and Supe [Williams and Merino 1979, Vega Centeno, et al. 1998; Shady 2003) but virtually nothing is known of the presence, nature and distribution of sites in the Huaura Valley. There has been only limited archaeological work in Huaura. Max Uhle (1925) collected ceramics from a number of sites in the valley in 1905, and there have been limited excavations at one Middle Horizon site (Shady and Ruiz 1979) and one Middle to Late Archaic coastal site, Bandurria (Fung 1988; Engel 1957, 1966). The present proposal requests funding to conduct a comprehensive archaeological survey of Huaura Valley from the Pacific coast inland 50 km to the modern town of Sayan. Sayan is at an altitude of 800 m above sea level and marks the point where the Huaura Valley narrows substantially as it enters the foothills of the Andes Mountains. The total area to be surveyed covers approximately 300 sq km., including all occupiable areas on hilltops, hill slopes, valley margins and the valley bottom. The survey area will include roughly an area of 2 km on either side of the river and a broader area around the mouth of the valley. The south side of the Huaura Valley is covered by deep recent sand dunes, and exploratory survey in this area indicates that few sites can be located in this zone today. Exposed areas within the dunes will be surveyed. Likewise, while there are sites on mountain tops and on moderate slopes, most of the sidewalls of the valley are too steep for either occupation or survey. High resolution (less than 1 meter) GPS equipment will be used to locate all sites. Furthermore, the project Total Station will be used to establish a string of base stations along the length of the Huaura Valley for future reference and for tying in maps of larger sites. A number of sites in the valley, located by informal surveys, are very large and incorporate multiple occupations. Nelson developed a strategy in the 2003 season in the Fortaleza Valley for recording these large, multicomponent sites. A single continuous area of occupation is designated as a "locality" and aerial photographs are used to outline the layout of specific site components (based on surface artifacts and architecture).
within these localities. These data can then be entered as different layers in the GIS database.

Two survey teams of 6 will conduct the actual field work. Teams will consist of a team leader who is registered with Registro Nacional de Arqueólogos (RNA) (a requirement of the Instituto Nacional de Cultura [INC] in Peru), an assistant team leader, 2 Peruvian student surveyors, and two U.S. student surveyors. Overall responsibility for the fieldwork portion of the project will be assumed by Nelson. Haas, Nelson, Ruiz and Creamer, all with RNA registration, will serve as team leaders for the survey teams. Ruiz, a full-time staff member of PANC will be the co-director of the project with Haas. While most of the field work will be conducted in July and August of 2004, not all of the ground can be covered during this time. All of the valley floor is currently under cultivation, and the teams cannot survey land with growing crops. Because there is an annual growing season on this portion of the coast, crops are rotated throughout the year, and individual fields can be surveyed between the time of harvest and replanting. PANC maintains a small permanent crew at the project headquarters in Barranca and this crew will continue to survey cleared field areas throughout the project year.

PANC has established a bi-lingual program for publishing project results. The final project reports required by the INC are being published in limited editions in Spanish in Peru and made available for a nominal cost on CDs as well. These project reports are also being translated into English and submitted to the Fieldiana series of monograph publications of the Field Museum. Both reports are being made available through the Field Museum's web site as well. PANC is committed to the sharing of data and encourages scholars to use databases developed from project research.

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