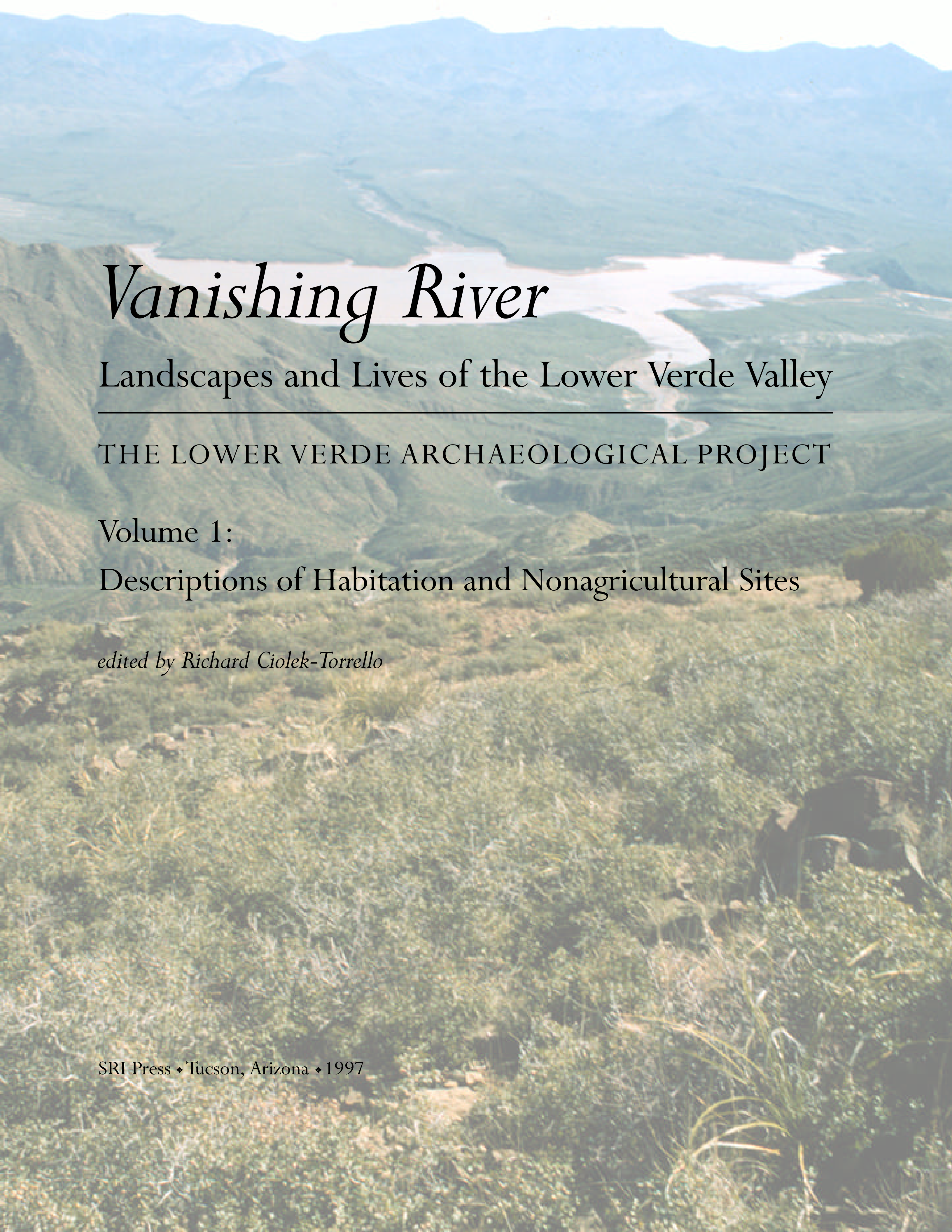

Vanishing River

Landscapes and Lives of the Lower Verde Valley

THE LOWER VERDE ARCHAEOLOGICAL PROJECT

Volume 1:

Descriptions of Habitation and Nonagricultural Sites

edited by Richard Ciolek-Torrello

SRI Press ✦ Tucson, Arizona ✦ 1997

Published by SRI Press,
a division of Statistical Research, Inc.,
P.O. Box 31865, Tucson, AZ 85751.

Report prepared for the
USDI Bureau of Reclamation,
Phoenix Area Office, P.O. Box 9980, Phoenix, AZ 85068
Contract No. 1425-2-CS-01870.

Contract performed under Special-Use Permit (Holder No. 4019-01)
issued by USDA Forest Service, Tonto National Forest.

Production manager: Lynne Yamaguchi
Graphics managers: Susan A. Martin and Cynthia L. Elsner
Document and cover design: Lynne Yamaguchi

ISBN 1-879442-90-6

First edition, first printing: January 1998
Printed in the United States of America.

Contents of CD-ROM:

Vanishing River: Landscapes and Lives of the Lower Verde Valley: The Lower Verde Archaeological Project: Introduction,
by Jeffrey H. Altschul, Stephanie M. Whittlesey, and Richard Ciolek-Torrello

Vanishing River: Landscapes and Lives of the Lower Verde Valley: The Lower Verde Archaeological Project,
Volume 1: *Descriptions of Habitation and Nonagricultural Sites,*
edited by Richard Ciolek-Torrello.

Vanishing River: Landscapes and Lives of the Lower Verde Valley: The Lower Verde Archaeological Project,
Volume 2: *Agricultural, Subsistence, and Environmental Studies,*
edited by Jeffrey A. Homburg and Richard Ciolek-Torrello.

Vanishing River: Landscapes and Lives of the Lower Verde Valley: The Lower Verde Archaeological Project,
Volume 3: *Material Culture and Physical Anthropology,*
edited by Stephanie M. Whittlesey and Barbara K. Montgomery.

Appendixes A–N, AA–CC

Supplemental reports

Catalog of Artifacts Associated with Human Remains

PART 1

Scorpion Point Village

AZ U:2:80/01-819

CHAPTER 1

An Overview of Scorpion Point Village: AZ U:2:80/01-819

William L. Deaver

CHAPTER 2

The Spatial Distribution of Features at Scorpion Point Village

William L. Deaver

CHAPTER 3

The Architecture at Scorpion Point Village: Ball Courts and Pit Houses

William L. Deaver

CHAPTER 4

Nonarchitectural Features at Scorpion Point Village: Cremations, Inhumations, Pits, Work Areas, Middens, and Other Features

William L. Deaver

CHAPTER 1

An Overview of Scorpion Point Village

AZ U:2:80/01-819

William L. Deaver

One of the attractions of archaeology as a vocation or avocation is the lure of discovery: the opportunity to discover the unexpected, something significant. Scorpion Point Village proved to be such an opportunity. As we began to peel back the desert sediments, we exposed far more than we had anticipated. We began the fieldwork expecting to find no more than a dozen pit houses representing a few small pre-Classic period farmsteads scattered along the terrace above the Verde River. Instead, we found the remains of a ball court village (Figures 80a, 80b) with at least 50, and perhaps as many as 300, pit houses.

The site's name, Scorpion Point, derived from a projectile point found above the floor of one pit house (Plate 80a). This point had two long tangs curved inward toward the midline and resembled a scorpion with its tail laid flat and its pincers curved in front of its head. In addition, at about the same time, the author's son visited the site. Though largely unimpressed with the archaeology, he was fascinated with the large number of scorpions he found while scouting the area. These two circumstances suggested to us that "scorpion" should be part of the name: thus, Scorpion Point.

Environmental Setting and Natural Stratigraphy

The Scorpion Point site was located on a remnant of a Pleistocene terrace about 37 m above the Verde River. The terrace surface was broad and nearly level, with a gentle slope to the south (Plate 80b; see Figure 80a). The vegetation on the site was within the Arizona Upland subdivision of the Lower Sonoran Desert community (Turner and Brown 1982:200–203). Plants observed on the site included: saguaro (*Carnegiea gigantea*), cholla (*Opuntia* spp.), prickly pear (*O. phaeacantha*), Christmas cactus (*O. leptocaulis*), whitethorn acacia (*Acacia constricta*), desert hackberry (*Celtis pallida*), blue palo verde (*Cercidium floridum*), creosote bush (*Larrea tridentata*), velvet mesquite (*Prosopis velutina*), *Zizyphus obtusifolia*, wolfberry (*Lycium exsertum*), desert marigold (*Baileya multiradiata*), foxtail brome (*Bromus rubens*), *Centaurea melitensis*, slender-stipe buckwheat (*Eriogonum trichopes*), storksbill (*Erodium cicutarium*), *Erodium texanum*, snakeweed (*Gutierrezia* sp.), and larchleaf golden bush (*Haplopappus laricifolius*). This vegetation was not uniformly distributed across the terrace, but certain plants seemed to correlate with variations in the soils.

The project soils geographer, Doug Pease, inspected several of the trench profiles and described and mapped the soils across the site (Figure 80c). He identified six soil types: (1) Typic Durargids, (2) Typic Haplargids, (3) Typic Calciorthids, (4) Typic Camborthids, (5) Typic Torriorthents, and (6) Lithic Torriorthents. Variations in the degree of pedogenesis in these soils indicated the relative age and stability of different sections of the terrace surface. Based on Pease's notes and our own observations, we further distinguished three subtypes among the Typic Haplargids, differentiated by subtle changes in the development of the argillic horizon or by the matrix in which the soils had formed. In the following discussion, we have grouped these six soil types and three subtypes by relative age: oldest, intermediate, and youngest. The characteristics of these three groups indicate the nature of the geomorphic processes affecting the archaeological deposits.

The oldest soils identified on the terrace were soils with well-developed argillic horizons that had formed in Pleistocene alluvium—namely, the Typic Durargids and two subtypes of Typic Haplargids. The well-developed argillic horizons indicated a ground surface that had been stable probably since the Pleistocene. The oldest of the old soils, the Typic Durargids (soil 1), lay along the extreme northern site boundary. Their argillic horizon overlay a duripan that had formed in Tertiary sediments. The Typic Haplargids extended from the northwestern part of the site to the southern boundaries. In two areas—near the center of the site and along the southern margin (soils 2a and 2b)—the argillic horizons of the Typic Haplargids were well developed. (In contrast, to the north and west [soil 2c], the argillic horizon was less developed and more like the cambic horizon that characterized the Typic Camborthids; this subtype of Typic Haplargids with a weakly developed argillic horizon is discussed below with the Typic Camborthids and Typic Calciorthids.) The Typic Haplargids near the center of the site were deep, fine-textured, loamy, and poorly drained, whereas those along the southern margin had formed in cobbly sediment. The argillic horizons associated with the oldest soils were generally located within 10–30 cm of the surface. On these soils, cultural resources were essentially surficial, with little likelihood of buried cultural materials. A few buried artifacts had been introduced into these soils through bio- and pedoturbation. The fine-textured, poorly drained Typic Haplargids, for example, tend to develop wide cracks when dry, and in some trench profiles, artifacts were found mixed with coarse sands and gravels that had washed into these desiccation cracks.

Of intermediate age were soils with cambic, calcic, and weakly developed argillic horizons—the third subtype of Typic Haplargids, the Typic Calciorthids, and the Typic Camborthids (soils 2c, 3, and 4). These soils were associated with portions of the terrace surface that had continued to aggrade since the Pleistocene and were consequently slightly elevated above the surface associated with the adjacent, older argillic soils. The cambic, calcic, and weak argillic horizons lay under a mantle of 30–90 cm of Holocene colluvium. The presence of lag gravels on the surface of these soils indicated a recent period of active sheet erosion. The calcic horizon of the Typic Calciorthids had probably formed in Pleistocene alluvium and was roughly the same relative age as the argillic soils, though it lay under a mantle of approximately 50–80 cm of Holocene colluvium, indicating that the surface had continued to aggrade. The cambic horizon of the Typic Camborthids and the weak argillic horizon of this Typic Haplargid subtype had probably formed in Holocene colluvium eroding down from the higher land surfaces to the north. Prehistoric houses found in the site areas characterized by these soils originated approximately 30–50 cm below the present-day ground surface and intruded into the calcic, cambic, and weak argillic horizons.

The youngest surface of the terrace was characterized by the Torriorthents (soils 5 and 6). These soils had formed from late Holocene colluvium and were differentiated by the absence of argillic, calcic, and cambic horizons, as the colluvium was too young and the surface too unstable for significant soil development. Found mostly in the north-central and northeastern parts of the site, these fine-loamy to coarse-loamy soils generally became more clayey with depth. The archaeological features discovered in these soils lay some 30 cm–1 m below the present-day ground surface. The vertical stratification of the features indicated that this surface was aggrading during the prehistoric occupation and continued to actively aggrade until relatively recently, perhaps until the late 1800s. Several shallow gullies about 40 cm deep had incised the upslope margin of this soil group near the northern site boundary, with the sediments being redeposited nearby on the toe slope of the colluvial deposits.

Our excavations showed the distribution of prehistoric features, particularly the houses, to correlate with the distribution of the soils (see Figure 80c). In particular, the prehistoric inhabitants appeared to have avoided the argillic soils in locating their houses. Houses were found only on those parts of the terrace characterized by the intermediate-aged and youngest soils, which were better drained than the older argillic soils because of their slight elevation and their lesser development of clay.

Previous Research

Prior to our excavations at the Scorpion Point site, three surveys had identified and described the cultural materials representing this site. The first record of this site was made in 1964 by Morris and Stone (ASU site files), who designated the cultural materials on this terrace remnant AZ U:2:22 (ASU). At this time, the site was recorded as a large sherd-and-lithic scatter across the second terrace above the Verde River with a possible cobble room at the base of the terrace slope (ASU site files). Later, in the late 1970s and early 1980s, during the Central Arizona Water Control Study (CAWCS), the area was revisited and AZ U:2:22 (ASU) was subdivided into four discrete sites: AZ U:2:80/01-819, 81/820, 82/821, and 83/822 (all site numbers share the ASM prefix AZ U:2 and the Tonto National Forest prefix 01; the shortened site number form is used hereinafter). Then in 1989, Northland Research (Dosh and Henderson 1990) visited the area, reevaluating the sites as defined by the preceding CAWCS survey. The characteristics of the site as found in the original survey and in the later CAWCS survey are available only from site cards on file at Arizona State University, and the descriptions are accordingly brief. Northland's published descriptions are more detailed, and the following discussion is based on these. (When the SRI team first reconnoitered the project area, we observed that the cultural materials covered most of the terrace surface where 80/819, 81/820, and 82/821 were located. In consultation with the Bureau of Reclamation and Tonto National Forest, we combined these three sites into a single site, designated AZ U:2:80/01-819. Site 83/822, which was at the foot of the terrace slope, was maintained as a separate site.)

The Northland Research survey team found that the location and general characteristics of 80/819 corresponded with the information in the CAWCS survey records, but that the site appeared to be larger than originally described. Site 80/819 was described by the Northland survey team as an extensive sherd-and-lithic scatter covering approximately 2.5 ha (Dosh and Henderson 1990:77–81). In addition to the artifact scatter, a number of cobble features were identified that appeared to include a coursed cobble structure, rock piles, gravel piles, and rock-outlined features that might have been structures or tent platforms (Dosh and Henderson 1990:79). Based on the types of features and artifacts observed, this site was identified as a possible habitation and agricultural site. Decorated ceramics indicated a Colonial period Hohokam affiliation. Based on the density of artifacts in the southeast corner of the site, the presence of subsurface features was considered likely, and the features in the remainder of the site appeared to reflect agricultural activities (Dosh and Henderson 1990:81). This site as described by Northland Research corresponds to Locus A as defined by SRI.

The Northland survey team described 81/820 as a moderate to dense artifact scatter covering approximately 0.5 ha with a possible cobble masonry field house at the extreme southeastern edge (Dosh and Henderson 1990:81). Again, based on the density and diversity of artifacts, the presence of buried features was considered likely. A single, unidentifiable buff ware sherd indicated a possible pre-Classic period Hohokam affiliation. Site 82/821 was described as a single cobble masonry structure associated with a low-density scatter of chipped (flaked) stone (Dosh and Henderson 1990:81–83). Two possible long cobble alignments that were interpreted as the remnants of berms along a historical-period road were also identified. Sites 81/820 and 82/821 as described by Northland Research correspond to Loci C and E, respectively, as defined by SRI.

The Northland team concluded that these three sites showed evidence of prehistoric habitation and agriculture on the terrace surface. The nature of the artifact distributions and the character of the sediments suggested the possibility of subsurface deposits in some parts of 80/819 and 81/820. Both these interpretations were borne out by the excavations reported here. There are two notable discrepancies between the CAWCS and Northland Research survey descriptions and the findings of our excavations. First, we found the site to be more extensive than originally defined by either survey. In reconnoitering the surface, the SRI team identified three additional loci of cultural materials, confirmed through excavation. The site boundaries we identified in our fieldwork more closely resemble those of AZ U:2:22 (ASU) as defined in 1964 than those used in the later surveys. Second, the buried cultural materials were more extensive and denser than projected. The pre-Classic period Hohokam features, including two ball courts and perhaps as many as 300 houses, were buried beneath a thick mantle of recent colluvium.

Field Methods: Goals, Strategies, Methods, Modifications, and Results

At the onset of fieldwork, the major goal of the Lower Verde Archaeological Project (LVAP) was to learn more about the individual functions of small sites and how they related to larger settlements and agricultural systems (see companion book). We were charged with the task of studying sites that appeared, based on the characteristics of the material culture visible on the desert surface, to represent specialized-activity locales, field houses, farmsteads, and hamlets. The three sites eventually combined as the Scorpion Point site, for example, were characterized by low-density surface artifact scatters and a few features traditionally associated with upland agricultural systems. As noted, however, the appearance of the surface remains proved misleading: the cultural materials embedded in the desert sediments were far more extensive, dense, and rich than estimated. This discovery led us to reevaluate our field strategies, allocations of field effort, crew structure, and research objectives.

We conducted the fieldwork in three sessions, the first two of which had been planned from the beginning of the project. No controlled excavation of sites in the Horseshoe Dam study area had been done before, so the first work session, in the spring of 1992, involved detailed surface collections and limited subsurface explorations at what were then defined as sites 80/819, 81/820, and 82/821. Based on the early findings of this work, the site boundaries were redefined to combine these three sites into a single site, 80/819. At the end of this first session, we evaluated the results and increased the level of effort planned for studying this site. At this point, though we had discovered more features than anticipated, our modifications to the work plan were still driven by the impression that this site was an aggregate of several dispersed small settlements and specialized-activity locales: a “big small site,” as we referred to it. This conclusion was based on the discreteness of feature concentrations, the lack of stratigraphic superimposing, and the low densities of artifacts in fill deposits.

The second field session began in the fall of 1992 and involved more-extensive excavation. About halfway through this session, we discovered that 80/819 was in fact a big site. Further exploratory excavations in Locus A, which essentially corresponded to the original 80/819, uncovered a sequence of superimposed structures. The complexity of these deposits exceeded our ability to study them adequately under the original budget, and so the Bureau of Reclamation directed us to concentrate the field effort in Loci B and C and to write a proposal for additional investigations in Loci A and D. Negotiations with the Bureau of Reclamation resulted in the funding of a third field session, carried out in the spring of 1993. It was at this time that we altered our research goals most significantly to address the research potential of a large site. During this last work session, in addition to finding many more houses, we discovered two ball court floors. By the end of the excavations, the classification of the Scorpion Point site had shifted from specialized-activity locale, to field house, to farmstead, to hamlet, to village, and, finally, to ball court village, covering the whole gamut of the pre-Classic period settlement paradigm.

The original research goals and field strategies, and subsequent modifications to these, are discussed below in terms of three phases. These phases represent the objective of the tasks rather than the three field sessions, though these generally correspond. Specific field strategies and methods were needed to achieve the objective for each phase; because the objective of each phase differed, so did the strategies and methods used to collect the pertinent information. Phase 1 was devoted entirely to site definition; however, because the subsurface deposits were so extensive, site definition continued during the second field session, even as Phase 2 began. The objective of Phase 2 was to study households, and the work involved intensive excavations concentrated on houses discovered during Phase 1. Phase 3 represented a major shift in the research goals; it emphasized village organization, growth, and development, and relied on extensive exposure of the site area with less-intensive excavation of household groups. The objective and field strategies for each of these phases are discussed below. Because the findings of each successive phase necessitated modifications to the original research goals and work plan, the following discussion includes an overview of the findings from each phase.

Phase 1: Site Definition

The objective of this phase was to define the distribution of cultural materials both on and beneath the surface. The field strategy was to map the sites, collect the artifacts from their surface, and conduct limited exploratory excavations. Preliminary field reconnaissance indicated that the artifact distribution extended beyond the previously defined boundaries for sites 80/819, 81/820, and 82/821. Furthermore, we identified three loci of surface artifacts that were not included in the original three sites but that were equally dense. We therefore decided to treat the prehistoric cultural materials on the surface of this terrace remnant as a single site, and to maintain any differences in the distributions of cultural materials by designating loci. This gave the site well-defined topographical limits on the north, south, and west sides. The eastern limit for the site was established where the main buildings of the historical-period dam construction camp (AZ U:2:39 [ASM]) had been. The surface of the terrace in this area had been extensively disturbed; any vestiges of the prehistoric site that continued farther to the east would have been severely disturbed. The revised site area measured roughly 570 m east-west by 330 m north-south, and covered 11.28 ha. The revised boundaries of the prehistoric site included several outlying features related to the dam construction camps; thus, the boundaries of the prehistoric site 80/819 and the construction camp AZ U:2:39 (ASM) overlapped somewhat. The possible agricultural features along the southern margin of the terrace edge (formerly site 82/821) were designated a discrete locus (Locus E) at this time. Investigations in this locus, beyond the collection of surface artifacts, were conducted by the agricultural study team and are reported in detail in Volume 2, Chapter 4.

In Locus E, a series of rock alignments were mapped and several trenches were excavated to evaluate these features and to obtain soil, pollen, and phytolith samples. A nearby field house, located at the edge of Locus C, also was completely excavated. Our investigations yielded results similar to those of other studies of prehistoric dryland fields in the Horseshoe Basin (see companion book). The system apparently dated to the Classic period. As elsewhere, no evidence of cultigens was found, and the only paleobotanical remains found represented wild plants found in the modern environment.

The fieldwork described here was directed at first defining the entire site area and then investigating the possible habitation areas across the northern part of the site. The locations of possible historical-period features associated with the Horseshoe Dam construction camp inside the revised site boundaries were mapped, but because the historical-period features had already been studied (Douglas et al. 1994), no attempt was made to map all of them.

Mapping and Surface Collection

The purpose of the mapping and surface collection was to systematically document the distribution of cultural materials on the surface of the site and to identify possible habitation areas likely to contain subsurface features and deposits. Only a limited number of subsurface test units were planned, and because of the large site area, these units had to be carefully selected. The decision to expand the site boundaries also expanded the scope of this work, because now more area had to be covered. The field strategy was to map all possible prehistoric cultural features visible from the surface, collect a systematic sample of the surface artifacts, analyze the relative density and diversity of artifacts, and then place a limited number of backhoe trenches and hand-dug test pits in the most-promising areas.

To establish the site grid, Jim Holmlund of Geo-Map, Inc., set three mapping datums, provenienced relative to the Arizona State Plane Coordinate System (ASPCS) grid, at the approximate center of each of the three originally recorded sites. A 460-m-long east-west baseline was established with grid points staked every 20 m. The remaining site area was laid out into 20-by-20-m blocks from this baseline. The locations of all surface features across the northern part of the site were either mapped with a transit or recorded on field maps relative to the 20-by-20-m grid blocks (Figure 80d). Collecting 100 percent of the surface artifacts was not feasible, given the large area of the revised site, so a systematic sample of 25 percent was collected from 10-by-10-m squares at the southwest corner of each 20-by-20-m grid block (Figure 80e). These surface collections represented all of the areas previously included within the boundaries of the three sites, and were extended beyond the limits of the possible habitation areas. Surface artifacts were not collected in areas where the terrace surface had been severely disturbed by roads, washes, or other factors. A tally of the kinds and numbers of artifacts collected from each unit was maintained in the field and used to generate field maps of the artifact distributions.

We expected that habitation areas would be characterized by relatively denser and more-diverse distributions of artifacts. The distribution of surface artifacts is represented in Figure 80e, which was developed from more-detailed analyses conducted after the completion of fieldwork but roughly corresponds to the maps generated in the field. During fieldwork, density isograms were drawn identifying areas with low, moderate, and high artifact densities. These three categories correspond approximately to the 0.13, 0.58, and 1.0 isograms, respectively, shown in Figure 80e. The isogram intervals used in the figure were selected based on the number of units and artifacts collected (Figure 80f). Approximately one-third of the collection units had fewer than four artifacts (0.04 artifact/m^2) and approximately two-thirds had fewer than thirteen artifacts (0.13 artifact/m^2). Ninety-five percent of the collection units had fewer than 0.58 artifact/m^2, and 99 percent of the collection units had fewer than 1.74 artifacts/m^2. For graphic representation, 0.13 artifact/m^2 was selected as the minimum isogram value, because it corresponded most closely with the distribution of units that included multiple artifact classes and, for the most part, its isogram encompassed the areas where habitation features were later found. Thus, on this terrace, under these geologic conditions, a consistent artifact density of slightly more than 0.1 artifact/m^2 appeared to indicate the site boundaries. The isogram values of 0.58 artifact/m^2 and 1.0 artifact/m^2 were selected to highlight the "hot spots" likely to represent the areas of densest activities and midden accumulations.

Overall, the density of surface artifacts was low: only six collection units had 1 artifact/m^2 or more, and none had more than 2.37 artifacts/m^2. By most standards, most of the surface area would not be considered part of a site. Instead, the area would be interpreted as a low-density, dispersed artifact scatter probably resulting from repeated low-intensity, special-purpose activities such as plant procurement and processing away from the main habitation area. Paradoxically, the diversity of artifact types indicated a wide variety of activities, as might be found at habitation sites.

Diversity indices were not established in the field; rather, the range of artifact types recovered in each collection unit was coded on the map. This approach is analogous to the MAC (multiple artifact cluster) concept established during the Salt-Gila Aqueduct site investigations by the Arizona State Museum (Teague 1984:52–57). Extensive surface collections at sites along the Salt-Gila Aqueduct and other parts of the Central Arizona Project established that the co-occurrence of different artifact classes—sherds, flaked stone, ground stone, shell, and bone—was a better indicator of the location of subsurface features than the presence of any single artifact class alone (Czaplicki and Heathington 1986:34–35; Czaplicki and Ravesloot 1989:134; Teague 1984:52–57). Generally, four prehistoric artifact classes were recovered from the surface of the Scorpion Point site: sherds, flaked stone, ground stone, and shell. Historical-period artifacts were not included in these evaluations. Four diversity classes and two subclasses were established. Class 1 included those units that had only one artifact class, typically either sherds or flaked stone. Class 2 included those units from which two artifact classes were recovered. Most Class 2 units had sherds and flaked stone, but a few had flaked stone and ground stone and were designated Subclass 2a. Class 3 units had three artifact classes present, usually sherds, flaked stone, and ground stone, though sherds, flaked stone, and shell were recovered from a few units, designated Subclass 3a. There was only one Class 4 unit, with all four artifact classes present. The distribution of subsurface features discovered in later exploratory excavations correlated well with the distribution of units with two or more artifact classes, and the distribution of units with multiple artifact categories present (Class 2, 2a, 3, 3a, or 4) correlated well with the density distribution of artifacts. However, the distribution of Class 3, Class 3a, and Class 4 units did not correlate well with the areas of highest density, as might be expected. The distinctions between the multiple-artifact classes and subclasses were therefore not germane to definition of the site. All units in which two or more artifact classes were represented are shaded in Figure 80e.

Six loci were identified based on the distribution of surface artifacts and features, with the loci boundaries generally correlating with the 0.13-artifact/m^2 isogram (see Figure 80e). Locus A encompassed the area from approximately N440 to N560 and E800 to E940, and included many of the surface features, as well as the artifact concentrations surrounding two "hot spots" that were possible midden deposits. This locus corresponded roughly to 80/819 as defined by Dosh and Henderson (1990), except that we extended the eastern boundary beyond the dirt road to include the artifact concentration surrounding the possible midden deposit at grid coordinates N485, E925. Locus B, which was entirely outside the previously defined sites, included the area from N440 to N500 and E680 to E740, thus surrounding the "hot spot" at grid coordinates N465, E725. Locus C was originally defined as the artifact concentration immediately around the "hot spot" at grid coordinates N345, E605; this corresponded to the original site 81/820 (see Dosh and Henderson 1990). After further analyzing the surface artifact distribution, however, we extended the northern boundary of this locus to follow the 0.13-artifact/m^2 isogram. The narrow "neck" connecting Loci B and C corresponded to a wash channel, and the artifact density in this area might have resulted from erosion and redeposition of artifacts from Locus B by this wash. Locus D was the artifact concentration surrounding the "hot spot" east of Locus A. Like Locus B, it was entirely outside the previously identified sites. Locus E included the possible agricultural features along the southern margin of the terrace. Locus F corresponded to the artifact concentration north of Locus B and might in fact have been a continuation of Locus B that had been arbitrarily separated by the road.

Each locus, except Locus E, was characterized by a diverse, low-density artifact scatter surrounding at least one possible midden deposit. The diversity of artifact types in these loci indicated a variety of activities, as would have occurred at habitations. The presence of a possible trash area further supported the interpretation that these loci represented prehistoric residential areas. All loci except Locus E were identified as habitation areas. Locus E was identified as a specialized agricultural area. The relatively low artifact density in the five habitation loci supported earlier assessments that this site represented the remains of small, briefly occupied settlements and belied the extent of subsurface deposits. These five possible residential areas were the targets of later subsurface explorations.

Exploratory Excavations

The distribution of surface artifacts at the site was the end result of many factors, including the type and intensity of activities that occurred on the terrace surface, the quantity and diversity of items discarded during these activities, the pattern of refuse disposal practiced, subsequent deposition and erosion of sediments, and historical-period and modern disturbances associated with the Horseshoe Dam construction camp, ranching, and public recreation. The objective of the exploratory excavations was to determine if the distribution of surface artifacts would indicate the presence, location, and density of subsurface features associated with habitation areas. These explorations revealed a strong correlation between the distribution of surface artifacts and that of buried features, though the density of subsurface remains exceeded expectations based on the low-density surface distribution.

Backhoe trenching was considered the most efficient way to effectively evaluate how many subsurface features were present and where. Initially, we planned only a few trenches in the areas with the densest and most diverse distribution of surface artifacts. Because of the unexpectedly high density of features discovered, particularly pit houses, we added more trenches to try to further define the distribution of subsurface features. Three sets of trenches were excavated, at progressively smaller intervals. The first two sets of trenches were completed during the first field session (Figure 80g). The last set was completed early in the second field session. Eventually, 104 trenches with a total length of 2.031 km were excavated (Figure 80h).

All backhoe trenches were excavated to a depth of 1.5–2 m below the present-day ground surface. Most trenches were oriented north-south, except along Horseshoe Dam Road, where trenches were canted parallel to the road, and one short trench in Locus A that was oriented east-west to test a possible trash midden. After the trenches were dug, cross sections of features and representative soil profiles were drawn, and the project soils geographer inspected trench profiles to map the distribution of soil types. We had planned additional trenches at the eastern margin of Locus A to explore the area adjacent to the other "hot spot," but did not dig them because a main water line to the dam keeper's house was located somewhere in this area and its precise location was unknown. The presence of this water line affected all stages of trenching; consequently, we cannot be absolutely certain of the discreteness of Loci A and D.

Our initial objective was to explore for subsurface features and to locate feature concentrations rather than individual features. We excavated 22 trenches in Loci A, B, C, and D, laying out the trenches at 20-m intervals in a checkerboard pattern that provided an efficient low-intensity sampling scheme. We found features in each of the four loci, for a total of 21 features: 17 houses, 2 extramural pits, an extramural hearth, and a possible horno. This inventory includes three possible pit houses exposed in the Horseshoe Dam Road road cut. Nine of the houses had burned.

The number of structures identified from the first set of trenches exceeded our expectations. Accordingly, we excavated a second set of 25 trenches. Our revised objectives at this time were to explore the four loci more intensively, to explore Locus F, to further define the loci boundaries, to explore for features in the areas between the loci, and to evaluate particular surface features. We placed trenches at 10-m intervals between previously excavated trenches, and at a minimum of 20-m intervals in the areas previously unexplored, except for one trench selectively placed across a possible roasting pit that was visible from the surface. With this second set of trenches, we located another 14 features: 9 houses, 4 extramural pits, and a midden deposit. Eight of these houses had burned.

These first two sets of trenches were completed during the first field session, and the findings from these 47 trenches provided the basic information used to develop the plan of work for Phase 2. During the hiatus between the first and second field sessions, we decided to excavate more trenches to define more precisely the boundaries of the subsurface feature distribution. At the beginning of the second field session, we excavated another 56 trenches and extended one of the previous trenches. Except for two selectively placed trenches, the minimum distance between trenches was 10 m. We thus identified another 15 features: 8 houses, 2 inhumations, 2 hornos, a pit, a roasting pit, and a midden. Five of these houses had burned. In all, 50 features were identified during trenching (Figure 80i): 34 houses, 14 extramural features, and 2 inhumations.

During the first field session, we excavated three test pits by hand in three structures to obtain chronological samples and controlled samples of the fill deposits. Two were expanded to expose larger portions of the houses: one house that was partially exposed in the Horseshoe Dam Road right-of-way was completely excavated, and one at the northern end of Locus A was partially excavated. Archaeomagnetic dating samples were collected from hearths in these three structures as well as from the hearth in a fourth structure, exposed in a trench profile. These samples were collected to determine the utility of this dating method in the project area and to assess the range of occupation, as few diagnostic artifacts were found.

Summary of Phase 1 Work

As is evident in Figure 80i, the distribution of subsurface features correlated well with the loci as defined by the distribution of surface artifacts and features. Trenching revealed that the incongruity between the low density of surface remains and the relatively high density of subsurface materials was due to a thick layer of relatively sterile colluvium that covered the subsurface deposits. The strength of the spatial correlation between artifact concentrations and subsurface feature concentrations indicated that most of the artifacts on the surface had probably been moved upward by rodents churning through the soft desert sediments. Relatively few appeared to have been laterally displaced by erosion. Though the distribution of features correlated with the loci boundaries, the subsurface distribution of features in Loci B and C suggests that these loci probably represent a more or less continuous distribution of features along a low topographic rise. Locus F was also located along this physiographic feature and, as noted earlier, might have been part of Locus B. Because we could not thoroughly explore the eastern part of Locus A, we could not verify the apparent discreteness of Loci A and D.

It was clear at the completion of Phase 1 that Scorpion Point was not strictly a small site (see Figure 80i), but even though we had discovered more houses than anticipated, the overall impression was still that the site represented a cluster of several small settlements scattered across the terrace surface. None of the features were superimposed, as is common in larger settlements, and we had recovered few artifacts from feature fill, indicating little trash disposal in the houses after abandonment. The paucity of trash in abandoned houses suggested briefly occupied single-component settlements. The few painted ceramics recovered from previous surveys and from our exploratory units indicated occupation during the late Pioneer, Colonial, and Sedentary periods, and the first four archaeomagnetic dates confirmed early and late Colonial period occupation. This preliminary chronological information thus indicated occupation on the terrace surface from the eighth through the mid-twelfth centuries A.D. relative to modern Hohokam chronologies (Dean 1991). We accordingly hypothesized that this site represented the remains of several dispersed residential units occupied over a long period of time. The relatively dense concentration of features in Loci A and B suggested perhaps a hamlet-sized settlement, but we conjectured that the other concentrations represented the remains of farmsteads.

Phase 2: The Big Small Site

The original objective of the second phase of work was to obtain information about pre-Classic period rural Hohokam settlements. Because the site still appeared to fall within the scope of the research design as a cluster of several rural settlements, and because these rural sites are, by definition, the residences and ancillary facilities of one or a few households, the household was the critical unit of study. Our intent, therefore, was to document the characteristics of pre-Classic period Hohokam households. Because of the size of the site and the large number of features, sampling was necessary. The chronological range of the ceramic types recovered during Phase 1 suggested the potential for comparing and contrasting the size, composition, function, and organization of prehistoric Hohokam households spanning perhaps four and a half centuries. The proposed field strategy was to develop a sampling plan, select an appropriate sample of houses for investigation, and excavate houses and associated extramural features to collect the necessary data classes. Because of the number of houses discovered, the generic difficulty in dating extramural features, and the fact that many houses had burned, we emphasized the excavation of houses over that of extramural features. We were confident that we could obtain samples of archaeobotanical materials from the burned houses that would be adequate to characterize the prehistoric agricultural and subsistence resources. Our revised objective was to fully excavate as many of the pre-Classic period pit houses as possible.

In developing the sampling strategy, we took into consideration the research goals, the results of the site definition work, and the constraints of the project budget. Because Scorpion Point still appeared to be a cluster of several small settlements and because none of the feature concentrations exceeded the small-site research scope, it was not deemed necessary to modify the original scope of work. At the same time, the quantity of subsurface deposits and features found here suggested that the information we needed to achieve the research goals was present at this site, so we allocated it more field effort, at the expense of sites that had shown less promise. We did not, however, change the composition and size of the field crew, which consisted of a field director, three professional archaeologists, and two laborers. Instead, we adapted the sampling and field strategies to this crew size and structure, expanding the second field session first to 12 weeks and eventually, as site definition work continued and more features were found, to 16 weeks, to achieve the desired objectives. After we discovered deeply buried, stratified houses in Locus A, the Bureau of Reclamation directed us to concentrate the field effort on exploring Loci B and C. Excavations in Loci A and D were carried out during Phase 3, discussed below.

To properly document the characteristics of pre-Classic period Hohokam households, we had to select an appropriate sample. This task presented the practical problem of defining the sample universe—the number of households. At the completion of Phase 1, we had little more to guide us than the spatial distribution of possible houses, coupled with the limited architectural details that were visible from the sectional exposures in the trench walls. In particular, we observed that some of the house floors were deep below the ground surface, whereas others were shallow. These deep and shallow houses appeared to occur in pairs, a pattern discussed in more detail below.

The purpose of the sampling scheme was first to identify possible households and then to select households representing different periods of time. We identified possible households by hypothesizing the size and structure of a pre-Classic period household and then evaluating the results of the site definition in light of this hypothesis. Because diagnostic artifacts were generally absent from the fill of these houses, no chronological information was available. We hoped to achieve a good chronological sample by selecting households from different parts of the site.

Since Wilcox's elucidation of the internal structure at Snaketown (Wilcox et al. 1981), the arrangement and development of Hohokam settlements has become a focal point of Hohokam research. It is clear that pre-Classic period settlements followed general patterns in the arrangement of structures and other facilities relative to one another (Ciolek-Torrello and Greenwald 1988; Doelle et al. 1987; Gregory 1984; Henderson 1987; J. Howard 1985; Wilcox et al. 1981). The domains of pre-Classic period households included not only the intramural domicile and storage space but also extramural space, where most daily activities probably occurred (Wilcox et al. 1981:154–155). For this discussion we have adopted two concepts from the literature on pre-Classic period settlement structure: *house cluster* and *courtyard group*.

The *house cluster* as defined by Wilcox (Wilcox et al. 1981:155) is the archaeological representation of the synchronic aspect of a household, and is defined as two or more houses of the same phase that have doorways opening onto a common area suitable for outdoor activities—the courtyard. The houses in a house cluster are not necessarily absolutely contemporaneous but can be classified as contemporaneous at the level of precision of the available chronological information. These house clusters consist of one or more dwelling structures with or without an ancillary nondwelling structure. At the site of Siphon Draw, Gregory (1984:135–168) carefully documented the structure of these households, which typically consisted of two houses, one of which was always larger than the other (Gregory 1984:139, 147, 151). This two-house, large-house–small-house pattern is evident at other sites as well and appears to represent a basic unit (see Ciolek-Torrello and Greenwald 1988:136; Doelle et al. 1987). Functionally, the two houses may both represent dwelling units, as was the case at Siphon Draw. This would mean that the pre-Classic period household, as used here synonymously with Wilcox's *house cluster*, encompassed the structures and associated features of a cooperative residential group. In such a case, the number of households would not equal the estimated number of residential structures identified during site definition. As noted, however, not all structures represent dwellings; some may represent ancillary, nondwelling components of the household's property.

The *courtyard group* (J. Howard 1985:313) represents the diachronic component of the household by emphasizing the courtyard that was the focal point of most Hohokam domestic groups (Ciolek-Torrello 1988:171). These courtyards often persisted over a time span longer than the use life of structures and associated facilities (Ciolek-Torrello 1988:171;

Henderson 1987:115; J. Howard 1985). Over time, as the composition and size of the household changed, house clusters progressed through a developmental cycle, with structures and other facilities added and deleted. The persistence of the courtyard space argues in favor of a household lineage.

Based on these concepts, we expected that a pre-Classic period household would be characterized in the archaeological record by one or more structures, of which at least one was the primary residence, with doorways opening onto a common extramural space. However, at the level of excavations completed during Phase 1, the courtyard would hardly be visible, and the orientation of the houses, and therefore their "relatedness," could not be confidently determined from the cross-sectional exposures in trenches. We therefore had to rely on spatial proximity to postulate house clusters and courtyard groups at this point. As Hohokam households are represented by a consistent arrangement of houses and other facilities around the extramural courtyard space, we expected that the house clusters and courtyard groups would have a consistent size, reflecting the household's perception of the appropriate spacing between the various components of the household's property. Houses that were closer to one another were more likely to be related than houses farther apart, but how far apart could two houses be from each other and still represent either a house cluster or a courtyard group?

In Gregory's (1984:135–168) detailed analysis of the site structure at Siphon Draw, he observed certain consistencies in the distances between structures and other facilities of house clusters. At this site, the straight-line distance between the doorways in Santa Cruz phase house clusters varied within a narrow range of 14–17 m (Gregory 1984:147, 151). This provided an estimate of the minimum diameter for the courtyard area. This distance was measured between doorways, however, and in our trench profiles we could not be certain what part of the house was represented. On Gregory's maps of the house cluster sequences, the average distance between the centers of structures in a house cluster was about 20 m, with a minimum distance of 17 m and a maximum of 29 m but with most clustered under 20 m. With the one maximum distance of 29 m deleted, the mean distance between house centers was 18 m. This mean distance was the same as the distance between structures at the Smiley's Well single-component farmstead on Queen Creek (Sires 1983:75, Figure I.5.1). Thus at these two rural sites, 18 m appeared to be the appropriate distance between structures in the same house cluster. The importance of using rural sites to obtain this estimated distance is that, in these types of settlements, household clusters tend to be more spatially discrete. Thus this estimate is considered an approximation of the maximum desirable distance. Given the variation in these measurements and the uncertainty about which part of each house was exposed in our trench profiles, a distance of 20 m seemed a reasonable estimate of the distance between structures in a house cluster. We accordingly redefined our working hypothesis for pre-Classic period households as two or more structures typically no more than 20 m apart.

We then applied these spatial constraints to analyze the distribution of houses discovered during Phase 1. For this analysis we assumed a typical maximum length of 5 m for each house. Because their orientations were unknown, the houses were plotted as 5-m-diameter circles, with the arc intercepting the trenches as closely as possible to the exposed edges of the houses. Larger circles with 20-m radii were plotted using the same centers as the circles representing the houses. Any other house encompassed or intersected by these 20-m-radii circles was considered a possible house cluster companion. From this exercise, we identified 24 possible house clusters, each encompassing houses no farther than 20 m from any other house in the same cluster. The results are shown in Figure 80j. The clusters contained up to five houses. Eight clusters were represented by one house only; 12 contained two houses; two contained three houses; and one each contained four and five houses. Clearly, most clusters contained few houses. This seemed to support the field interpretation that this site consisted primarily of dispersed farmsteads. The hypothetical house clusters with three or more houses were located near the cores of Loci A and B adjacent to artifactual "hot spots" identified in the surface collection units. These two locations might have been occupied over a longer period of time than other areas or occupied by multiple households and were identified as possible hamlets.

In addition to the spatial clustering of houses, we observed that some house floors exposed in the trenches were deep (more than 70 cm below the ground surface) and others were shallow (less than 70 cm below the ground surface). An equal number of deep and shallow houses were identified ($n = 16$); information was not available on two houses identified in the Horseshoe Dam Road road cut. Nearly all of the deep houses (14) showed evidence of burning, whereas only about one-half (7) of the shallow houses appeared burned. Thus there appeared to be an important dichotomy between these deep and shallow houses: the two house types appeared to have had different abandonment processes. The differences might reflect differences in the function or age of the structures; we conjectured that they reflected differences in house function. Because digging a deep house pit would require greater effort, we conjectured that the deeper house floors represented more-formal architectural units than the shallower houses and were possibly residential structures. The shallow houses, on the other hand, showed less effort, and we conjectured that these might have been ancillary domestic structures. We also observed that the deep and shallow houses often occurred in pairs: 6 of the 10 two-house clusters shown in Figure 80j consisted of a deep-floored house paired with a shallow-floored house. In the single three-house cluster that consisted of two deep houses and a shallow house, each deep house was closer to the shallow house than to the other deep house. This apparent pairing of the two architectural types led us to hypothesize that the deep house represented the large primary residential unit of a household and the shallow house represented the smaller ancillary structure found in the small-house–large-house clusters identified at Siphon Draw and other sites.

The hypothetical house clusters shown in Figure 80j constituted the sampling universe. Our objectives were to test the pre-Classic period household model described here and to collect information on the composition, structure, function, and age of these households. To evaluate the household model we needed orientation and chronological information from the houses. Because we found no houses in Locus F and no shallow houses in Locus D, we initially selected one pair of deep and shallow houses in each of Loci A, B, and C for study, in addition to the two houses completely or partially excavated during Phase 1. The house pair initially selected in Locus A is not shown in Figure 80j, because we determined that neither feature was a house but simply part of the thick cultural horizon in this locus. We then chose an alternative pair in Locus A. It was in the process of exposing this alternative pair that we discovered the depth and complexity of the deposits in Locus A. We then suspended excavations in this locus and concentrated the field effort in Loci B and C, selecting two additional house pairs, one in Locus B and one in C, for excavation. We selected the pairs from different parts of the loci to evaluate whether the overall occupation represented a brief dispersed occupation, the drift of one or more settlements over time, or periodic reoccupation over the four and a half centuries represented by the sparse ceramic data. A minor consideration in selecting the initial sample was that at least one of the houses in each of the house pairs be burned, to increase the probability of recovering a rich body of information.

To evaluate the model, we needed to determine whether the houses opened onto a common courtyard area and whether they were of approximately the same age. We needed orientation and chronological information for each structure in the selected house pairs, as well as information about architectural variability, house function, and agricultural and subsistence practices. The field strategy was to remove the overlying colluvial deposits to expose the plan view of each structure and then to excavate these houses fully. Initially, the outlines of two houses in Locus B were cleared by hand. Because of the thick clayey loam sediments, this proved to be a difficult and time-consuming task. A backhoe with a 2.5-m-wide straight bucket was used to remove the overburden deposits from the other houses. We soon discovered that excavating a 10-by-10-m unit ensured that the full outline of a house would be cleared while providing a uniform-sized recovery unit. Excavating in units of this size also exposed some of the associated extramural features. Thus, for each house pair, a 200-m^2 area was horizontally exposed. The trench profiles indicated the depth to which the overburden needed to be removed. In several house pairs, we excavated a 1-by-2-m test pit above each house, to the depth of the top of the house pit, to obtain a controlled sample of the overburden deposits. Given the small size of the crew and the low quantity of artifacts recovered, however, we found these units inefficient and discontinued them. All backhoe stripping was monitored by at least one crew member, who was responsible for marking the locations of features and collecting artifacts from the backdirt.

The results of excavation of the selected house pairs in Loci B and C both supported and contradicted the model. Typically, there were architectural differences between the deep and shallow houses. The deep houses were consistently larger than the shallow houses and contained interior features that indicated a habitation function. The smaller, shallow houses tended to lack either entry vestibules or interior hearths or both, suggesting nonhabitation functions, though one small shallow house had a complement of features indicating habitation. In only two of the four pairs, however, did both houses open onto a common courtyard area. In these two pairs the distance between house centers was 10.5 m and 11.7 m. These measurements suggested that earlier we had overestimated the size of the household area and that there might be more households represented at this site than originally estimated. This was obviously the case with regard to the other two hypothetical house pairs, which clearly contained units from different households. Furthermore, when the overburden was removed from each 10-by-10-m square, we found additional houses that had not been discovered during trenching. In the first eight stripping units, which we expected to contain nine houses, we identified an additional three houses, including one that was stratigraphically superimposed on another. There were also two examples, not included in the house count, of houses that appeared to have been constructed within the pits of older houses. The higher density of houses indicated a more intensive occupation and reoccupation of the area than the results of the Phase 1 excavations had indicated.

It thus became obvious during Phase 2 that Scorpion Point was a village and not a small rural settlement. As we were preparing a research design and field strategy for further excavations in Loci A and D, we decided to remove the overburden from a broad area of Locus B. This would provide an areal sample from this locus to compare with the areal sample we expected to obtain from Locus A. Our primary purpose in exposing these broad areas was to observe the internal structure of the settlement. Secondarily, we wanted to determine the effectiveness of the trenching scheme in locating pit houses. Accordingly, we stripped an area of about 1,270 m^2, approximately 50 percent of the locus, around the two previously sampled house pairs in Locus B (Figure 80k).

In addition to the six houses already discovered through trenching, we found six more houses, two stratigraphically superimposed on other houses. The organization of these houses showed a definite pattern, and two discrete house groups were apparent. What we found in this areal exposure indicated that the paired large and small houses might represent a basic residential unit at this site.

Applying the results of the areal exposure to estimate the effectiveness of the trenching pattern in locating structures, we found that, using a 10-m trenching interval, we had located about one-half of the pit houses present. Using the initial 20-m checkerboard trenching pattern, we had located only one-fourth of the houses in this area. Extrapolation of these sampling figures and the number of houses identified in the trenches indicated that there might have been as many as 38–76 houses in Loci B and C. The results of the stripping in Locus B, which exposed 12 houses in the 1,270 m^2 stripped, yielded an apparent density of one house for every 106 m^2. Extrapolation of this revised figure across Loci B and C yielded an estimate of about 137 houses in these two loci. Based on these two lines of evidence we estimated between 38 and 137 houses in Loci B and C, or 19–69 households, assuming each household comprised two structures. The maximum estimates based on stripping are undoubtedly high, because stripping units targeted concentrations of houses, leaving out areas with fewer or no houses.

In addition to the single house completely excavated during Phase 1, and the eight excavated in the household-sampling scheme, another six pit houses, most in Locus B, were excavated (see Figure 80k). These additional six houses were selected because they (1) were stratigraphically superimposed on other structures and thus provided a relative sequence of architectural types and associated material culture, (2) were located at the margins of the loci and were excavated to obtain a sample from the periphery, (3) were part of an apparent house cluster, or (4) were burned and appeared to contain a rich material culture inventory. In total, 15 of the 27 identified pit houses in Loci B and C were excavated. Additionally, all structures in one house cluster in Locus B were completely excavated.

Phase 3: The Big Site

When we came to realize that Scorpion Point was a village rather than a cluster of small settlements, we had to abandon the small-site research design and field strategies. At the end of the second field session, we met with the Bureau of Reclamation and negotiated a third phase of work. The archaeological reality of this site necessitated that we retool the research design to address issues specific to large sites. The research goals were shifted toward studying the spatial, structural, and functional relationships between the larger villages and the smaller settlements. The emphases on agricultural strategies, cultural affiliation, temporal occupation span, lithic procurement and use, exchange, and specialization were maintained, and two more topics were added: site structure and regional chronology.

With regard to site structure and spatial organization, we expected that as more families lived in closer proximity to one another, the arrangement of features would become more formalized, reflecting the demarcation of properties and space belonging to separate households. We also expected that these arrangements of household groups relative to one another would reveal higher levels of social organization and integration within the settlement, reflecting shared cultural concepts. To understand the cultural affiliation of the peoples who settled and occupied Scorpion Point, we thus became concerned with comparing and contrasting the site structure at Scorpion Point with the structure evident at contemporaneous Hohokam village settlements along the lower Salt and middle Gila Rivers.

Even though chronology had been a concern in the small-site research design, the objective was primarily to date the small sites. Reconstructing village structure similarly required good control of the features, particularly houses, with regard to chronology. As a village site, however, Scorpion Point now provided an opportunity to address the broader issue of the pre-Classic period chronology for the lower Verde region. The abundance of burned houses and the presence of well-prepared hearths in the larger habitation structures provided an opportunity to collect and analyze a significant number of chronometric samples. Given the time span represented by ceramics from the Snaketown through the Sacaton phase, we now had the opportunity to collect sufficient information to construct a chronology of pre-Classic period occupation in the lower Verde project area.

We shifted our field strategies to emphasize the study of site structure rather than individual households. Our objective was to broadly expose the site area to document the distribution of features and, particularly, the orientation of houses. We had learned from stripping in Loci B and C that mechanical removal of the overburden would reveal this information quickly. However, broadscale removal of the uppermost stratified deposits in Locus A (where most of the Phase 3 field effort was concentrated, because it contained some of the deepest and thickest cultural deposits found at the site) would have meant wasting an opportunity to collect samples from a known relative chronological sequence spanning most of the site occupation. Before commencing broadscale stripping, therefore, we excavated a series of 1-by-1-m test pits to collect controlled samples from the overburden deposits. Once samples had been collected, we removed the remaining overburden to a depth where the outlines of the houses were clearly visible, typically between 40 and 60 cm below the present-day ground surface.

In Locus A, we planned to remove the overburden from an area approximately 5,000 m^2. Because of the extraordinary thickness of the deposits in some parts of this locus and the number of features discovered, we exposed only 2,745 m^2 (Figure 80l; Plate 80.A), approximately 19 percent of the locus. In addition to this broadscale stripping, the overburden was removed from above the westernmost structure discovered in Locus A and one structure in Locus D. The objectives of stripping these smaller units were to determine the orientation of these houses and to prepare them for sampling.

From the results of stripping in Locus B, we anticipated a house density of about one every 106 m^2. It was impossible to excavate the nearly 50 pit houses that were predicted in Locus A. Even with the reduction in the areal exposure necessitated by the thickness of the overburden, we did not plan to fully excavate all houses discovered. To study site structure, we needed three pieces of information about each feature: size, orientation, and age. We were able to estimate the size and orientation after the plan view of a feature had been exposed. Because extramural features, except for burials, rarely contain sufficient numbers of ceramics for temporal placement and rarely have any reliably associated materials for chronometric dating, our objective was to collect chronological information from each house discovered. We devised a sampling scheme in which we excavated a 2-m-wide test pit extending from the center of each house to the front edge of the entryway. This strategy provided a large controlled sample of the fill deposits and exposed the hearth or firepit, if one was present, and the sample unit was large enough to yield adequate samples of the material culture and archaeobotanical remains. Archaeomagnetic samples were collected from all hearths, firepits, and sections of fired floor. Often, there were also large quantities of charred botanical materials suitable for radiocarbon dating. Thus, the age of these houses could be assessed based on ceramic, archaeomagnetic, and radiocarbon data.

Initially, 20 houses were identified in the areal exposure. All of them except for one that had an indistinct outline were sampled as described above. Three additional houses were identified during the final week of work. Two had appeared as areas of dark sediments with no clear outlines; one of these stains, which surrounded two roasting pits, we had originally interpreted as a possible ramada or work area. Tree roots had badly disturbed the other house stain, and we had interpreted it simply as an area of disturbed sediments. The only visible evidence of the third house was a large, shaped entryway slab exposed while clearing the cremation area by shovel. To complete the final excavation map, shovel pits were excavated in these three features; all were found to be pit houses. No controlled samples were available from these houses, as these shovel pits were not screened, but artifacts were collected from the backdirt. Fired floor areas or hearths were found in all three structures, and archaeomagnetic samples were collected to ascertain their ages.

Because the primary objective in Phase 3 was to document site structure, we placed less emphasis on complete excavation to obtain extensive samples or to characterize the full range of architectural variability. We did, however, obtain some type of excavated sample from 22 of the 23 houses identified in the stripped area in Locus A, as well as from the house partially excavated during Phase 1. The houses excavated in Phase 2 conformed to a consistent, even redundant, architectural pattern. In addition to sampling, we selected nine stratified houses in Locus A for more-extensive exposure, both to document architectural details for comparison with those of the houses excavated in Loci B and C and to collect unusually rich artifactual and archaeobotanical remains. A series of five stratified houses that were part of the stratigraphic sequence sampled before stripping were completely excavated. These provided a known sequence of architectural types. We also extensively exposed the floors of two other stratified houses. Two burned structures that had evidence of raised floors supported on stone piers were also selected for excavation, primarily because of their unusual architectural style but also because they had burned and contained a large quantity of archaeobotanical materials. The two ball court floors discovered during the final stages of work also were extensively exposed.

The emphasis during this last phase was on documenting the overall pattern in the distribution of features and sampling or extensively excavating selected architectural features. Extramural features were less emphasized, but all identified burials and cremations were excavated, and other extramural features were sampled. Archaeomagnetic samples were collected from extramural hearths, roasting pits, and hornos.

Summary of Fieldwork

At the conclusion of fieldwork, we had identified 284 features (Table 80.1; also see Figure 80b) from the excavations at Scorpion Point Village, including 57 pit structures, 5 inhumations, 20 cremations, 2 ball courts, and 199 extramural features. These features represented a settlement that was occupied intermittently from the end of the Pioneer period through the Sedentary period. Many of the surface features represented a later, Classic period reuse of the site area for dry-farming and a still-later, historical-period construction camp. Only the pre-Classic period occupation is treated in this volume. The Classic period agricultural site is described in Volume 2, Chapter 4; the historical-period component has been treated in Douglas et al. (1994).