CHAPTER 3

NATIVE AMERICANS IN SOUTHERN NEVADA BEFORE 1492

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The archaeological story of Native American settlement in the Southern Nevada began 11,000 to 11,500 years ago, with the first documented appearance of distinctive, fluted, lance or projectile points. That story then continues almost to the present—although Native Americans certainly continue to live in the region today, the strictly archaeological record of their presence disappears by around AD 1900. In discussing the archaeological history of Native American peoples in the Las Vegas Valley, we refer to two overlapping yet distinct subsets of the archaeological record. Our narrative relies on data from sites that have been investigated in some detail, through excavation, testing, or surface collection. These sites provide a range of information involving some combination of radiocarbon dates, descriptions of excavated features, artifact analyses, and, in some cases, studies of botanical specimens and faunal remains. We also refer, however, to the findings of a less detailed study that is based primarily on archaeological survey data.

As part of a recent, large-scale (47,000 acre) archaeological survey in the Las Vegas Valley, HRA conducted a GIS (geographic information systems) analysis of Native American site distributions throughout the valley (Ahlstrom and Lyon 2004). Site data were obtained from three sources: the findings of the new survey; IMACS Site Forms from past archaeological surveys that are on file at the Harry Reid Center (HRC), University of Nevada, Las Vegas; and finally the same excavation reports that were used in producing the culture history narrative. The analysis included data on over 1100 archaeological sites and site loci distributed over an 1840 square-mile (2965 km²) area incorporating 187.5' USGS quadrangle maps. Much, though by no means all, of this area has been intensively surveyed for cultural resources.

Figure 3.1 plots the locations of archaeological sites in the GIS database, along with springs, spring mounds, and mesquite stands. The most striking aspect of the site distribution is the clustering of the majority of sites in eight archaeological localities: Corn Creek Dunes, at the valley's far northwestern end; Tule Springs—Upper Las Vegas Wash and the Eglington Escarpment, both in the northwestern portion of the valley; the Apex Area, just outside the valley's northeastern edge; Red Rock Canyon, at the valley's western edge; Las Vegas Springs, near the center of the valley; Duck Creek, in the south-central portion of the valley; and Lower Las Vegas Wash where it passes through Clark County Wetlands Park in the southeastern corner of the valley. Sufficient survey has been completed in the Las Vegas Valley to indicate that these site clusters are real phenomena. On the other hand, there are enough gaps in survey coverage to mean that some other areas in the valley may possess (or, prior to development, may have possessed) more sites than the map would indicate. Most of the evidence discussed in the following culture history narrative comes from sites located in six of these localities—Corn Creek Dunes, Tule Springs, the Eglington Escarpment, the Apex Area, Duck Creek, and Lower Las Vegas Wash—as well as in a seventh locality, Upper California Wash, which lies "off the map" several miles to the east of the Apex Area (Figure 3.1).

The majority of sites in the database are small, briefly occupied procurement, processing, and camping locales. Most of these sites are in open settings, though some occupy small rockshelters. In addition, there are a few larger sites and site clusters that include longer-term encampments and even habitation sites. These sites with more extensive and, probably longer-term occupations are located in the Corn Creek Dunes, Eglington Escarpment, Las Vegas Springs, Duck Creek, and Lower Las Vegas Wash areas. The resources that would have attracted people to these locations would have included springs (Corn Creek Dunes, Las Vegas Springs,

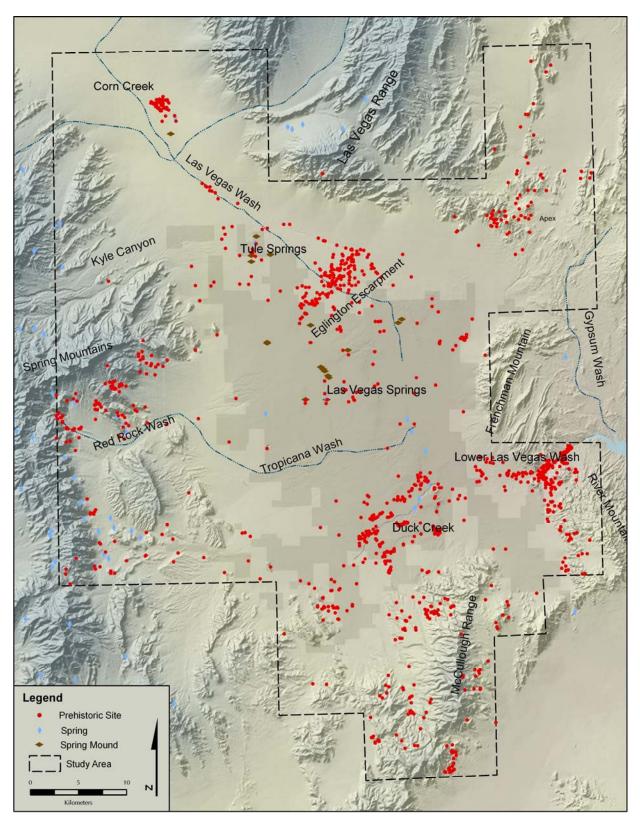


Figure 3.1. Map of the Las Vegas Valley showing recorded Native American sites.

Duck Creek, and possibly Eglington Escarpment), mesquite groves (all locations except perhaps Las Vegas Springs), and patches of marsh habitat (Duck Creek, Lower Las Vegas Wash, and probably Corn Creek Dunes and Las Vegas Springs).

The culture history of the desert region that includes the Las Vegas Valley can be discussed with reference to a scheme of periods and subperiods that is summarized in Table 3.1. HRA has developed this chronology during the course of a series of projects conducted in southern Nevada over the last eight years (Ahlstrom and Roberts 1999, 2001b; Harper et al. 2002; Roberts and Ahlstrom 2000; Roberts et al. 2003b; this project). In the beginning, the chronology used by HRA was based on one published by Ezzo (1995) in Statistical Research, Inc.'s report, A Class I Cultural Resources Survey for the Southern Nevada Water Authority Treatment and Transmission Facility, Clark County, Nevada. Over time, we have modified the chronology, based on our reading of the culture-historical data that are summarized here. As a result of a stepby-step process of revision, our current chronology, presented in Table 3.1, bears only a general resemblance to Ezzo's original framework. One specific contribution to the current chronology that can be cited is Gregory Seymour's (personal communication 2000) suggestion that the Ceramic period be divided into Early, Middle, and Late subperiods. The chronological framework (Table 3.1) includes four major periods: Paleo-Archaic (10,000–5500 BC), Archaic (5500 BC–AD 500), Ceramic (AD 500–1850) and Historical (AD 1500–1900). The first three periods (10,000 BC-AD 1800) are defined with reference to archaeological data, whereas the fourth period (AD 1500–1900) is based on historical and ethnohistorical data. This difference in perspectives is responsible for the temporal overlap between the Ceramic (AD 500–1800) and Historical (AD 1500–1900) periods. Figure 3.2 shows the locations of sites in the GIS database that can be assigned to one or more of these periods.

Table 3.1. Chronological Sequence for the Las Vegas Valley.

PERIOD	SUBPERIOD		DATE RANGE
Paleo-Archaic			9500–5500 BC
	Paleoindian		9500–9000 BC
	Early Archaic		9200–5500 BC
Archaic	Middle		5500-3000 BC
	Late		3000 BC-AD 500
		Terminal Late	AD 1–500
Ceramic	Early		AD 500–1000
	Middle		AD 1000–1500
	Late		AD 1500–1850
Historical	Early		AD 1500–1850
	Late		AD 1850–1900

Sites have been assigned to periods on the basis of two kinds of evidence, radiocarbon dates and time-diagnostic artifacts. Both the culture history narrative and the database analysis make use of two-sigma, calibrated date ranges. In each case, 95 percent statistical probability that this date range includes the dated sample's "true" date. Several dozen radiocarbon dates are available from sites in the Las Vegas Valley: see Rager (2001:Table 4) for dates from Burnt Rock Mound (26CK3601), located on the Eglington Escarpment; Seymour (1997:Table 10) for dates from the Berger site (26CK501/1528), located on Duck Creek; Blair and Seymour (1998:Appendix II) for dates from Mended Basket Rockshelter, in the southwestern corner of the valley; and Ahlstrom and Roberts (2001b:Table 2.3), Blair and Wedding (2001), and Brooks et al. (1975:Table 29) for dates from sites in the Apex and Upper California Wash areas.

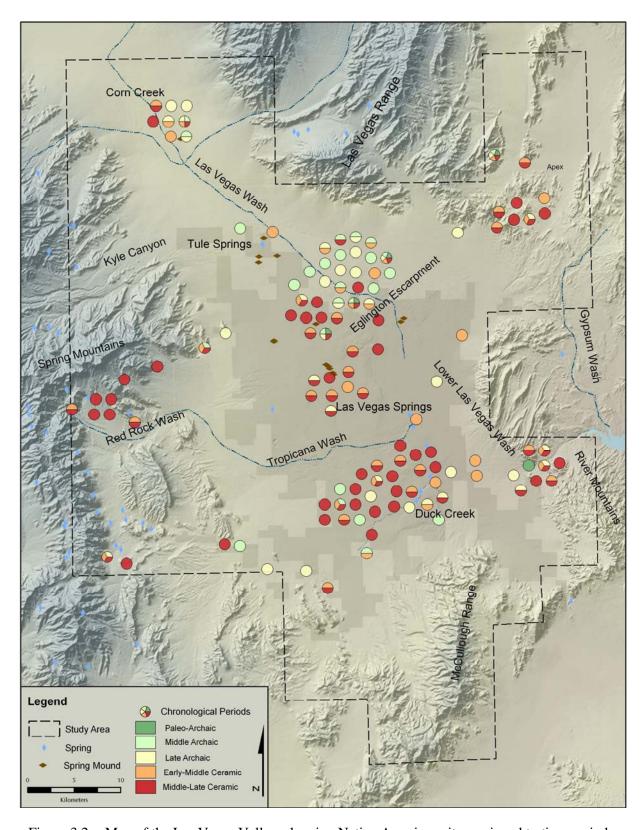


Figure 3.2. Map of the Las Vegas Valley, showing Native American sites assigned to time periods.

Artifacts used in making temporal assignments include stemmed and fluted (Clovis) points for the Paleo-Archaic, Pinto points for the Middle Archaic, Gypsum points for the Late Archaic, and Rose Springs, Cottonwood, and Desert Side-notched points, as well as potsherds, for the Ceramic period.

PALEO-ARCHAIC PERIOD (9500-5500 BC)

The Paleo-Archaic period includes the end of the Pleistocene epoch and first several millennia of the Holocene epoch. It combines what have generally been termed the Paleoindian and Early Archaic periods. Today, Great Basin archaeologists (Grayson 1993; Schroedl 1991) generally distinguish two artifact traditions within the Paleo-Archaic period: the Fluted Point (Paleoindian) and the Stemmed Point (Lake Mojave) traditions.

The Fluted Point tradition's most characteristic artifact is the large, distinctive Clovis point. These points may have had a variety of uses, but in southern Arizona some, at least, were apparently hafted to thrusting spears. The weapons were used to kill mammoths and other large mammals, or megafauna, that became extinct as the Pleistocene epoch ended and the Holocene epoch began. Although fluted points have been recorded throughout the Great Basin, most have been found as isolates. None of the Great Basin examples have occurred in association with remains of extinct megafauna. The fluted points from this region are extremely variable in form (Grayson 1993), and only some fit the "classic" definition of the Clovis point. Little is known is known about the lifeways of the people who were responsible for the Fluted Point tradition in the Great Basin. Even in southeastern Arizona, where fluted points can be linked to the taking of large mammals, other aspects of subsistence remain largely unknown. In that area, the Clovis tradition can be dated to the interval from 9500 to 9000 BC, but in the Great Basin, there is little evidence on which to infer a date. The Great Basin Stemmed Point tradition was first recognized in the 1930s at sites located on the shores of Pleistocene Lake Mojave, California (Grayson 1993:239). The sites possessed Lake Mojave and Silver Lake projectile points, as well as other distinctive artifacts called crescents (Warren and Crabtree 1986). Based on 60 years of research at these sites and at others throughout the Great Basin, the Lake Mojave culture can be dated between 11,200 and 7500 years ago, or roughly to 9200-5500 BC (Grayson 1993:240-241; Warren and Crabtree 1986:184). This interval overlaps the traditional dating of both the "Paleo-Indian" and Early Archaic periods—which is the reason why archaeologists working in the Great Basin have identified a combined "Paleo-Archaic" period. As of the 1970s, Stemmed Point sites were known primarily from settings along lake margins. This led some archaeologists to associate them with a marsh- or lake-environment subsistence focus, referred to as the Western Pluvial Lakes tradition (Grayson 1993:242). With the more recent discovery of Stemmed Point sites in numerous other environmental settings, this term has largely been abandoned (Grayson 1993). Today we know that the makers of stemmed points exploited a diverse array of plant and animal resources at locations throughout the Great Basin.

Little evidence of either the Fluted or Stemmed Point traditions has been found in the Las Vegas Valley—Figure 3.2 shows just five sites with evidence dating to this period. Three of those five sites are on the Eglington Escarpment. With respect to the Fluted Point tradition, HRA recently recorded a Clovis point base (Site 26CK6000) in the eastern half of Clark County Wetlands Park (Roberts and Ahlstrom 2000). This point is the first reliable evidence of the Clovis tradition from Clark County. An earlier report of a Clovis point recovered from a vandalized site, Bird Springs Rock Shelter, has been described as "problematic" (Ezzo 1995:38). A second point, reported by Perkins (1967) as coming from Site 26CK405, also cannot be verified. Clovis and Clovis-like points have, however, been found elsewhere in southern Nevada, as well as in the surrounding region of southwestern Utah, southeastern California, and northwestern Arizona (Haynes 2001; Roberts and Ahlstrom 2000). Most of these points have been isolates. In addition, Perkins (1968) has reported a Folsom and a Sandia point from the Las Vegas Valley.

As for the Stemmed Point tradition, to our knowledge no convincing Stemmed Point-Lake Mojave assemblage has been found in the Las Vegas Valley. Two stemmed points were, however, collected from the

surface at the Twin Dunes site (26CK1525), located on the Eglington Escarpment. The site also produced surface evidence for use in the Middle Archaic, Late Archaic, and Ceramic periods, and it is not possible to relate the stemmed points to a contemporaneous artifact assemblage. Another Lake Mojave point is reported from Site 26CK4246, also on the Eglington Escarpment (Ahlstrom, Eskenazi, and Roberts 2004:109). Two Lake Mojave points were also recently reported from the Flaherty Rockshelter (26CK415), located in the Apex Area on the northeastern edge of the Las Vegas Valley. Based on radiocarbon dates, the occupation of this site appears to have begun in the Middle Archaic period, with most of the occupation dating to the Late Archaic through the Ceramic periods (Ahlstrom and Roberts 2001b:202; Blair and Wedding 2000). Whether it also had a "stemmed point component" is impossible to say. Elsewhere in southern Nevada, stemmed points have been recovered from sites located in the Yucca Mountain Area, Nye County (Buck et al. 1998; IMACS site forms for 26NY3191 and 26NY8062, on file at the Desert Research Institute). Unfortunately, these artifacts were not found in association with materials suitable for radiocarbon dating. In addition, at least one Stemmed Point–Lake Mojave assemblage has been recorded near Jean Lake, which is south of Las Vegas Valley, and another from a site along California Wash near the Moapa River Indian Reservation (Claude Warren, personal communication 2001).

Although no Fluted or Stemmed Point assemblages have been found in the Las Vegas Valley, the Tule Springs area has yielded flakes, a scraper, and a bone tool that date to this period (Wormington and Ellis 1967). The Tule Springs area is located on Las Vegas Wash, in the northwestern part of the Las Vegas Valley. Mark Raymond Harrington of the Southwest Museum led a series of expeditions that investigated the site between 1933 and 1956 (Harrington 1985; Harrington and Simpson 1961). The last of these expeditions discovered a charcoal deposit associated with camel bones and stone tools. Although the expedition collected remains of mammoths, camels, and stone tools, the site has not been accepted as a legitimate pre-Paleoindian or Paleo-Archaic locale (Fowler and Jennings 1982; Shutler 1967). Later investigations at Tule Springs by Shutler (1967), Stein (1967), and Fitzwater (1967) did, however, identify seven chert and obsidian flakes (Locality 1), a quartzite scraper (Locality 4), and a possible bone awl and caliche bead (Locality 4a). All of these artifacts originated from radiocarbon-dated strata that are at least 10,000 to 11,000 years old. Bones of megafauna were also recovered from these deposits, but not in direct association with the artifacts. (This site is not plotted as a Paleo-Archaic in Figure 3.2.)

One site in the Las Vegas Valley has yielded a radiocarbon date in the Paleo-Archaic period. The site, 26CK3799, is located on the Eglington Escarpment. The work conducted there by the Harry Reid Center (HRC) is described below (Blair, Winslow, and Wedding 2000:66-75). Feature 11 (5735–5515 BC) consisted of a discrete area of stained sediment associated with fire-affected rock. Although the outline of a pit could not be identified, the feature appears to have represented the remains of a hearth or small roasting pit. Some or all of the artifacts recovered during excavation of the 2×2 -meter unit that contained the feature were probably associated with its use. These artifacts included a biface, three cores, and several flakes. The feature was one of four definite or possible thermal features (Nos. 9-11 and 13) situated around a sand dune or hummock. The four features were located in a 3×6 -meter area, and their proximity suggests that one or more of the other features might have been contemporaneous with Feature 11—though no other evidence supporting this inference was recovered.

ARCHAIC PERIOD

The Archaic tradition is characterized by a broad-spectrum adaptation to the animal and plant resources of a Holocene environment, that is, one that resembles the historical and modern-day environment. Jesse Jennings (1957) coined the concept of the Desert Archaic to refer to the Western expression of the American Archaic. His view emphasized the continuity of this hunting-and-gathering adaptation from the Early Archaic period until the adoption of agriculture. In the Las Vegas Valley, the earliest clear evidence of this generalized hunting and gathering lifeway does not appear until around 5500 BC, that is, in the Middle Archaic period.

Characteristic artifacts of the Middle and Late Archaic periods include large projectile points that would have been hafted to darts that were propelled using atlatls. Grinding tools appear to be an important part of tool assemblages dating to the Middle Archaic, and they are common in Late Archaic assemblages. The Middle Archaic has also been called the Pinto period, in reference to the Pinto point, and the Late Archaic the Gypsum period, in reference to the Gypsum point (Ezzo and Majewski 1995; Warren and Crabtree 1986). This usage reflects the fact that both Pinto and Gypsum points have been considered useful Archaic temporal markers (Bettinger et al. 1991). The same cannot be said of two other common kinds of dart points, the Humboldt and the Elko (Aikens 1970). These point styles appeared during the Archaic, ca. 3500 BC, but they continued in use into the Ceramic period and possibly even the Historical period (Blair 1986:16). This late dating of the two point styles serves as evidence that at latts and darts continued in use after the introduction of the bow and arrow. Based on such considerations as the recovery and reuse of old projectile points, the periodic re-occupation of sites over long intervals of time, the survival of atlatl-and-dart technology, and the cycling of points through different styles as they were repaired and rejuvenated (Flenniken and Wilke 1989), some lithic technologists have argued that point types are poor temporal markers. At the least, these variations on the histories of projectile points and projectile-point styles suggest that sites and site components should be dated on the basis of assemblages of artifacts, including a number of projectile points, rather than the presence of just one or a few projectile points of a given style.

According to Byrd (1998), in the Mojave Desert,

The hunting of large mammals (artiodactyls) appears to have been a significant aspect of Gypsum period [Late Archaic] subsistence, although other smaller faunal remains are well represented.... Ground stone artifacts are well represented during the Gypsum period, indicating the utilization of hard seed resources. These are often small, portable, and formally diverse...and the appearance of mortars and pestles has been interpreted as indicative of the onset of mesquite bean exploitation.... Gypsum period settlement patterns are characterized by increased utilization of valley floors and interbasin transportation corridors on Fort Irwin, although most sites appear to have been formed by repeated short stays by mobile hunter-gatherers [Byrd 1998:8].

As shown in Figure 3.2, Middle and Late Archaic period sites tend to be less common than Ceramic period sites in all of the Las Vegas Valley's major archaeological localities except the Eglington Escarpment, where they outnumber sites of the later period. The relative abundance of Archaic period sites on the Eglington Escarpment may be a function of two environmental factors. First, the area supports numerous mesquite trees, which would have been an attractive food source for hunter-gatherers, including those lived in the area during the Archaic period. Second, the area may not have had the springs and areas of marsh vegetation that characterized other localities, such as Corn Creek Dunes, Las Vegas Springs, Duck Creek, and Lower Las Vegas Wash (which, though it lacked springs, at least at times supported marsh vegetation). These characteristics may have made those areas relatively more attractive to the valley's Ceramic period inhabitants than it was to people who occupied the area during Archaic times. This might have been the case, for example, if the Ceramic period people practiced farming on even a modest scale, like the areas Early Historical period Paiute inhabitants (Fowler 2001). Specifically, the springs and marshes may be indicators of soil-moisture regimes suitable for farming.

Middle Archaic Period (5500-3000 BC)

Several surface assemblages have been reported from southern Nevada that date to the Middle Archaic period (Figure 3.2). At least half of these sites are located on the Eglington Escarpment; a few more are on Duck Creek. A Middle Archaic, Pinto component was investigated by Margaret Susia (Lyneis) in the Tule Springs project area during the 1960s expedition (Susia 1964). Prior to this, Mark Harrington collected Pinto points from Tule Springs (Ezzo and Majewski 1995:41). Several other sites with Pinto points have been recorded along Duck Creek (Ezzo and Majewski 1995:41; Rafferty 1984:133-137); although no radiocarbon

dates were obtained from these sites, they appear to date at least in part to the Middle Archaic period. Two other sites of this period, Tarantula Canyon and Alice Hill, have been investigated north of Las Vegas Valley near Yucca Mountain in Nye County (Buck et al. 1998). These sites are artifact scatters that were used over long periods of time; both sites lacked material suitable for radiocarbon dating.

One of the best known Middle-to-Late Archaic period sites in southern Nevada is the Corn Creek Dunes site (26CK2605) (Roberts et al. 2003a and b). The Corn Creek site was discovered by Richard Shutler Jr. and C. Vance Haynes during a geological and archaeological survey of the area that was carried out as part of the Tule Springs Project. After radiocarbon samples collected from two hearths produced two (uncalibrated) dates between 3350 and 2350 BC, Shutler and Haynes decided that the site should be investigated further. As part of the Tule Springs investigations, fieldwork was conducted at the Corn Creek site in December 1962 and January 1963. A report of these investigations was prepared by Pete A. Williams and Robert I. Orlins and published by the Nevada State Museum in 1963 (Williams and Orlins 1963).

Three different areas of the Corn Creek Dunes site were investigated by Williams and Orlins. Two of the artifact scatters contained a variety of prehistoric ceramics. Test excavations (5×5 -feet units) in these two loci revealed cultural deposits to a depth of 0.5 to 2 feet, although no cultural features were encountered. The third locus is located in an area of sand dunes and contains a Middle-to-Late Archaic temporal component. Surface evidence at this locus included flaked stone tools, lithic debitage, and six hearths. Fieldwork by Williams and Orlins included excavation of the surface features, surface collection of artifacts, and excavation of two bulldozer trenches. Five additional hearths that were exposed in one of the trenches were excavated. Seven radiocarbon dates obtained from the surface and buried features have combined ranges falling between 4318 and 2302 BC (4318–3779, 3945–3382, 3636–3031, 3631–2935, 3366–2886, 3359–2707, and 2876–2302 BC). Although the tool assemblage from the third locus lacked temporally diagnostic projectile points, the radiocarbon dates place the occupation of the locus firmly in the "late Middle" to "early Late" Archaic periods. In addition, a Pinto point that presumably dates to the Middle Archaic period was found in the sand dunes surrounding the third locus (Williams and Orlins 1963:38).

The HRC has recently reported on investigations at two sites with radiocarbon-dated Middle Archaic components. One of these sites, the Flaherty Rockshelter (26CK415), is located several miles north of the Las Vegas Valley, on the northwestern edge of the Apex Area. The Desert Research Institute excavated the Flaherty site between 1967 and 1970, but it was not until 2000–2001 that the HRC obtained support to analyze the collections and notes from that earlier work (Blair and Wedding 2001; also Ahlstrom and Roberts 2001b:198-204). A radiocarbon date from the deposits (4220–3800 BC) suggests that the shelter saw some use during the Middle Archaic period. No Pinto points were recovered from the site, however, and radiocarbon dates and other evidence indicate that it was occupied primarily during the subsequent Late Archaic period (Ahlstrom and Roberts 2001b:203).

The second Middle Archaic site investigated by the HRC was 26CK3799. This site, which was mentioned earlier for its Paleo-Archaic period radiocarbon date, was investigated as part of the Northern Beltway Data Recovery Program. It was located on the Eglington Escarpment, and its environmental setting—scattered dune hummocks with mesquite-dominated vegetation—resembled that of the Corn Creek Dunes site. Site 26CK3799 was a large scatter of artifacts and fire-affected rock clusters that were eroding from the edges of sand dunes. The site was on a terrace, and some of the features were located along the eroded terrace edge. The site was divided into two loci, with Locus A consisting of 21 excavated thermal features, and Locus B of 16 features (Blair, Winslow, and Wedding 2000: Map 4). The fire-affected rock clusters appear to have marked the locations of thermal features that were in various stages of erosion (Gregory Seymour, personal communication 2002). Most of the features were completely eroded, but there were a few that contained ash, charcoal, and evidence of shallow, basin-type hearths (Features 5, 8, 22, 27, and 31) (Blair, Winslow, and Wedding 2000:Map 4). Radiocarbon samples obtained from three of the features produced dates that fall in the Middle Archaic to early Late Archaic periods. (A fourth feature, with a date in the Paleo-Archaic period, was described earlier.) The three features included a hearth (Feature 8,

2620–2025 BC), a rock-lined hearth (Feature 5, 3335–2925 BC), and a discrete area of stained sediment without a distinguishable pit outline (Feature 20, 5340–4800 BC). All of the features contained or were associated with fire-affected rock and could, on that basis, be identified as small roasting pits. Surface artifacts collected from Feature 20 included two flakes, two cores, a "metate-slab," two ground-stone fragments, and a mano fragment (Blair, Winslow, and Wedding 2000:85). Also deserving mention in this context is an obsidian Pinto point collected from the ground surface at Feature 3, located about 25 meters from Feature 5. Feature 3, which consisted of several pieces of fire-affected rock on the ground surface, was interpreted as "non-cultural" when shovel scraping failed to uncover any subsurface remains. The fire-affected rock could, however, have represented the last recognizable remnants of a feature destroyed by erosion.

In 2005, HRA's test excavations at 26CK6146, the Larder Site, in Clark County Wetlands Park revealed the presence of 63 storage pits and hearth features. The extensive artifact scatter included a Gatecliff point, hinting that the site was used during the Middle Archaic (5500 – 3000 BC).

Late Archaic Period (3500 BC-AD 500)

Sites with evidence of Late Archaic use are somewhat more common than Middle Archaic sites in the Las Vegas Valley. Sites of the two periods do, however, have similar distributions within the valley (Figure 3.2). Southern Nevada's most famous Late Archaic site is Gypsum Cave, the type-site for the Gypsum point. That site is located several miles east of the Las Vegas Valley's northeastern edge, outside the site distribution study area. Although Harrington (1933), the site's excavator, thought that its Gypsum Cave points were 8000 years old, wood samples recovered in association with the points have produced Late Archaic period radiocarbon dates of 1371–897 and 762–387 BC (Ezzo and Majewski 1995:43). Gypsum points were also recovered at the Basic site (26CK1098) during excavations conducted by the Navajo-McCullough transmission line project (Brooks et al. 1975). This site occupies a rockshelter at the northern end of the McCullough Range, in the southeastern corner of the Las Vegas Valley. Finally, two Gypsum points, one per site, were found at two sites on Duck Creek (Rafferty 1984:136).

As previously mentioned, the third locus investigated in the 1960s at Corn Creek Dunes has produced a set of seven Middle-to-Late Archaic radiocarbon dates. One of these dates falls entirely within the Late Archaic period (2876–2302 BC). HRA recently obtained a second Late Archaic period date (1000–820 BC) from the Corn Creek site's Field Station Locus (Roberts et al. 2003b). The dated sample came from a small roasting pit discovered 53 centimeters below the ground surface.

Flaherty Rockshelter, previously mentioned in the context of Middle Archaic sites, produced evidence of an important Late Archaic component (Blair and Wedding 2001; also Ahlstrom and Roberts 2001b:200-203). Ten of the 18 radiocarbon dates from the site fall in the Middle Archaic period. Four of the 10 dates cluster in the interval from 1650 to 1105 BC. The other six are spread through the broader interval of 2560 BC to AD 225. The site also yielded a number of dart points of types that are consistent with a Late Archaic date, including Gatecliff, Humboldt, and Elko points.

Late Archaic period radiocarbon dates are available from three sites on the Eglington Escarpment. One of the dates (3335–2305 BC) was from a hearth "in a dune area" that was sampled by the Tule Springs Project. The site containing the dated feature was not assigned an official number, though the area containing the feature was identified as the Tule Spring Project's Locus 65 (Haynes 1967:Table 6). The second site with Late Archaic dates was the Burnt Rock Mound site (26CK3601), located on and around an ancient spring mound. There are four Late Archaic period dates from this site. Three of these date (80 BC–AD155, 50 BC–AD 230, and AD 330–625) were derived from samples of charred material recovered from what the excavators interpreted as archaeological (as opposed to geological) contexts (Rager 2001; Seymour and Rager 2001, 2002). The fourth date (AD 390–550), from a burial that is described below, overlaps the end of the Late Archaic and beginning of the Early Ceramic period.

The third location on the Eglington Escarpment with a Late Archaic radiocarbon date (AD 92–539) was a large prehistoric campsite known as the Pardee site (26CK3766). The dated sample was from a hearth that was buried 40 to 50 centimeters below the ground surface (White et al. 1989:48-53). Sample surface collection and limited excavation (of six 1 × 2-meter units) demonstrated that the Pardee site was also occupied during the Ceramic period. Potsherds were recovered from the excavation unit that contained the hearth, but only from higher levels. Sherd counts were as follows: three from Level 1; three from Level 2; four from Level 3; one from Level 4; zero from Level 5, which contained the hearth; and zero from Level 6. There was no clear stratigraphic break between Level 5 and the overlying levels, and there was also evidence of rodent disturbance from Level 3 down. For those reasons, it is not possible to demonstrate an association between the artifacts from Level 5 and a Late Archaic period occupation of this area of the site. Nevertheless, it is likely that some portion of those artifacts do in fact date to that period. Additional artifacts recovered from Levels 6 through 8 probably date to that occupation as well, or possibly to an even earlier one. Artifacts from Level 5 included 33 chert flakes, three obsidian flakes, three basalt flakes, one ground stone fragment, one possible handstone, and one thin disk bead made from Olivella (White et al. 1989:48-53, 88). A second bead of the same kind came from the next higher level. Levels 6 through 8 contained 46 chert flakes and one projectile point fragment. One hundred and thirty faunal bone fragments were also recovered from Levels 5 through 8—though the description of these and other bones from the unit as being "located in areas of rodent disturbance" suggests that the excavators did not consider them to be "cultural" in origin (White et al. 1989:48-53, 88).

Additional Late Archaic radiocarbon dates have been obtained from a roasting pit in the Muddy Mountains (1915–1309 BC) and from a roasting pit (1047–830 BC) and a hearth (794–3 BC) in the Upper California Wash locality (Blair 1986; Ellis et al. 1982, as described in Blair 1986:40). The dated hearth was part of a site (26CK2130) that included two rockshelters. The feature was found outside the shelters, at a depth of 30 cm below ground surface in a unit that contained numerous flaked lithic artifacts, but no potsherds. Overall, the site produced an artifact assemblage with a low ceramic-to-lithic ratio, relative to other sites investigated in the vicinity (Blair 1986:87-91). This would suggest that the site saw use in particular during the Archaic (preceramic) period.

Terminal Late Archaic (AD 1–500)

The end of the Archaic period was a time of change in Native American lifeways throughout the American Southwest. The manner in which the process of change played out in the Las Vegas Valley can be discussed with reference to four categories of archaeological evidence, involving the introduction of ceramic technology, the shift from the atlatl-and-dart to the bow-and-arrow, increased investment in habitation structures, and the introduction of agriculture. In the present chronology (Table 3.1), the Archaic period ends and the Ceramic period begins with the introduction of ceramic technology to the Las Vegas Valley. In the past, a date of around AD 500 has been suggested for this event—in line with the beginning of the Patayan ceramic sequence (Seymour 1997). This date provides an end point for what we are referring to the Terminal Late Archaic period (or sub-subperiod in the framework of Table 3.1). We place the beginning of this period at AD 1, because the 500-year interval defined in this way takes in all of the evidence that is relevant to the four kinds of change we have identified as important to this period.

An important beginning point for discussion concerns the timing of the four kinds of change as they occurred in nearby regions. This is particularly true of the prehistoric puebloan region to the east of the Las Vegas Valley, which has provided most of the relevant, dated evidence. The introduction to that region of ceramic technology is a marker for the beginning of the Basketmaker III period. It would appear that pottery making had appeared among Virgin Branch puebloan groups living in the Moapa Valley of extreme southeastern Nevada and in southwestern Utah by around 500 or 550 (Ezzo 1995; Walling et al. 1986). Farming and, probably, the bow-and-arrow arrived in this region at an earlier date. Evidence for farming comes in particular from radiocarbon dates run directly on samples of maize. A handful of dates from three

Virgin Branch sites located northeast of the Las Vegas Valley on the Muddy River—Black Dog Cave, Yamashita Site 2, and Yamashita Site 3—suggest that farming was being practiced in this area by AD 300. Evidence relating to the bow-and-arrow comes from farther east, on the Rainbow Plateau, as well as from Black Dog Cave. The new technology had been adopted on the Rainbow Plateau by AD 300–400 and, perhaps, by AD 200 (Geib and Spurr 2000:195). As for Black Dog Cave, a bow fragment recovered from this site produced a radiocarbon date of AD 440–640 (Winslow and Blair 2003:362). Pithouse architecture was well established in the Rainbow Plateau area by AD 200. As noted by Geib and Spurr (2000:189), "widespread use of [pithouses] on the Colorado Plateau is correlated with the adoption of agriculture."

Turning to the Las Vegas Valley, one bit of evidence relating to the Terminal Late Archaic period consists of the previously described radiocarbon date of AD 92–539 from a hearth at the Pardee site. A case can be made that the dated context is preceramic in age; however, the site is better characterized as a campsite than as a habitation site. That being the case, and given the small area of the site that was investigated, it is also possible that the context is aceramic rather than preceramic. In other words, a ceramic-using group may have camped at that site without leaving behind any broken pieces of pottery.

What is perhaps the most important evidence relating to the end of the Terminal Late Archaic period in the Las Vegas Valley comes from a pithouse that HRA recently excavated in Clark County Wetlands Park at Site 26CK1282. The remains of this structure, labeled Pithouse Feature 3, were buried more than 2 meters beneath the historical, though now abandoned, floodplain of Las Vegas Wash. Two samples consisting of charred seeds from the structure's hearth and from a floor or near-floor context produced statistically indistinguishable radiocarbon dates that, together, yielded a mean date of AD 430–600. No pottery was recovered from floor or lower-fill contexts, suggesting that the structure is preceramic in age. The excavated artifact assemblage included two projectile points that were probably, though not certainly, associated with the structure's use. Both are Rose Springss style arrow points. A particular effort was made to identify evidence of farming through pollen and flotation analysis. No such evidence was recovered. Instead, the samples indicated an emphasis by the pithouse's inhabitants on the exploitation of wetland resources. Though by no means conclusive, the evidence from this structure is consistent with that from the Muddy River and points farther east in indicating the construction of pithouses and the use of the bow-and-arrow in the period before the advent of ceramic technology. And, as mentioned, the lack of cultivated remains may indicate that farming arrived here later than in areas to the northeast and east.

A second Terminal Late Archaic period structure was excavated in the 1970s at the Windy site, 26CK1086 (Brooks et al. 1975:281-189). In this case, the structure was located more or less at the ground surface, and the structural remains consisted of a substantial rock ring that measured around 2 by 2 m on the inside and 4 by 6 m on the outside. There is a single radiocarbon date, AD 410–690, from a hearth that may have been located outside the structure. There is significant overlap between this interval and the date of AD 430–600 from the pithouse at 26CK1282. Excavation of the structure yielded more than 1000 flaked stone artifacts and no potsherds. Among the flaked stone tools were two Rose Springss arrow points that were recovered from the ground surface. According to the excavators, "The absence of pottery is suggestive that this site was a temporary house structure that may have been used as an overnight camp during foraging trips to the Gypsum or California Wash areas" (Brooks et al. 1975:289). Alternatively, there may have been no potsherds at the site because it is pre-ceramic in age. If so, the site provides a second example of the bow-and-arrow being in use before pottery in this region.

Other evidence relating to the end of the Terminal Late Archaic comes from sites that also produced Early Ceramic period dates as well as ceramic evidence. Unfortunately, there is no direct connection between the dated radiocarbon samples and the potsherds recovered from the sites in question. Nevertheless, the data from these sites have a bearing on the earliest date that one might assign to the beginning of the Ceramic period on the basis of radiocarbon evidence. The details of the various cases are described in the following section on the Ceramic period, and only the dates are mentioned here. These dates include AD 530–710, from a possible pit structure at the Corn Creek Dunes site that contained potsherds in its floor fill; AD 540–690,

from a hearth in a small rockshelter at 26CK4440 that, based on the pottery recovered, can be dated to the Early Ceramic period or first half of the Middle Ceramic period; and AD 560–760, from a roasting mound at 26CK4908, a site with several projectile points and potsherds that probably relate to an Early Ceramic period temporal component (the site was occupied primarily during the Middle and Late Ceramic periods).

The radiocarbon date from Pithouse Feature 3 at 26CK1282 has a mid-point of AD 515 and an end point of AD 600. The date ranges from the three Early Ceramic period sites do not begin until AD 530–560, and they extend to AD 690–760. This evidence is in agreement with the previously cited date of AD 500 for the boundary between Terminal Late Archaic and the Early Ceramic periods. Based on the weight of the evidence, one could even move this date up a half century, to AD 550.

CERAMIC PERIOD (AD 500-1850)

The introduction of pottery for cooking and storage marks the beginning of the Ceramic period. As previously noted, the bow-and-arrow was apparently introduced to the southern Nevada region before ceramic technology. The replacement of lightweight basketry with heavier ceramic containers is usually associated with a farming economy and greater sedentism. Because pottery types vary from region to region, and because they correlate with other traits such as architecture and settlement patterns, pottery often forms the basis for defining prehistoric cultures.

In the past, the Ceramic period in the Las Vegas Valley has been divided into phases with specific reference to the Virgin Branch (Anasazi) cultural sequence, specifically that sequence as developed for use in the Moapa and Virgin river valleys (Ezzo and Majewski 1995; Lyneis 1982). We do not follow that practice here, for three reasons. First, the decorated gray ware ceramics that are the basis for assigning sites to phases in the sequence are relatively rare on sites in the Las Vegas Valley. Second, the Virgin Branch chronology does not incorporate other categories of artifacts that have proven useful for dating sites in the Las Vegas Valley that are known only from survey data. Those artifact categories, consisting of non-grayware ceramics and projectile-point styles, will be discussed shortly. Finally and as Seymour (1997, 1999) has pointed out, the Virgin Branch sequence does not take into account the strong Patayan presence in Southern Nevada that began around AD 1000, if not earlier, and lasted to at least AD 1500.

In the following discussion, we make use of two schemes for dividing the Ceramic period in the Las Vegas Valley into smaller temporal units. First, we follow Seymour (1997, 1999) in applying the Patayan cultural sequence to the region. Waters (1982) developed this sequence in its modern form using data from the Lower Colorado River region. The sequence is based entirely on change over time in Lower Colorado River Buff Ware ceramics. This chronology includes three periods, which can be reasonably dated as follows: Patayan I, AD 500–1000; Patayan II, AD 1000–1500; and Patayan III, AD 1500–1850 (cf. Seymour 1997; Waters 1982). Because the Las Vegas Valley is located at the edge of the Patayan realm, and because Prehistoric Puebloan and Paiute ceramic "influences" are also prevalent in the area, we refer to these three periods as Early, Middle, and Late Ceramic.

There are a number of problems in the definition and dating of the three Patayan periods (Ahlstrom, Chenault, and Wrobleski 2000:107-110). Nevertheless, we use this three-part sequence in our narrative discussion of the Ceramic period for three reasons. First, we want to be consistent with Seymour's (1997) research on ceramic collections in the Las Vegas Valley. Second, our discussion is based primarily on data from excavated sites, which provide the best possible circumstances for extracting temporal and other data from buffware ceramics. Excavated collections of buffware potsherds are typically larger than surface collections and, therefore, include more of the relatively rare decorated sherds that are most useful for ceramic dating. Also, excavated collections can studied in the laboratory by experienced analysts. This is an important advantage, given that Lower Colorado River Buff Ware represents a predominantly plainware ceramic tradition. For that reason, data on temper, paste, and surface treatment that are difficult to obtain in the field can be critical to the correct identification of the different pottery types into which this ware has been divided.

And third, we employ the three-part sequence because it provides a workable framework for breaking a continuum of radiocarbon date ranges into separate periods.

In spite of its useful for the discussion of culture history, the three-part chronology did not work well when applied to the data compiled for HRA's valley-wide site-distribution study. The data available on most of the sites had been collected during survey and, thus, did not laboratory identifications of pottery types. For the reasons previously mentioned, we doubted the reliability of the few field identifications of buffware pottery types that could be found on the IMACS forms. Also, the three-part chronology did not take full advantage of relatively robust, temporally useful evidence that does exist in the site-survey record. That evidence, based on arrow-point styles and occurrences of ceramic wares other than buffware, provides a reasonable basis for distinguishing early and late portions of the Ceramic period. The early portion is characterized by Rose Spring arrow points and grayware (Prehistoric Puebloan) ceramics, and the late portion by Cottonwood Triangular and Desert Side-notched arrow points and brownware (Paiute and some Tizon Brown) ceramics. For purposes of incorporating the radiocarbon data that do exist for some sites, we placed the break between the two periods at AD 1200. The Rose Spring type mostly pre-dates AD 1200, and few, if any, grayware vessels are likely to have been brought into the Las Vegas Valley from Virgin Branch communities to the east after that date (Ezzo and Majewski 1995; Lyneis 1982). Most dates for Southern Paiute Brown pottery also fall after AD 1200 (Perry 2003:204), and Desert Side-notched points are often dated as post-AD 1200 as well. Cottonwood points, on the other hand, date as early as AD 1000, though they also certainly continued to be made after AD 1200. This date of AD 1200 for the boundary between the two periods is close to the midpoint of the previously described Middle Ceramic period. For that reason, and to avoid the confusion that might arise from adding a new set of period names, we simply refer to the two periods that were used in the site-distributional study as the Early-Middle Ceramic and Middle-Late Ceramic periods.

Figure 3.2 shows the distribution of sites in the valley with evidence of occupation during the Early-Middle and Middle-Late Ceramic periods. Substantially more sites date to the earlier period as compared to the later one. It is noteworthy in this regard that this apparent decrease in sites is reflected in all of the localities that, as mentioned earlier, have evidence of relatively long-term site occupations, including Corn Creek Dunes, Eglington Escarpment, Las Vegas Springs, Duck Creek, and Lower Las Vegas Wash. This difference between the Early-Middle and Middle-Late periods may simply be a function of differences in the way that evidence of the two periods is identified, but it could also have some basis in reality. Excavation data from sites in the Lower Las Vegas Wash (Clark County Wetlands Park) area suggest a shift in settlement modes between the two periods. Site components of the earlier period reflect more intensive and longer-term settlement and warrant being labeled as "habitation sites," whereas components of the later period reflect less intensive and shorter term settlement consistent with their being referred to as "campsites."

Figure 3.3 shows the distribution of sites in the valley with buffware, grayware, and brownware ceramics. Small pie charts show the relative frequency of these three categories of pottery in each site's ceramic assemblage. Many of the Ceramic period sites in the valley possess potsherds of more than one of these wares, and, in order to account for this fact in a minimally reliable manner, only those sites with more than five sherds are included in the figure (n=47 sites; Ahlstrom and Lyon 2004:270). This map was produced to evaluate an impression, gained from the examination of project reports, that grayware pottery is more abundant on sites in the central and northern portions of the valley, whereas buffware pottery is more abundant at sites located toward the valley's southern end. The grayware category consists primarily, if not entirely, of Virgin Branch ceramics (it could include a few Fremont sherds), and the buffware category of Patayan ceramics, specifically Lower Colorado Buff Ware. The brownware category could include sherds of Paiute Brown Ware or of the type Tizon Brown. No attempt was made to separate these two categories, based on concern over the accuracy of field identifications. In fact, however, much of the data summarized on the map are from excavated sites and laboratory analyses. These studies suggest that most of the identified pottery is Paiute Brown Ware, with the exception of some Tizon Brown sherds from the Lower Las Vegas Wash area.

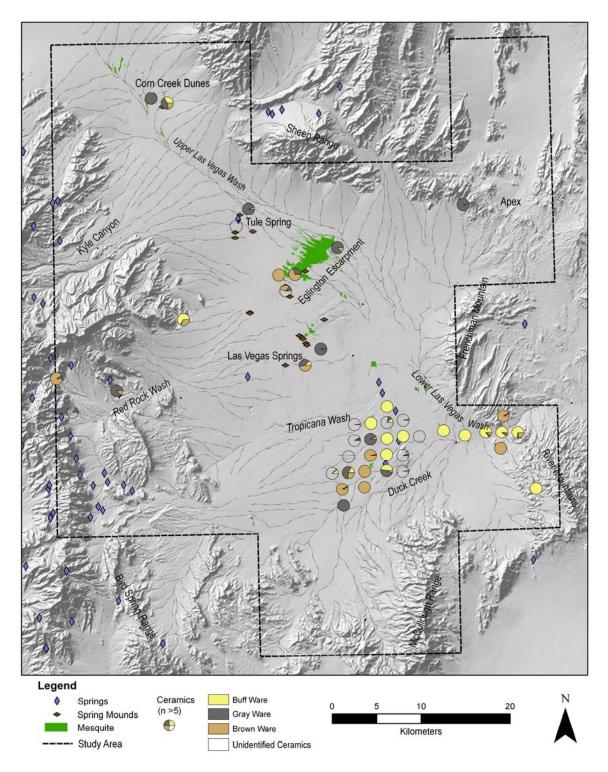


Figure 3.3. Map of the Las Vegas Valley, showing Native American sites with identified ceramic wares.

The data presented in the map generally support the stated impression. Grayware is much more common than buffware in the portion of the valley from Las Vegas Springs northward. It occurs at more sites and in higher proportions within site assemblages. Supporting data come from sites in the Upper Las Vegas Wash, Eglington Escarpment, Apex, and Las Vegas springs areas. The one main exception to the pattern is a site in the Red Rock area, with buffware and no grayware. In contrast, buffware occurs at more sites than grayware in the Duck Creek area and is more common than grayware at sites in the Lower Las Vegas Wash area. The spatial separation between distributions of grayware and buffware is even more distinct when sites with 20 or more sherds are plotted (n=29 sites; Ahlstrom and Lyon 2004:270). Specifically, the filtering out of small and insufficiently reported ceramic assemblages reduces the number of sites on Duck Creek with grayware pottery.

The contrasting spatial distributions of grayware and buffware ceramics provide hints concerning the directions and paths of contact between groups living in the Las Vegas Valley and, on the one hand, their Virgin Branch neighbors to the northeast and, on the other hand, their Patayan neighbors to the south. The Lower Las Vegas Wash and Duck Creek archaeological localities contain the closest site clusters in the valley to the core area of the Patayan archaeological culture, located on the Lower Colorado River from the Mojave Valley southward. (This archaeological culture can generally be associated with the ancestors of peoples who speak Yuman languages and who continue to live today along the Lower Colorado River.) One relatively easy route of travel would have left Las Vegas Valley along Las Vegas Wash and then turned southward to parallel the Colorado River—the primary route may have been located well above the river, which cuts through narrow gorges in the area around modern-day Hoover Dam. Given their location, it is not surprising that sites located within the Duck Creek and Lower Las Vegas Wash archaeological landscapes have the greatest representation of Patayan ceramics among sites within the valley. Also worth noting in this context is the presence of an intaglio, or ground figure, within a mile south of the Lower Las Vegas Wash site cluster (Woodman and Valentine 1999). This feature type occurs primarily within the Patayan area. These data suggest that the southern portion of the Las Vegas Valley was near the northern end of the Patayan sphere of influence.

Even more revealing than the distribution of sites with abundant buffware ceramics is that of sites dominated by grayware. The data imply an overland route of contact, northeast from the Las Vegas Valley to the Moapa Valley. The latter was a center for Virgin Branch settlement. The importance of this route is underscored by the recovery of substantial quantities of grayware from sites in the Upper California Wash area, located immediately northeast of the Las Vegas Valley (Blair 1986). The ceramic data suggest that this route through the desert was favored over a longer, but better watered route that would have proceeded down Las Vegas Wash to the Colorado River, up the Colorado to its confluence with the Virgin River, and up that stream to the Moapa Valley. Along with its greater length, that route would have shared a segment of Lower Las Vegas Wash with the previously described route of travel between the Las Vegas Valley and Lower Colorado River. Perhaps a potential for conflict between different groups was one reason for a separation of travel routes.

The ceramic assemblages studied by Seymour (1997) from various sites in Las Vegas Valley, particularly along Duck Creek, frequently contained equal numbers of Patayan and Virgin ceramics, with Southern Paiute Brown Ware sherds also well represented. Seymour concluded that the mixed assemblages resulted from repeated, short-term use of the sites by different groups of people. In other words, movement of Virgin Branch and Patayan people into the Las Vegas Valley occurred throughout prehistory. Alternatively, the Las Vegas Valley could have had a relatively stable resident population, whose members established links with nearby people, particularly those living in the Moapa and Virgin River valleys and along the Colorado River (Roberts and Ahlstrom 2000). The existence of these socioeconomic contacts would have had three effects on the assemblages of ceramic vessels that were used by the Las Valley's inhabitants. First, pots that were manufactured by the valley's neighbors could have been brought into the valley as items of exchange. Second, potters (presumably women) who had grown up as members of those neighboring groups could have

come to the Valley as marriage partners. Once there, they would have continued to make pots in the way that they had been taught, to the extent that they could do so with the materials that were available locally. Worth noting in this context is Seymour's (1997) argument that some Lower Colorado Buff Ware was made in the Las Vegas Valley. Third, the focus of these contacts could have changed over time, contributing to the mixed appearance of sherd assemblages from sites that had more than a single, short-term occupation.

Both situations may have applied: new groups may have migrated to the Las Vegas Valley from time to time, and the Valley's residents may have maintained alliances with nearby communities. Ceramic data suggest that, during the Early Ceramic period, the outside contacts were with Virgin Branch culture area, located to the east. Later, during the Middle and Late Ceramic periods, these contacts shifted to the Patayan area, located to the south. Also during the Middle Ceramic period, Paiute ceramics first appeared in the Las Vegas Valley.

Early Ceramic Period (AD 500-1000)

The Early Ceramic period, as defined here, corresponds roughly in time with the Patayan I period in the Patayan cultural sequence, the Basketmaker III and Pueblo I periods in the generalized Ancestral Puebloan (Anasazi) cultural sequence, and the Muddy River and early Lost City phases in the Moapa-Virgin Valley, Virgin Branch cultural sequence. The earliest ceramics identified in the Las Vegas Valley are a handful of Virgin Branch potsherds that predate AD 1000. As reported by Seymour (1997), these sherds came from the Duck Creek area (Seymour 1997:Figures 11 and 15), from the Burnt Rock Mound site (26CK3601) in North Las Vegas, and from the Big Springs sites (Seymour 1999:192).

During HRA's survey of the Corn Creek Dunes site, a group of 11 depressions was recorded near a spring in the site's Field Station Locus (Roberts et al. 2003a). These depressions, which range from 2 to 4 m in diameter, probably represent habitation structures. Test excavations in one these features (Roberts et al. 2003a) identified a hard-packed clay floor buried under 60 cm of cultural fill. Logandale gray sherds were collected from the floor fill and from the surface of a pit feature in the floor. The 50 cm of fill above the floor fill did not contain additional ceramics, but did hold large quantities of charcoal, animal bone, and flaked lithics. The findings of these test excavations, including the density of artifacts in the feature's fill, indicate that Midden 1 probably consists of a cluster of semi-subterranean habitation structures and associated occupation debris. A radiocarbon sample recovered from the floor of the tested structure provided a radiocarbon date of AD 530 to 710. This date, together with the Logandale gray ceramics, suggest that this structure dates to the Basketmaker III period in the generalized Puebloan–Virgin Branch cultural sequence. The other depressions may mark the locations of additional structures dating to this period. This cluster of possible habitation structures is one among only a few settlements with Virgin Branch associations that have been identified in the Las Vegas Valley.

There are several additional radiocarbon dates from sites in and around the Las Vegas Valley that fall in the interval of AD 500 to 1000 assigned to the Early Ceramic period. Burnt Rock Mound (26CK3601), located on the Eglington Escarpment, has three radiocarbon dates in the Early Ceramic period (650–885, 670–870, and 680–1020). As in the case of the site's Late Archaic dates, the dated samples consisted of charred material recovered from archaeological contexts within the spring mound (Rager 2001; Seymour and Rager 2001, 2002). Site 26CK4908 is located southwest of the Eglington Escarpment, at the base of the Spring Mountains (Blair, Winslow, and Wedding 2000). The site, which incorporates a small rockshelter and three roasting mounds, dates primarily to the Middle and Late Ceramic periods. The site also appears to have been used during the Early Ceramic period, however, as indicated by a radiocarbon date from one of the roasting mounds (AD 560–760). Three Rosegate projectile points, seven sherds of North Creek Gray, and one sherd of Moapa Gray recovered from the rockshelter portion of the site probably date to this period of use as well.

Excavations conducted in Clark County Wetlands Park at 26CK1474 in the 1970s yielded a single radiocarbon date indicating that the site was occupied during this period. Archaeologists with the Nevada Archaeological Survey–Archaeological Research Center of the University of Nevada, Las Vegas, first

identified 26CK1474 in a cutbank of Las Vegas Wash, which was exposed by flooding while they were conducting data-recovery work elsewhere in Wetlands Park (Ferraro and Ellis 1982). The archaeologists noticed cultural material and charcoal lenses exposed under 5 m of floodplain deposits. Test excavations in a portion of the site revealed the presence of thermal features and two possible habitation structures. A sample from a hearth buried 5 m below the surface yielded a radiocarbon date of AD 621 to 959. Two other samples from deeply buried cultural deposits yielded dates with ranges falling primarily in the Early Ceramic period (at 490 cm, AD 402–1018 and at 335–350 cm, AD 544-1155). HRA's recent work at this site has produced a fourth date that falls in the Early Ceramic period. This date (AD 660–790) is from a deposit of ash-stained sediment exposed 5+ m below the ground surface in a cutbank formed by one of Las Vegas Wash's tributaries. The feature is one of several deposits at the same level that represent a stable surface on and into which cultural materials were deposited.

Finally, HRA's test excavations at 26CK6146, the Larder Site (also in Clark County Wetlands Park), in 2005 revealed the presence of 63 storage pits and hearth features, along with five Ancestral Puebloan ceramic sherds that date to the first half of the Ceramic Period (AD 500 – 1150/1250) (Ahlstrom 2008). Forty other sherds recovered from the site span the entire Ceramic Period. Excavations at 26CK6147, Scorpion Knoll, identified pitstructures, storage pits, and a roasting pit. A radiocarbon date from Feature 4, a pitstructure, yielded a 2-sigma calibrated date range of AD 660 – 800 (Ahlstrom 2008). Potsherds from this site date to the first half of the Ceramic Period.

Other sites with radiocarbon dates the Early Ceramic period are located at the northeastern edge of the Las Vegas Valley, in the Apex and Upper California Wash areas. Site 26CK4440 is located in the Apex Area and was excavated as part of the Kern River Pipeline Project (York, Kelly, and Zukosky 1992). Four hearth or charcoal-stain features were uncovered during excavation of this rockshelter. Artifacts included flaked-lithic and ground-stone tools, potsherds, several fragments of tabular incised stone, and a sandstone ornament. The ceramic assemblage consisted almost entirely of Virgin Branch types; the exceptions were several sherds from "paddle-and-anvil-thinned vessels" that might belong to Lower Colorado Buff Ware. The Virgin ceramics place the site's occupation in the Early Ceramic period and first half of the Middle Ceramic period. Three of the four features produced radiocarbon dates, but only one of these (AD 540–690) is in agreement with the site's ceramic date. The others are more recent, as is a fourth radiocarbon date that was taken on a sample recovered during the screening of general fill (Ahlstrom and Roberts 2001b:Table 2.3).

Four sites located in the California Wash locality can be dated, at least in part, to the Early Ceramic period. They include 26CK1088, 1095, 1112, and 1309. Site 26CK1088 included three rockshelters, a roasting feature, and six rock-ring features; 26CK1095, three roasting features, a rockshelter, and rock-ring features; 26CK1112D, at least a roasting feature; and 26CK1309, a rockshelter and associated midden (Brooks et al. 1975; Blair 1986). Each site produced evidence for use in more than one period. Site 26CK1095 can be dated, at least in part, to the Early Ceramic period on the basis of radiocarbon dates from two roasting features (AD 540–850 and 660–890) and ceramic evidence; 26CK1112 on the basis of a radiocarbon date from a roasting feature (AD 690–1030); and 26CK1309 on the basis of a radiocarbon date from the midden (AD 600–900) and some ceramic evidence. Site 1088 can be assigned to Early Ceramic period on the basis of ceramic evidence, with some support from two radiocarbon dates that overlap the period (AD 260–780 and 890–1260) (for radiocarbon dates, see Brooks et al. 1975, Blair 1986, and Ahlstrom and Roberts 2001b:Table 2.3; for ceramic data, see Blair 1986:Table 3).

Middle Ceramic Period (AD 1000-1500)

The Middle Ceramic period is probably the best represented subdivision of the Ceramic period in and around the Las Vegas Valley. It corresponds roughly in time with the Patayan II period in the Patayan cultural sequence, the late Pueblo II and Pueblo III periods in the Puebloan–Virgin Branch cultural sequence, and the late Lost City and Mesa House phases in the Moapa–Virgin Valley, Virgin Branch cultural sequence. Patayan and Anasazi ceramic types that date to this interval are often equally represented in artifact assemblages,

which may reflect ties to both groups. During the later part of the period, however, Virgin Branch ceramics decrease in number as Patayan and Paiute varieties increase. This shift is undoubtedly related to the thirteenth-century abandonment of the Moapa and Virgin River valleys by Virgin Branch communities. Many archaeologists believe that the Southern Paiute arrived in the region during or soon after this event. Most of the sites in the Las Vegas Valley that date to the Middle Ceramic period are located near springs and other well-watered locales.

Williams and Orlins (1963:Appendix A, Table 3) described a wide variety of Virgin Branch ceramics that were collected from the vicinity of the Corn Creek Dunes Field Station including Aquarius Brown, Boulder Gray, Lino Gray, Medicine Black-on-Red, Moapa Gray, North Creek Black-on-Gray, North Creek Corrugated, North Creek Gray, Pyramid Gray, Shinarump Brown, Southern Paiute Brown, St. George Black-on-Gray, Tusayan Black-on-Red, Washington Corrugated, and Washington Gray. These ceramic types span the Early and Middle Ceramic periods. During HRA's recent survey of the Corn Creek Dunes site (Roberts et al. 2003a), potsherds dating to the Middle Ceramic period were identified at one locus (Locus 26), and other sherds that may date to this period were found at another locus (Field Station Locus, Middens 3 and 5).

Additional Middle Ceramic period radiocarbon dates are available from the Eglington Escarpment. Archaeological deposits at Burnt Rock Mound (26CK3601) yielded six dates with ranges falling entirely or predominantly in this period (AD 980–1195, 1250–1420, 1300–1430, 1300–1430, 1310–1440, and 1310–1638; Rager 2001:Table 4). Three other dates were obtained by the Tule Springs Project from hearths in the area. Two of the dates apply to features buried near the base of Haynes's depositional Unit G (AD 1071–1409 and 1280–1466). The third date was from "aboriginal hearths on spring mound" (AD 1020–1278; Haynes 1967:74).

Additional dates came from 26CK3799, a campsite previously discussed in the context of the Paleo-Archaic and Middle Archaic—early Late Archaic periods. Three hearths or small roasting pits at this site produced Late Ceramic period radiocarbon dates. Features 40A and 40B were located just 3.5 m apart and produced statistically indistinguishable dates (AD 1235–1390 and 1275–1400), suggesting that they were used as part of the same encampment. A third hearth, discovered 1 m from Feature 40A, may also have been contemporaneous with the other two features. A flotation sample from either Feature 40A or 40B contained abundant *Prosopis* (mesquite) charcoal, as well as a small amount of *Acacia* (acacia) charcoal. Both categories represent the remains of fuel that was used in the feature. Feature 27 (AD 1290–1425) was located in a different area of the site. A flotation sample from this hearth or small roasting pit contained a charred *Yucca schidigera* (Mohave yucca)-type seed fragment, suggesting that a fleshy yucca fruit may have been processed in the feature. Also present was fuel-wood charcoal, primarily *Prosopis*, but with some *Acacia* and *Atriplex* (saltbush) also present (Blair et al. 2000).

Big Springs, a well-watered site toward the center of the Las Vegas Valley, contained habitation features. Seymour (1999:172) reports that, in 1920, a local physician, Dr. William S. Park, excavated a fiveroom, multi-occupation pueblo in this locality. A prehistoric adobe feature located near a spring mound at Big Springs and associated with Virgin Branch ceramics may be the remnant of a second pueblo. Finally, there may have been a third pueblo located near the intersection of Interstate Highways 15 and 95 (Gregory Seymour, personal communication 2000). Seymour (Roberts and Seymour 2006) conducted surface collections and test excavations at the Big Springs Site in 2002. Moapa and Logandale Gray wares were collected from the interior of the pithouse, and an interior hearth provided a 2-sigma calibrated date range of AD 670 to 870. Pollen samples processed from floor and fill suggest processing of Cheno-am seeds, Curcubita, and possibly rye. A single cupule of corn from the hearth was the only evidence of maize.

The Duck Creek drainage contains many sites dating to the Middle Ceramic period. The Berger site (26CK501/1528), for example, yielded five radiocarbon dates that fall entirely or predominantly within this period (AD 1188–1385, 1245–1410, 1294–1432, 1296–1435, 1279–1472) (Seymour 1997:Table 10; CALIB REV4.4.2). Some of the sites investigated on Duck Creek have produced evidence of habitation structures and cultivated plants. At Site 26CK1445, Rafferty (1984:76) reported a depression that resembled a semi-

subterranean habitation structure. Seymour identified Patayan II (the most abundant category) and Patayan III types as well as Pueblo I and Pueblo II types in the ceramic collections from this site (Seymour 1997:Tables 13 and 14). The Patayan sherds slightly outnumbered Virgin Branch sherds (Seymour 1997:Table 12). Evidence of cultigens consists of pumpkin or gourd seeds, a corncob, and a corn kernel that were recovered from the Berger site. Abundant burned tortoise bones were also found there.

At least two sites in Clark County Wetlands Park date to the Middle Ceramic period. Both sites are rockshelters. Site 26CK1301 contains deposits that are at least 1 m deep. The decorated ceramics from this site appear to indicate the presence of a Middle Ceramic period component (Roberts and Ahlstrom 2000). Site 26CK1139 was partially excavated by the Nevada Archaeological Survey-Archaeological Research Center in the 1970s. Although the ceramics recovered during these excavations were never fully analyzed, the existing project report did note the presence at the site of Verde Black-on-gray pottery, as well as Patayan and Paiute pottery (Ferraro and Ellis 1982). Seymour's recent reanalysis of the surviving ceramic collection from 26CK1139 has confirmed the presence of Patayan and Paiute pottery, as well as Prescott Gray Ware (which would include Verde Black-on-gray), and it has added Tizon Brown and Virgin Branch grayware to the inventory. The assemblage consists mostly of Patayan pottery, that is, Lower Colorado Buff Ware. According to Seymour, this portion of the assemblage is "predominantly representative of the Patayan II period" equivalent here to the Middle Ceramic period. In addition to this ceramic evidence, the site has produced a number of radiocarbon dates with ranges falling entirely or substantially within the Middle Ceramic period (AD 1020–1255, 1020–1250, 1040–1260, 1288–1480, 1400–1460, and 1405–1635). Some of these dates were run at the time of the excavations (Ferraro and Ellis 1982) and others during a recent reanalysis of data from the site conducted by HRA.

The Basic Site (26CK1098) yielded a radiocarbon date and ceramics suggesting that it was utilized during the Middle Ceramic period (Brooks et al. 1975:246). As noted earlier, this site is located in a rockshelter at the southern end of the Las Vegas Valley. Complete excavation of the shelter yielded an artifact collection of 361 sherds, 32,000 waste flakes, 31 projectile points, and other cultural materials. Although the cultural deposits lacked living floors or hearth features, burnt tortoise remains were plentiful, indicating that tortoises were an important food source. It is not clear if macrobotanical or pollen samples were analyzed. Ceramics suggest that the shelter's occupants were strongly affiliated with the Patayan archaeological culture: buffware sherds made up 76% of the ceramic assemblage, which also included Plain Grayware (1%), Corrugated Grayware (0.5%), and Paiute sherds (10%).

Patayan ceramics were also recovered from a rockshelter, 26CK3243, a site excavated for the Lake Las Vegas development that was located on Las Vegas Wash immediately downstream from Clark County Wetlands Park. Also found at this site were Desert Side-Notched and Rose Springss projectile points and two Paiute Corrugated sherds (Rafferty 1985). The artifact assemblage suggested a Middle Ceramic period occupation for this single-component site.

The Apex area has produced a number of radiocarbon dates that fall in or overlap the interval of AD 1000 to 1500 identified as the Middle Ceramic period (Ahlstrom and Roberts 2001b:Table 2.3). Two of these dates (AD 990–1190 and 1300–1460) are from Garrett Shelter (26CK5712), which was excavated by HRA. Faunal and botanical remains from the site indicated that its occupants, including those who produced the deposits that yielded the dated samples, came to the area to gather and consume the locally available resources, consisting in particular of desert tortoise and yucca pods (Ahlstrom and Roberts 2001b). Other dates are from two sites, 26CK2461 and 26CK4440, that were excavated during the Kern River Pipeline Project (York, Kelly, and Zukosky 1992). A rockshelter at 26CK2461 was found to contain three charcoal stain–hearth features and a small flaked stone and ground stone assemblage. One sample from each feature was submitted for radiocarbon dating: two of the calibrated dates fall in the Middle Ceramic period (AD 1260–1440 and 1300–1480), and the third overlaps the Middle and Late Ceramic periods (AD 1310–1620; Ahlstrom and Roberts 2001b:Table 2.3). The rockshelter at 26CK4440 apparently was utilized in the Early Ceramic period. In addition, the site yielded one date from general fill that falls in the Middle Ceramic period

(1280–1430) and two dates from hearths that overlap the Middle and Late Ceramic periods (AD 1330–1630 and 1410–1650). A macrobotanical sample from one of the hearths contained burned spines from a hedgehog cactus, "and it is surmised that the feature was used to sear the spines from the cactus for transport or use" (York, Kelly, and Zukosky 1992:107). Additional Middle Ceramic period dates came from an informal hearth in a small rockshelter (26CK2459; AD 1320–1500) and from fill and possible hearth remains in a second small rockshelter (26CK3780; AD 980–1150, 1020–1250, and 1040–1275). The sample with the earliest date was a charred maize cob (Ahlstrom and Roberts 2001b; Blair and Wedding 2001). Finally, three samples from Flaherty Shelter gave dates falling entirely or primarily within the Middle Ceramic period (AD 910–1150, 980–1205, 1405–1500).

Late Ceramic period radiocarbon dates from sites in the Apex area are described in the next section. Here it can be noted that patterning in the distribution of dates suggests that Southern Paiute or Patayan people were particularly drawn to this area between AD 1300 and 1650, that is, at the end of the Middle and beginning of the Late Ceramic period (Ahlstrom and Roberts 2001b). Small rockshelter camps with quantities of burned tortoise bone, hedgehog cactus and yucca seeds, and locally obtained flaked stone debitage dot the upland portion of this area. The Burnt Rock Mound site (26CK3601) shows a similar pattern: 10 of that sites 19 dates fall entirely or predominantly in the AD 1300 to 1650 period.

Sites in the California Wash locality also date to the Middle Ceramic period. The most convincing ceramic evidence for use during this time is provided by corrugated ceramics. Two previously mentioned sites, 26CK1088 and 26CK1091, produced ceramic assemblages with more than 55 corrugated sherds each (Blair 1986:Table 3). Three other sites in the area have yielded Middle Ceramic period radiocarbon dates. Dated samples from sites 26CK1081 (1000–1280 and 1300–1480), 26CK1081B (AD 1020–1280), and 26CK1083 (AD 1220–1400) were recovered primarily from hearths and roasting pits (Brooks et al. 1975; Ahlstrom and Roberts 2001b:Table 2.3).

Late Ceramic Period (AD 1500-1850)

The Late Ceramic period corresponds to the Patayan III period in the Patayan cultural sequence. Evidence of Patayan influence, in the form of Patayan ceramics, continues into the Late Ceramic period. The frequency of Patayan ceramic types decreases in favor of Southern Paiute Brown Ware, which first appeared sometime during the Middle Ceramic period. The use of ceramics, both Paiute and Patayan varieties, suggests that horticulture was practiced around springs and well-watered locales.

During HRA's recent survey of the Corn Creek Dunes site (Roberts et al. 2003a), the survey crew recorded Southern Paiute Brown Ware throughout the project area, suggesting fairly extensive use of the site by Southern Paiute people. A scraper made of glass hints that this use continued into the early Historical period. Paiute Elders tell stories of relatives who lived in the Corn Creek area in the early nineteenth century.

The previously mentioned Flaherty site (26CK415) in the Apex Area, Burnt Rock Mound (26CK3601) on the Eglington Escarpment, and Berger site on Duck Creek have yielded Late Ceramic period radiocarbon dates. There are three of these dates from the Flaherty site (1425–1635, 1440–1640, and 1440–1650; seven from Burnt Rock Mound (AD 1400–1620, 1430–1645, 1440–1650, 1450–1660, 1455–1665, 1520–1950, and 1715–1885; and one from the Berger site (26CK501/1528) on Duck Creek (1421–1632) (Ahlstrom and Roberts 2001b:200-203; Blair and Wedding 2001; Seymour 1997:Table 10; Rager 2001:Table 4).

Site 26CK4908 consists of a rockshelter and three roasting mounds located at the base of the Spring Mountains, on the western side of the Las Vegas Valley (Blair et al. 2000; Seymour 2000). The roasting features were probably used for processing agave and, possibly, other foodstuffs. Although 26CK4908 dates in part to the Early Ceramic period, most of the evidence from site appears to relate to a period of use that had begun by the AD 1400s and that continued into the Historical period. This dating is based on a suite of seven radiocarbon dates (AD 1310–1470, 1410–1470, 1435–1660, 1515–1950, 1675–1955, 1675–1955, 1685–

1955), as well as the recovery from the site of a Historical period metal projectile point. Consistent with this dating is an artifact assemblage that included 18 Cottonwood Triangular points, 10 Desert Side-Notched points, and a ceramic assemblage dominated by Topoc Buff, Topoc Red-on-buff, and Southern Paiute Brown Ware (n = 94-165) with lesser amounts (n < 35) of Topoc Black-on-buff and Topoc Stucco, Parker Buff and Parker Red-on-buff, Tizon Brown and Tizon Stucco, and Southern Paiute Corrugated. Much of this assemblage would also be consistent with a beginning date for the site's major period of use in the AD 1000s.

Clark County Wetlands Park at the south end of Las Vegas Wash contains at least two sites that date to the Late Ceramic period (Roberts and Ahlstrom 2000). The previously mentioned rockshelter site, 26CK1139, has produced seven dates falling entirely or substantially in the Late Ceramic period (Ahlstrom and Roberts 2001a:Table 1.2). This site also saw use in the Middle Ceramic period and probably during the Historical period. HRA's recent work at the second site, 26CK1282, produced a Late Ceramic period radiocarbon date (AD 1490–1950) from a small roasting pit buried 75 cm below the ground surface (Ahlstrom and Roberts 2001a:Table 1.2). A second, nondescript thermal feature, located stratigraphically above the dated roasting pit and 5 to 15 cm below the surface, was associated with Southern Paiute ceramics (a rim sherd of Southern Paiute Brown Ware). In addition, there are two fragile-pattern sites in Wetlands Park, 26CK1126 and 26CK1138, which appear to have been occupied during the Late Ceramic period. Both sites yielded evidence of mesquite-bean use (Roberts and Ahlstrom 2000).

HRC excavated a Southern Paiute or Chemehuevi occupation in the Mended Basket Rockshelter (26CK4038) located in the southwestern edge of the Las Vegas Valley (Blair and Seymour 1998). The site's artifact assemblage and five small hearths indicate the shelter served as a temporary habitation that was occupied intermittently for short periods of time between A.D. 934 and A.D. 1473. Basketry and ground stone implements suggest that the site's occupants gathered and processed seeds. Faunal remains were dominated by desert tortoise bones. Mesquite seeds, prickly pear cactus seeds, domestic squash seeds, and coyote melon seeds, recovered from the site, were probably used as food. A cache contained juniper bark, which does not occur locally. The 12 Southern Paiute Brown Ware sherds suggest a Southern Paiute affiliation, but the projectile points are predominantly Rosegate style, which are typically associated with the earlier Early Ceramic and Middle Ceramic periods (Jennings 1986:Figure 3).

Several sites in the Apex area have produced Late Ceramic period radiocarbon dates. In a number of cases, the date ranges begin in the Late Ceramic period, but extend beyond that period to AD 1950/1955. Dates from hearths at two sites in the Apex area, 26CK2461 and 26CK4440, produced date ranges that, as was mentioned earlier, fall partly in the Late Ceramic period. The previously mentioned Garrett Shelter has two dates (AD 1530–1950 and 1640–1960) in the period, and the Flaherty site has three (AD 1425–1635, 1440–1640, and 1440–1650). Site 26CK4415, a small rockshelter excavated by the HRC (Blair and Wedding 2001), yielded six dates with ranges that, as a group, fall predominantly in the Late Ceramic period (AD 1435–1650, 1445–1645, 1460–1665, 1510–1795, 1645–1950, and 1660–1950). Another of the area's Late Ceramic period dates (AD 1490–1660) came from an open site, 26CK5701, which has parallel rock alignments set against a vertical rock face. These alignments appear to mark the location of an ephemeral shelter. The radiocarbon sample probably came from debris found in one or several small hearths (Ahlstrom and Roberts 2001b). In addition, there is a date (AD 1450–1950) from a hearth at Site 26CK1164, in the Dry Lake locality north of the Apex area that falls in the Late Ceramic period. The site was excavated during the Navajo-McCullough Project (Brooks et al. 1975). Finally, a couple of date ranges from the California Wash locality also overlap this period (Ahlstrom and Roberts 2001b:Table 2.3).