Mogollon Communal Spaces and Places in the Greater American Southwest

edited by

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Early Communal Architecture

The Plaza at the Sanchez Cerro de Trincheras and Other Locations

Robert J. Hard, Gabriella Zaragosa, John R. Roney,
A. C. MacWilliams, *and* Mary E. Whisenhunt

As this volume attests, integrative features, including plazas, communal structures (e.g., great kivas), mounds, and ballcourts, have fascinated archaeologists working in Northwest Mexico and the U.S. Southwest since the beginning of the discipline. Such features signal corporate activities beyond the household and implicate multiple dimensions of social life including ritual, social, and labor organization. The plaza on the Sanchez cerro de trincheras site represents an early example of a communal feature and corporate activities in the Mogollon region.

The ascent to the top of the Sanchez site (AZ CC:2:452[ASM]) is a grueling 200 m climb rewarded by the discovery of a large, cleared area bounded by low cobble walls. The plaza is just one of many features there, including over 140 rock rings and almost a mile of walls. Based on ceramics and radiocarbon dates, the Sanchez site dates to both the Early Agricultural period (2100 BC–AD 200) and the Early Pithouse period (AD 200–550). The site is a cerro de trincheras, a dark volcanic ridgetop with a complex array of structures, cobble walls, and terraces. It lies one kilometer north of the Gila River floodplain in the eastern Safford Valley in southeastern Arizona (Figure 1.1). With an apex of 1,139 m amsl, the ridge abruptly rises 207 m above a swath of irrigated cotton fields. The conspicuous rock ring foundations and long walls on this prominence show the communal plaza feature was only one element of this substantial ancient hilltop village, but an unanticipated one, as plazas were not expected on sites of this age.

The Early Agricultural and Early Pithouse periods are a transitional interval of radical, though uneven, change in Northwest Mexico and the U.S. Southwest. In some locations, societies were rapidly adopting agriculture, and patterns of mobility and aggregation were fluctuating. Communal features were coming into increasing use, signaling that social units above the level of the household were taking new forms and engaging in new behaviors. These shifts raise multiple questions regarding social organization, population size, and aggregation. Yet the appearance of communal features appears patchy across this area. Domestic pithouses were likely to have also been used as kivas or communal features. During the Early Agricultural and Early Pithouse periods, communal features built for the specialized purpose of collective activity were still uncommon. In fact, plazas are not a known feature of the Early Pithouse period in the Mogollon region (Anyon and LeBlanc 1980; Diehl and LeBlanc 2001).

The association of the Sanchez communal feature on a cerro de trincheras is critical for understanding the function of the plaza. With their networks of terraces and low cobble walls that frequently encircle the upper portions of

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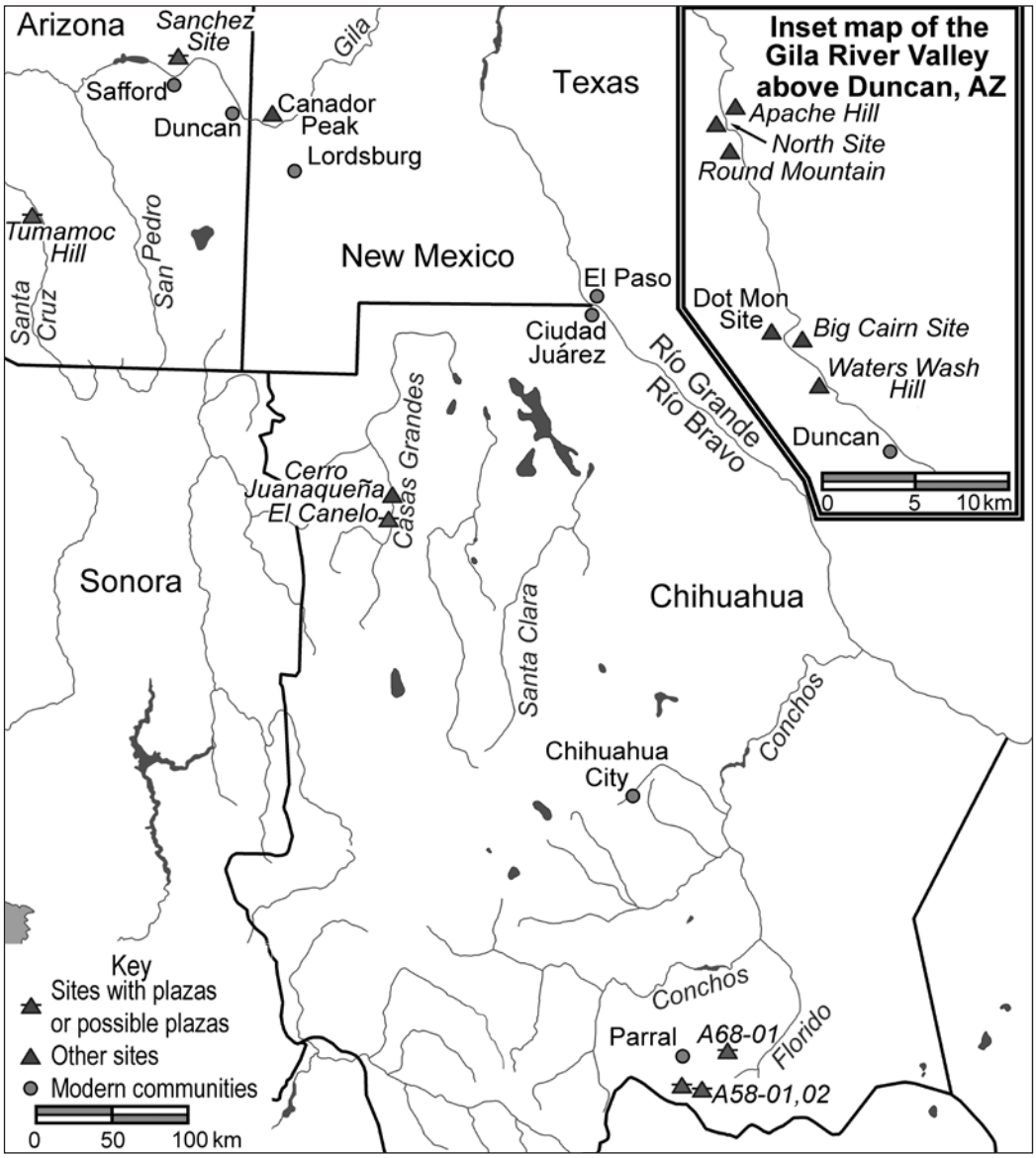


Figure 1.1. Cerros de trincheras locations.

isolated volcanic hills, cerros de trincheras are spectacular archaeological sites. Many have ample evidence of domestic structures and residential occupation; others have few such remains. With over 100 recorded, they are present in the basin and range country of Sonora, Chihuahua, and southern Arizona, plus a few in southern New Mexico (e.g., P. Fish et al. 2007; Hard and Roney 2020; Stacy 1974; Wilcox 1979).

One key pattern is that the cerros de trincheras dating to the Early Agricultural and Early Pithouse periods in Northwest Mexico and the U.S. Southwest are found adjacent to major well-watered floodplains, a consequence of the integration of maize agriculture into the economy (Hard and Roney 2020). This pattern occurs in the Río Casas Grandes and Santa Cruz Valleys, as well as the upper Gila River Valley. In

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addition, early cerros de trincheras are settings where multihousehold units cooperated in the construction of networks of walls and terraces. The proposed functions of cerros de trincheras from all time periods include residential settlements, defense, agricultural terraces, political display, ideological expression, social integration, seasonal aggregation, response to environmental conditions, and special activities (e.g., Fish and Fish 2007; Fish et al. 2013; Fontana et al. 1959; Hard and Roney 2020; Haury 1962; LeBlanc 1999; Stacy 1974; Wallace et al. 2007; Wilcox 1979).

Here, we address key questions regarding the Sanchez site plaza's age, construction, and relation to the large residential cerro de trincheras on which it was situated and summarize our understanding of the feature, the site, and its regional and temporal contexts.

This work grew out of the University of Texas at San Antonio's archaeological field schools conducted with the support of Colinas Cultural Resource Consulting. As part of this research, we acquired surface and excavation data from the Sanchez cerro de trincheras. The archaeological study of the Sanchez site is but one element of a larger project investigating broad issues related to the adoption of agriculture, the role of cerros de trincheras, and settlement patterns in the upper Gila River Valley.

Cerros de Trincheras in the Upper Gila River Valley

Farther upstream of the Sanchez site in the York/Duncan and Virden Valleys, we have documented a series of other cerros de trincheras belonging to the Early Agricultural and Early Pithouse periods. These include Canador Peak, Round Mountain, DotMon, and the North site. Roney (1999) documented Canador Peak (LA 72654), which overlooks the Gila River in the Virden Valley, New Mexico (Figure 1.1). Based on surface mapping, this site contains a dozen rock rings and multiple, short, constructed terraces. Two pithouses on a small saddle just below the summit are assumed to be associated with the terraces. Brown ware and red ware ceramics place the main occupation of the site in the Early Pithouse period. Some boulders and cliffs are covered with petroglyphs of unknown cultural affiliation. An isolated concentration of white wares at the apex of the hill includes Mimbres Style III Black-on-white ceramics and indicates Mimbres Classic period specialized reuse of the site, given the lack of evidence for domestic occupation at that time. Alternatively, this tight cluster of sherds could have been deposited by visitors in modern times, as powerline and other disturbances are present (Roney 1999). Adjacent to this concentration is a 10 × 10 m rectanguloid wall construction dissimilar to other site features.

Another nearby site (Figure 1.1) on which we recently conducted excavations and surface documentation is Round Mountain (AZ CC:4:61[ASM]), an Early Agricultural period cerro de trincheras (Hard et al. 2016; Roney et al. 2015a, 2015b; Whisenhunt 2020). The site includes 1.9 km of rubble walls and 18 rock rings, some of which represent domestic structures. Three radiocarbon dates cluster in the Early Cienega phase, 800–400 cal BC. The substantial ground stone assemblage, along with the structures, indicate residential activity. However, the minimal wear on the tools suggests that these activities persisted for a limited time, perhaps months or years, not decades (Hard et al. 2016). The site contains two stone pipes and a fragment of a stone mortar, artifact forms that are associated with the Early Agricultural period. A least-cost path analysis supports the interpretation that the site had a defensive function during the Early Agricultural period in that wall constructions were placed along the most accessible ascent routes, presumably to impede attacks (Whisenhunt 2020; Whisenhunt et al. 2016). A 20 m diameter area at the summit of the hilltop contains a scatter of sherds comprising Alma Plain, undifferentiated white wares, Three Circle Red-on-white, Mimbres Style I and Style III Black-on-white, and Salado Polychrome. These ceramics indicate multiple specialized visits, primarily after ca. AD 700 (Roney et al. 2015a, 2015b; Whisenhunt 2020).

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Just upstream of Round Mountain is the North site (AZ CC:4:81[ASM]), a moderate sized cerro de trincheras with 650 m of wall, including a distinct perimeter boundary and 22 rock rings (Roney et al. 2016; Whisenhunt 2020). Brown ware ceramics identify its temporal affiliation as the Early Pithouse period. We also recorded a few additional hilltop sites, each with several features, such as the Apache Hill (Field Site number FS-18), Big Cairn Hill (FS-21) and Waters Wash Hill (FS-23) sites. Each also includes brown ware ceramics (Whisenhunt 2020). In sum, during the Early Agricultural and Early Pithouse periods ancient people constructed and resided on cerros de trincheras adjacent to the upper Gila River floodplain. These sites were later utilized for special purposes by later Ceramic period (pithouse and pueblo) visitors who left small, isolated concentrations of sherds. In broad outlines, these cerros de trincheras are not unlike those also seen along the Santa Cruz River in the Tucson Basin and the Río Casas Grandes in northwestern Chihuahua. Previous researchers have argued that the Santa Cruz River and Río Casas Grandes settlements are related to the adoption of agriculture, aggregation, defense, and multihousehold cooperation (e.g., Fish et al. 2013; Hard and Roney 2020; Wallace et al. 2007). While these are critical issues relevant to the upper Gila River cerros de trincheras, they are beyond the scope of this chapter.

Early Plazas and Cerros de Trincheras

Cerros de trincheras contain some of the earliest communal features in the Northwest Mexico/U.S. Southwest area. Between 1300 BC and AD 700, agriculture was being integrated into hunter-gatherer adaptations, residential mobility was being reduced, and larger populations were residing together as experiments in village living, although these changes were spatially and temporally uneven. As an element of these sociocultural changes, communal architecture was emerging for the first time. Not only do the substantial walls and terraces on cerros de trincheras represent early examples of collective effort, but the plazas indicate activities related to social integration. There are a total of six cases of plazas on early cerros de trincheras that span southern Arizona to southern Chihuahua: Cerro el Canelo, Tumamoc Hill, Cerro Talamantes, Cerro Maynez I, Cerro Maynez II, and the Sanchez site (Table 1.1; see Figure 1.1). We will discuss these sites briefly for comparative context.

Cerro el Canelo

What may be the earliest public architecture in the Northwest Mexico/U.S. Southwest area is the large stone circle, dating to 1300 to 1100 BC, at Cerro el Canelo, an Early Agricultural period cerro de trincheras in northwestern Chihuahua (Figure 1.1; Hard and Roney 2020). The stone circle is indirectly dated, based on its association with the site of Cerro el Canelo and a radiocarbon date from a terrace on the site. In addition, ceramics are absent from the circle, and the rocks that make up the feature are

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patinated like those on the constructions on the rest of the site. Cerro el Canelo has 50 rock ring structure foundations representing domestic structures, 3.9 km of terrace walls, and 250 arc-shaped terraces. It is about half the size of the contemporaneous Cerro Juanaqueña, 20 km to the north in Chihuahua (Hard and Roney 2020).

The circle was built in a saddle and is 70 m in diameter, over twice the diameter of the dome of the U.S. Capitol. Rock was cleared from the circle, and then a low stone berm wall was constructed around its circumference (Hard and Roney 2020:161, Figures 4.4, 4.5, and Plate 8). The capacious scale of the feature suggests it was built to accommodate an ample number of participants. With the enclosure nestled in the saddle, the surrounding slopes would have provided an unobstructed view for crowds gathered to watch presumed public performances.

Tumamoc Hill

Another potential example of an early communal feature on a cerro de trincheras comes from Tumamoc Hill in the Tucson Basin, which dates to both the Cienega phase (500–300 BC) and the Tortolita phase (AD 475–700) (Fish et al. 2013:7). The site includes 1.9 km of rubble walls, at least 152 structure foundations, systems of trails, mortar holes, petroglyphs, and other features (Fish et al. 2013; Wilcox and Larson 1979). The walls enclose 6.4 ha, but the total site area is far greater (Table 1.1). In an early twentieth-century newspaper account, archaeologists describe the site as having a centrally located plaza (Fish et al. 2013). Unfortunately, construction destroyed that part of the site before the plaza was documented, but it is thought to have been a Tortolita phase feature located in the same area as a Cienega phase communal structure (Fish et al. 2013:17).

Southern Chihuahua Cerros de Trincheras

Like the Sanchez site, three cerro de trincheras sites located during 2003 in southern Chihuahua have plazas in saddles. These include Cerro Talamantes, Cerro Maynez I, and Cerro Maynez II. The sites are located around Hidalgo del Parral, approximately 700 km southeast of the Sanchez site (Figure 1.1). They are among a total of 17 known cerro de trincheras sites in southern Chihuahua (Hard et al. 2015:248; MacWilliams et al. 2006; MacWilliams et al. 2009). Notably, the experience of working on the Sanchez site has helped to clarify our understanding of the southern Chihuahua saddles as plazas. Each of the three sites is on an igneous hill offering a commanding regional view, though these hills are considerably smaller than Sanchez and Cerro el Canelo (Table 1.1)

Cerro Talamantes (A58-01) lies on an isolated hill beside perennial water, now dammed to create a reservoir on the southwest side of the site. Two peaks near the top are oriented roughly north–south with an intervening saddle that is less than 10 m lower than the peaks. Features on the site include terrace walls, terraces, and stone circles that are typically close to 4 m in diameter (Figure 1.2). The stone circles are inferred to be house remnants. There also are features related to Historic period mining. The site has a diffuse assemblage of flaked stone, ground stone, and plain ceramics. One two-sigma calibrated AMS radiocarbon date of AD 660 to 790 from a test excavation unit indicates a Ceramic period occupation (Beta-191113, 1290 ± 40, δ^{13}C-26.1‰) (MacWilliams et al. 2006:48).

The plaza was built into the near-level saddle. The landform is almost entirely cleared of surface rocks within the ca. 700 m² saddle. Low cobble walls were built on three sides of the plaza. The fourth side, to the south, is defined by a low cliff.

Cerro Maynez I (A68-01) is approximately 35 km south of Hidalgo del Parral in a tributary valley draining eastward. This small valley includes several springs close to the site. The long axis of the hill extends northeast–southwest. The saddle is several meters lower than the hilltops in an area approximately 2,200 m². The saddle is close to level, cleared of most rocks, and bordered with low cobble walls on the east and west flanks (Figure 1.3). The variety of features again includes terrace walls, filled terraces, and stone circles close to 4 m in diameter. These circles are located on the peaks above the saddle.

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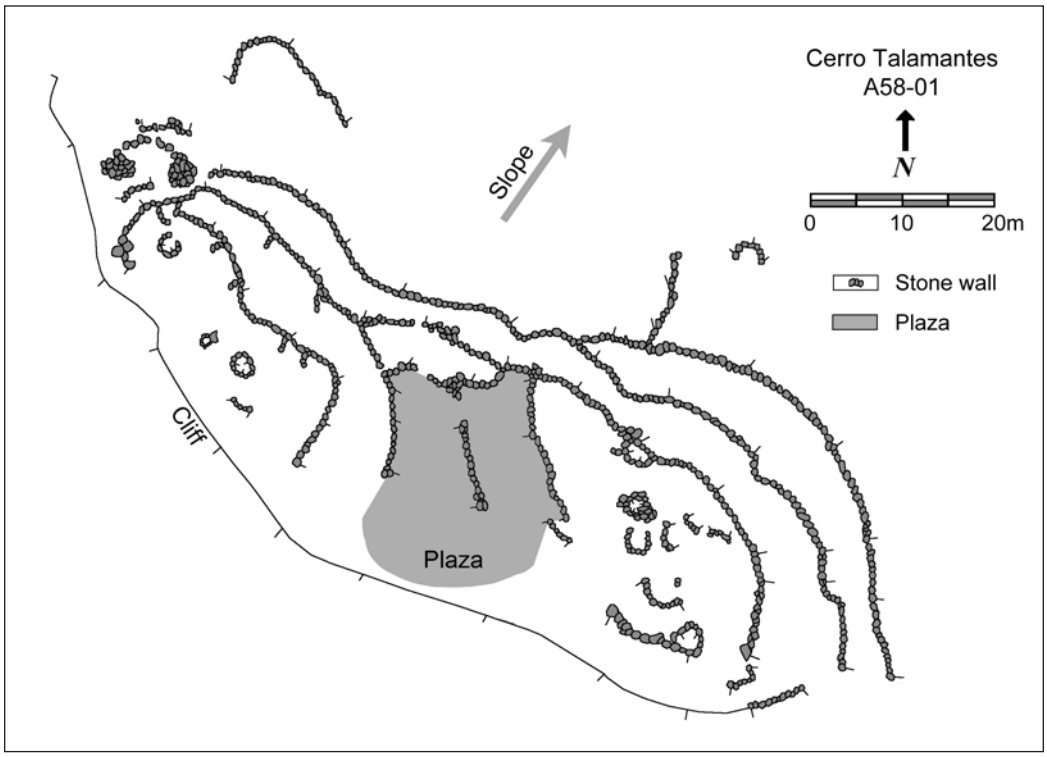


Figure 1.2. Cerro Talamantes site map.

A one-square-meter excavation unit in the west side of the plaza reached bedrock slightly more than 50 cm below surface. The fill contained flaked stone, plain sherds, and carbonized wood that yielded a two-sigma AMS calibrated radiocarbon date of AD 540 to 660 (Beta-191114, 1460 ± 40, δ^{13}C-24.0‰) (MacWilliams et al. 2006:48).

Cerro Maynez II (A68-02) is about 1.5 km southeast of the previous site. The long axis of this site is northwest–southeast. This site is expansive and diffuse as compared to the two others, though most of the structures at this site are concentrated on the relatively level south peak of the hill and are approximately 4 m in diameter (Figure 1.4). One apparent structure and a stone arc exist within the saddle of this hill. As with the other saddles, this is a near-level area from which most rocks have been cleared to form a plaza. Flanking walls exist on the sides of the plaza. The saddle is about 800 m^2, though more difficult than the others to define, as it tapers to the southeast. Diffuse artifacts include flaked stone, plain ceramics, and scarce ground stone. There are no radiocarbon dates from this site.

These three cerro de trincheras sites in southern Chihuahua are part of a much larger group of hill sites. Most of the known cerro de trincheras sites in the area do not have plazas or other discernible communal spaces. Common denominators among southern Chihuahua cerro de trincheras sites are basic: ascendable hills, proximity to water, and areas to construct terrace walls and filled terraces. In scale and layout, there is considerable variation. Selecting hills that could accommodate communal space and particularly plazas obviously was not obligatory for builders. However, we do not know whether these three sites reveal differentiation in function or if the saddles are better described as opportunities not wasted.

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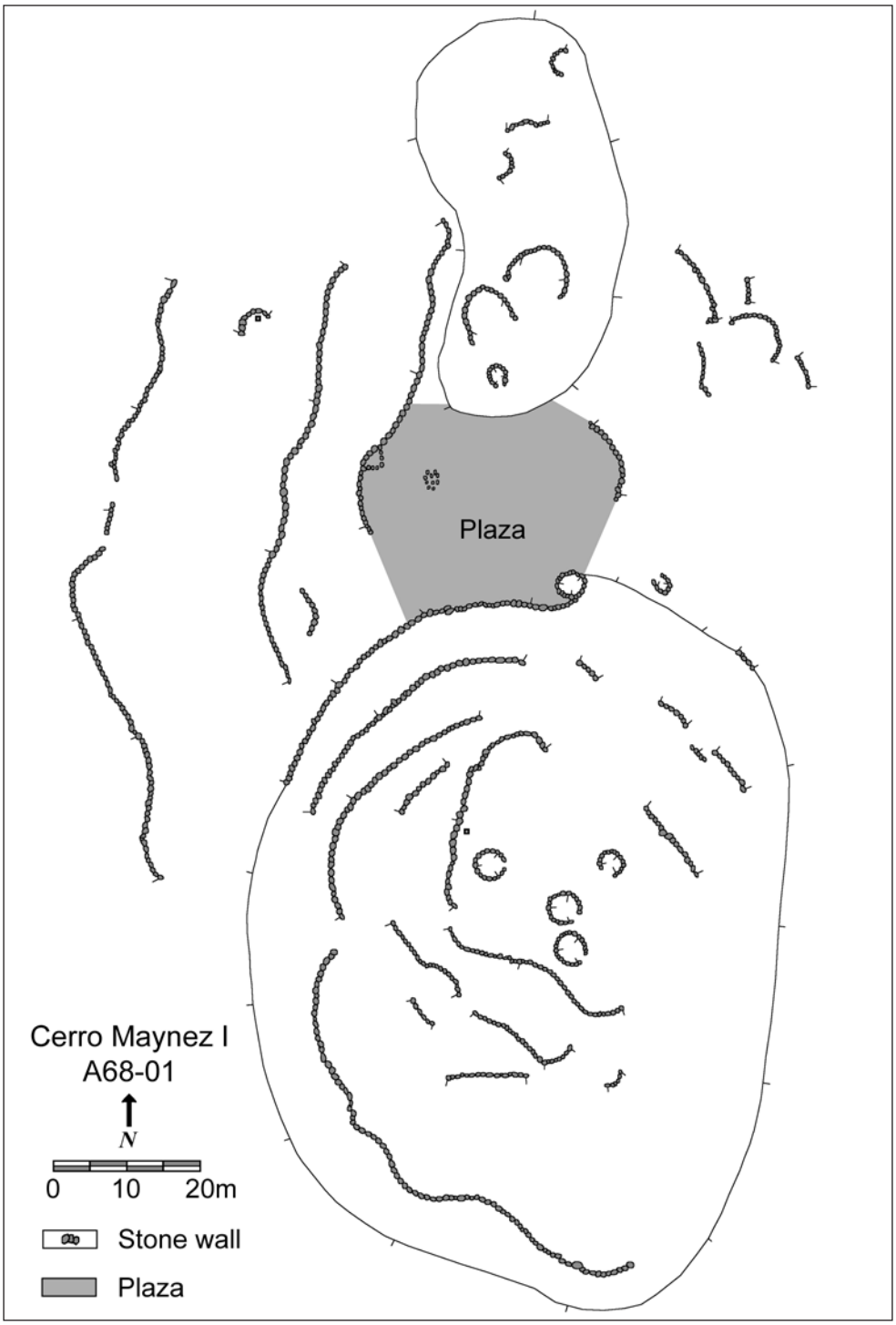


FIGURE 1.3. Cerro Maynez I site map.

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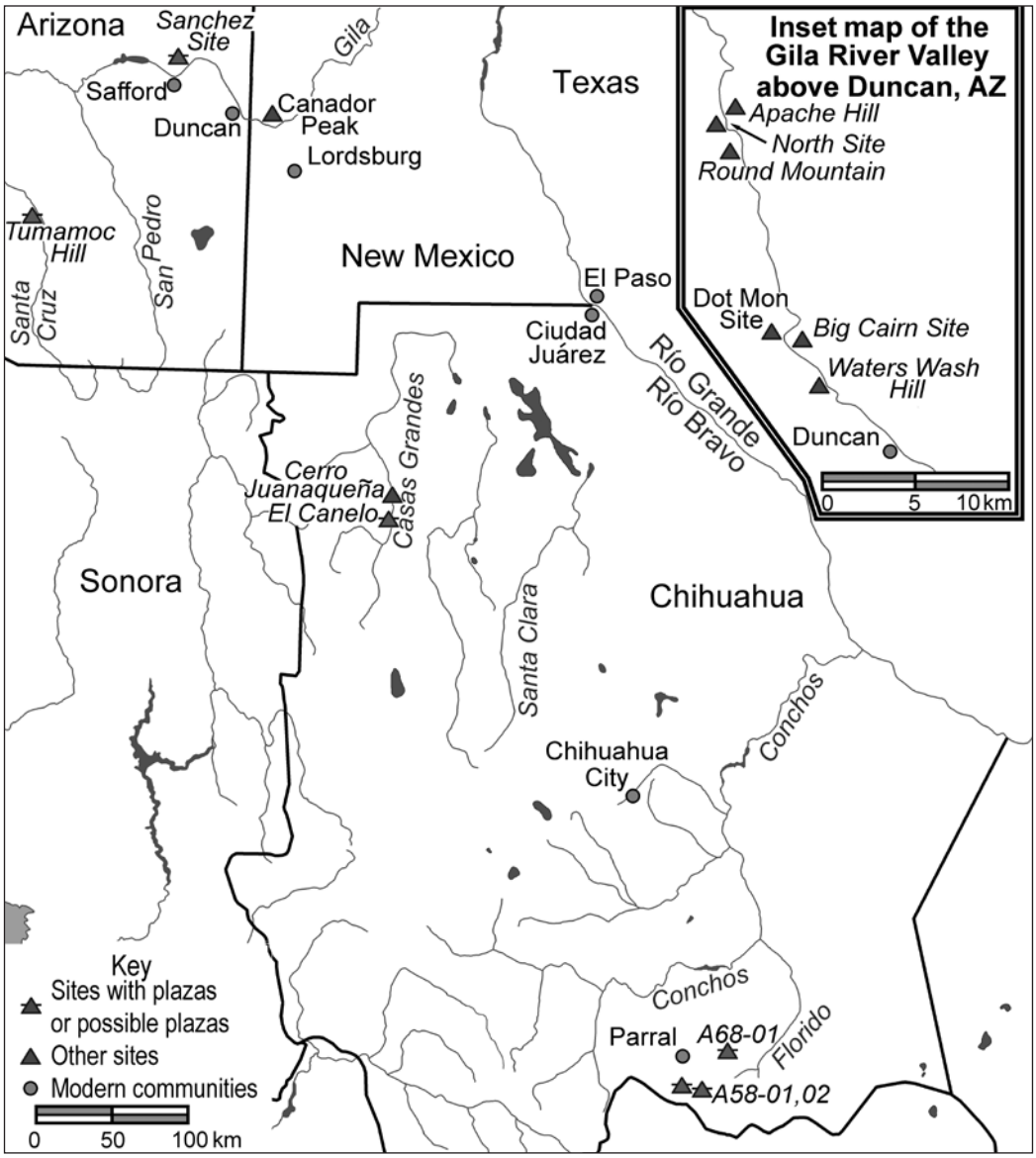


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The circle was built in a saddle and is 70 m in diameter, over twice the diameter of the dome of the U.S. Capitol. Rock was cleared from the circle, and then a low stone berm wall was constructed around its circumference (Hard and Roney 2020:161, Figures 4.4, 4.5, and Plate 8). The capacious scale of the feature suggests it was built to accommodate an ample number of participants. With the enclosure nestled in the saddle, the surrounding slopes would have provided an unobstructed view for crowds gathered to watch presumed public performances.

Tumamoc Hill

Another potential example of an early communal feature on a cerro de trincheras comes from Tumamoc Hill in the Tucson Basin, which dates to both the Cienega phase (500–300 BC) and the Tortolita phase (AD 475–700) (Fish et al. 2013:7). The site includes 1.9 km of rubble walls, at least 152 structure foundations, systems of trails, mortar holes, petroglyphs, and other features (Fish et al. 2013; Wilcox and Larson 1979). The walls enclose 6.4 ha, but the total site area is far greater (Table 1.1). In an early twentieth-century newspaper account, archaeologists describe the site as having a centrally located plaza (Fish et al. 2013). Unfortunately, construction destroyed that part of the site before the plaza was documented, but it is thought to have been a Tortolita phase feature located in the same area as a Cienega phase communal structure (Fish et al. 2013:17).

Southern Chihuahua Cerros de Trincheras

Like the Sanchez site, three cerro de trincheras sites located during 2003 in southern Chihuahua have plazas in saddles. These include Cerro Talamantes, Cerro Maynez I, and Cerro Maynez II. The sites are located around Hidalgo del Parral, approximately 700 km southeast of the Sanchez site (Figure 1.1). They are among a total of 17 known cerro de trincheras sites in southern Chihuahua (Hard et al. 2015:248; MacWilliams et al. 2006; MacWilliams et al. 2009). Notably, the experience of working on the Sanchez site has helped to clarify our understanding of the southern Chihuahua saddles as plazas. Each of the three sites is on an igneous hill offering a commanding regional view, though these hills are considerably smaller than Sanchez and Cerro el Canelo (Table 1.1)

Cerro Talamantes (A58-01) lies on an isolated hill beside perennial water, now dammed to create a reservoir on the southwest side of the site. Two peaks near the top are oriented roughly north–south with an intervening saddle that is less than 10 m lower than the peaks. Features on the site include terrace walls, terraces, and stone circles that are typically close to 4 m in diameter (Figure 1.2). The stone circles are inferred to be house remnants. There also are features related to Historic period mining. The site has a diffuse assemblage of flaked stone, ground stone, and plain ceramics. One two-sigma calibrated AMS radiocarbon date of AD 660 to 790 from a test excavation unit indicates a Ceramic period occupation (Beta-191113, 1290 ± 40, δ^{13}C-26.1‰) (MacWilliams et al. 2006:48).

The plaza was built into the near-level saddle. The landform is almost entirely cleared of surface rocks within the ca. 700 m² saddle. Low cobble walls were built on three sides of the plaza. The fourth side, to the south, is defined by a low cliff.

Cerro Maynez I (A68-01) is approximately 35 km south of Hidalgo del Parral in a tributary valley draining eastward. This small valley includes several springs close to the site. The long axis of the hill extends northeast–southwest. The saddle is several meters lower than the hilltops in an area approximately 2,200 m². The saddle is close to level, cleared of most rocks, and bordered with low cobble walls on the east and west flanks (Figure 1.3). The variety of features again includes terrace walls, filled terraces, and stone circles close to 4 m in diameter. These circles are located on the peaks above the saddle.

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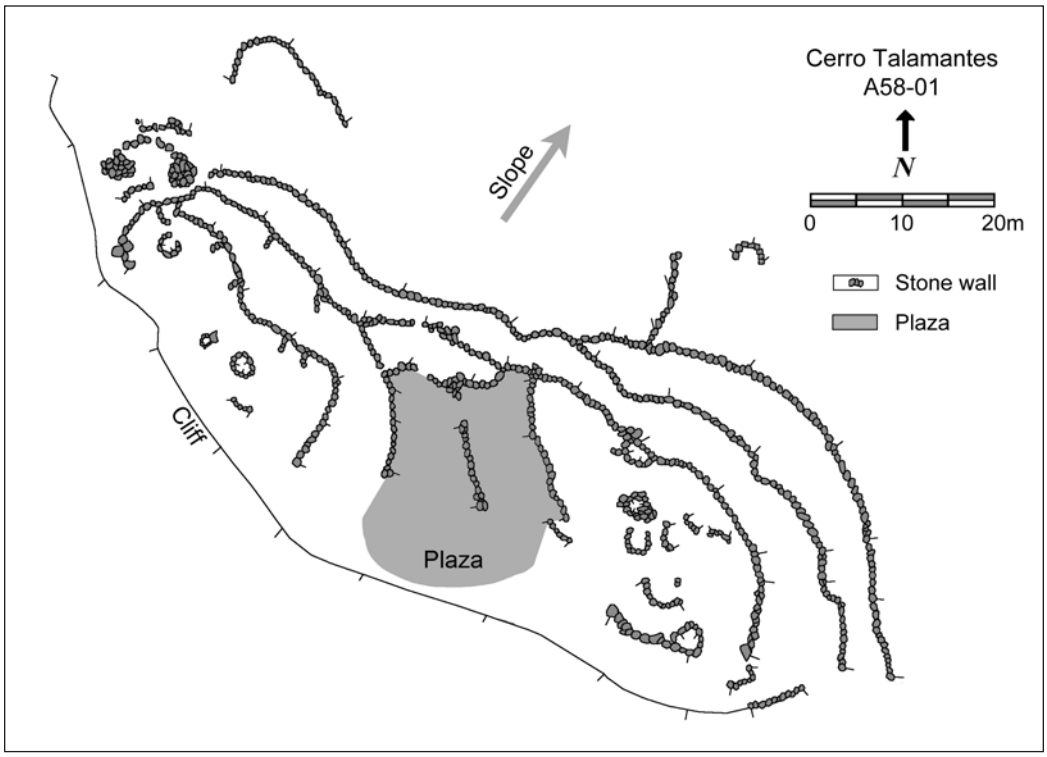


Figure 1.2. Cerro Talamantes site map.

A one-square-meter excavation unit in the west side of the plaza reached bedrock slightly more than 50 cm below surface. The fill contained flaked stone, plain sherds, and carbonized wood that yielded a two-sigma AMS calibrated radiocarbon date of AD 540 to 660 (Beta-191114, 1460 ± 40, δ^{13}C-24.0‰) (MacWilliams et al. 2006:48).

Cerro Maynez II (A68-02) is about 1.5 km southeast of the previous site. The long axis of this site is northwest–southeast. This site is expansive and diffuse as compared to the two others, though most of the structures at this site are concentrated on the relatively level south peak of the hill and are approximately 4 m in diameter (Figure 1.4). One apparent structure and a stone arc exist within the saddle of this hill. As with the other saddles, this is a near-level area from which most rocks have been cleared to form a plaza. Flanking walls exist on the sides of the plaza. The saddle is about 800 m^2, though more difficult than the others to define, as it tapers to the southeast. Diffuse artifacts include flaked stone, plain ceramics, and scarce ground stone. There are no radiocarbon dates from this site.

These three cerro de trincheras sites in southern Chihuahua are part of a much larger group of hill sites. Most of the known cerro de trincheras sites in the area do not have plazas or other discernible communal spaces. Common denominators among southern Chihuahua cerro de trincheras sites are basic: ascendable hills, proximity to water, and areas to construct terrace walls and filled terraces. In scale and layout, there is considerable variation. Selecting hills that could accommodate communal space and particularly plazas obviously was not obligatory for builders. However, we do not know whether these three sites reveal differentiation in function or if the saddles are better described as opportunities not wasted.

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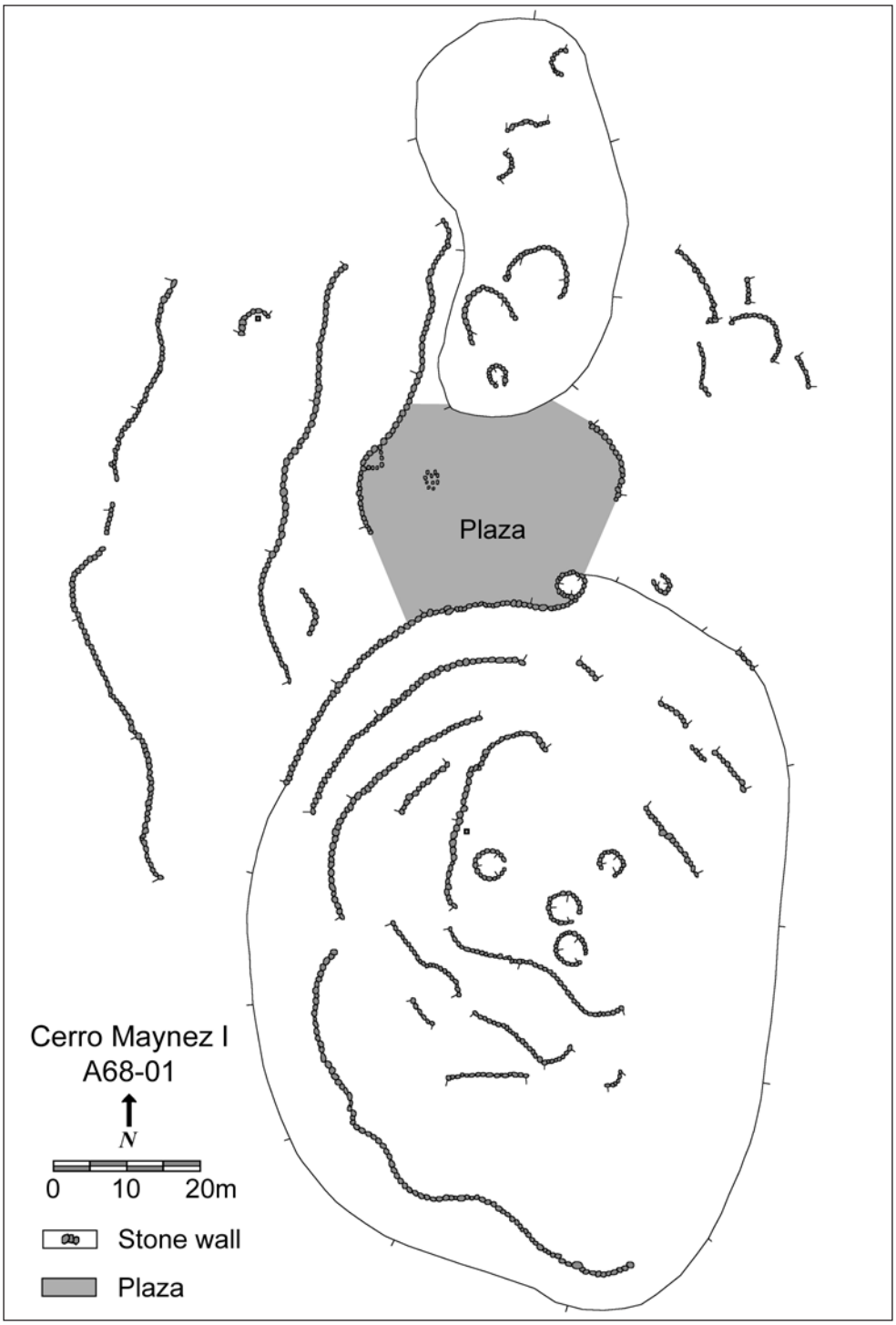


FIGURE 1.3. Cerro Maynez I site map.

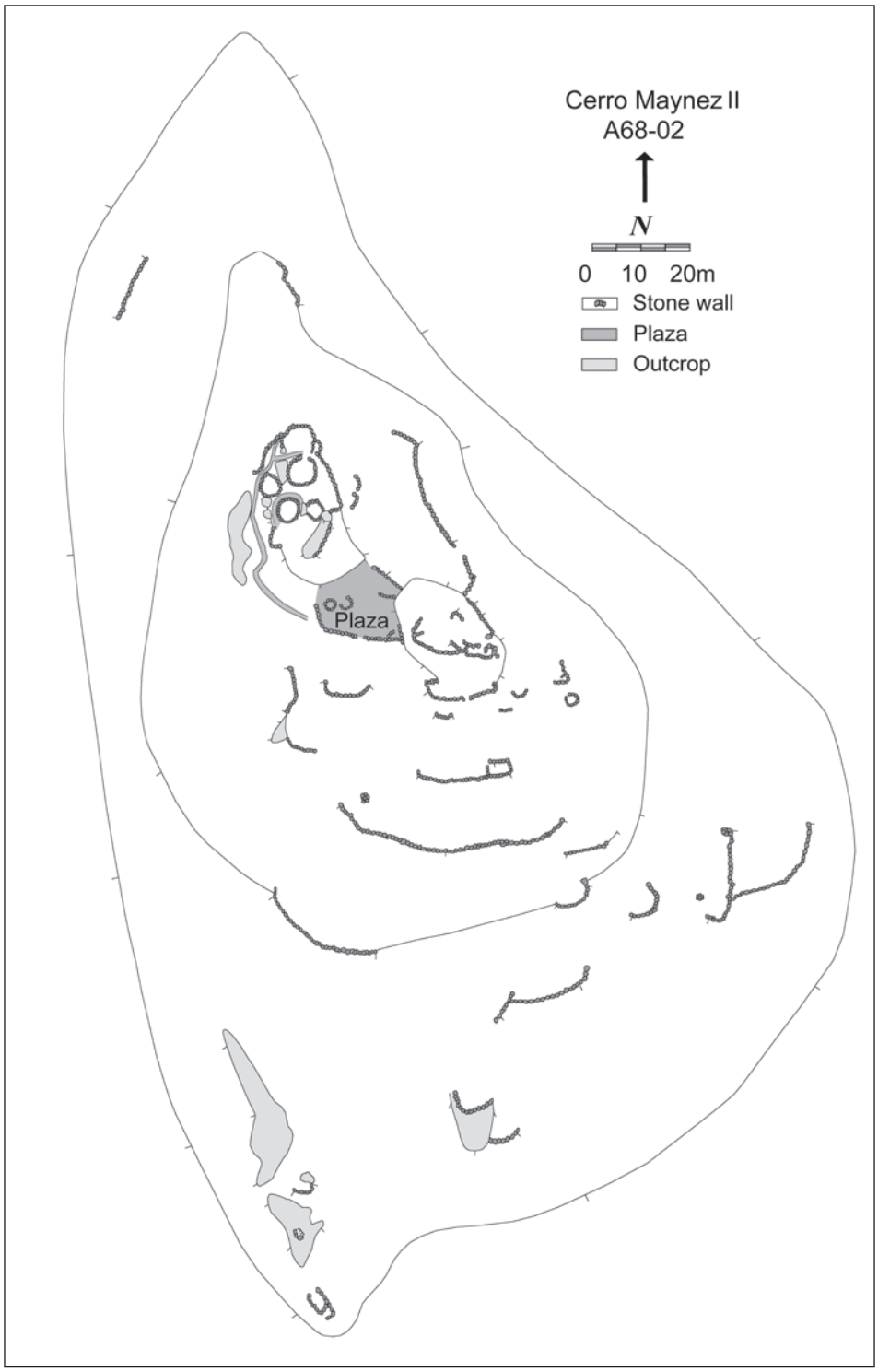


FIGURE 1.4. Cerro Maynez II site map.

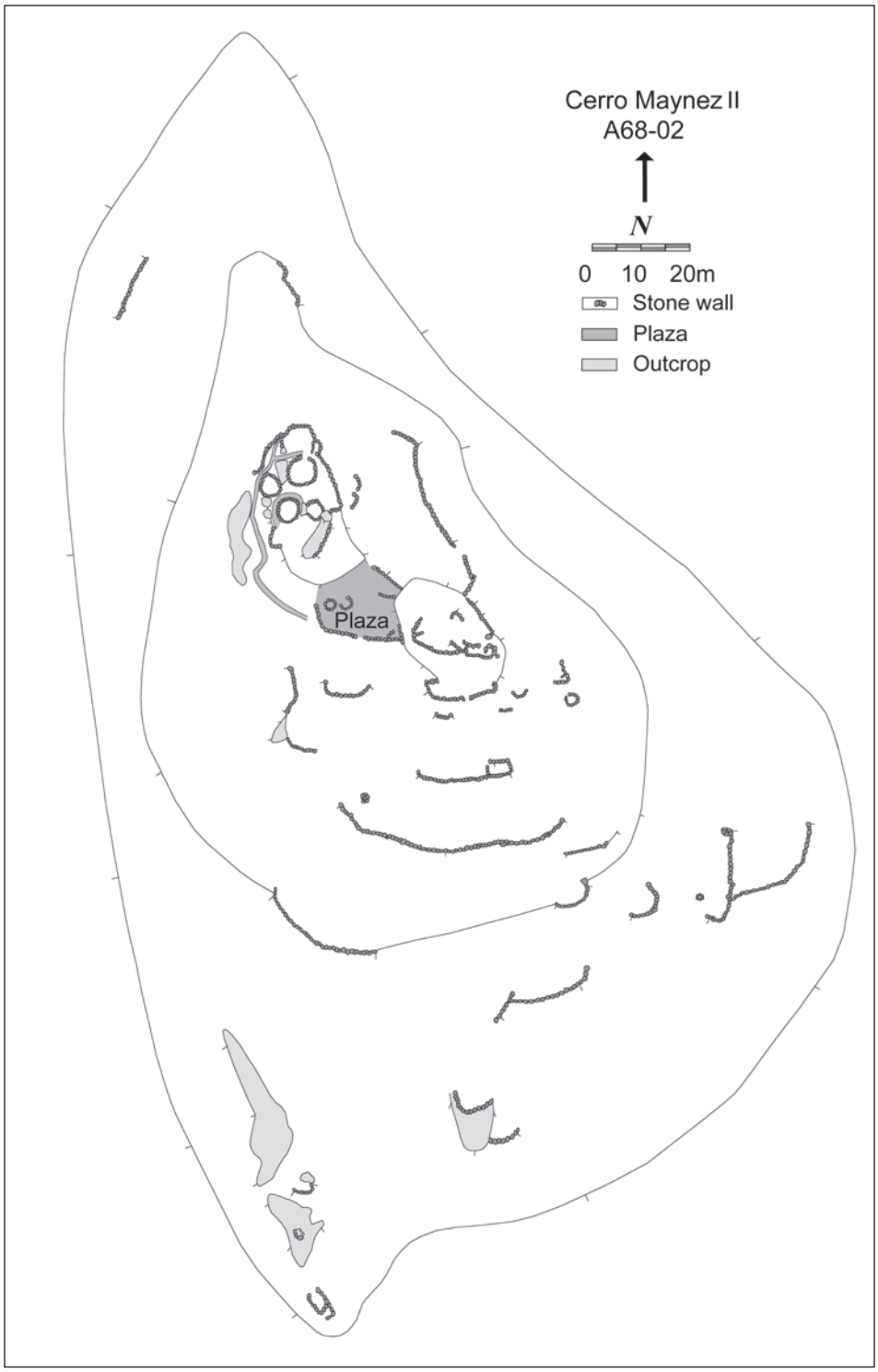


FIGURE 1.4. Cerro Maynez II site map.

Several if not many of the southern Chihuahua hill sites have multicomponent histories. All have at least some plainware but generally lack decorated pottery, excluding colonial period to modern pottery. There is no recognized decorated pottery tradition in southern Chihuahua, and undecorated pottery cannot be temporally differentiated. In fact, given the minimal work in southern Chihuahua, it is an area that is not readily placed in one of the well-known archaeological traditions such as Mogollon or Casas Grandes. Two of the three sites approach the age of the Sanchez site's younger component. Cerro Maynez II can only be described as dating from the Ceramic period, which itself is not well defined for southern Chihuahua.

Communal Structures in Other Early Sites

Cerros de trincheras are not the only context in which early plazas and communal structures occur. One of the earliest Hohokam plazas dates to the Tortolita phase at the Valencia Vieja site in the Tucson Basin. Valencia Vieja represents an early example of the long tradition of large Hohokam sites organized around plazas (Wallace and Lindeman 2003a, 2012; Wilcox et al. 1981). The perimeter of the large open space at the Valencia Vieja site was defined by houses fronting the plaza, as well as a dearth of artifacts. The plaza may have been present by the end of the fifth century but was certainly present by AD 500/525 to 550/575 and throughout the Tortolita phase (Wallace 2003; Wallace and Lindeman 2003b). Wallace and Lindeman view early Hohokam plazas as a product of population aggregation and reduced residential mobility.

During the Early Pithouse period in the Mogollon region, plazas are generally not recognized, making the Sanchez case notable. However, Lightfoot (1984) argued that a plaza was present at the Duncan site in the upper Gila River Valley based on the presence of a 60 × 26 m open area surrounded by seven pithouses. The Duncan site is radiocarbon dated to AD 400 to 500. Lightfoot (1984) further suggests that circular communal areas, 30 to 60 m in diameter and defined by the surrounding pithouses, are present at other Early Pithouse settlements in this area of the Gila River. These include San Simon village, Bluff site, Connie site, Cave Creek site, and the McAnally site in the Mimbres Valley. Other researchers focusing on the Early Pithouse period have largely neglected Lightfoot's perceptions, instead tending to follow Anyon and LeBlanc (1980:254) who state that during the Early Pithouse period structures "show no apparent planning or groupings within the village."

By the later Three Circle phase (ca. AD 850–1000) in the Mimbres area, large communal structures (great kivas) opened onto plazas that were surrounded by pithouses (Creel and Shafer 2015). With the emergence of pueblo architecture after AD 1000, plazas became readily defined by the surrounding room blocks (Anyon and LeBlanc 1980, 1984). There is subjectivity in perceiving open areas defined by irregularly spaced structures of unknown contemporaneity but given the later Three Circle phase patterns and the earlier Sanchez site plaza feature, perhaps Lightfoot's suggestions should be revisited.

Early Pithouse period communal structures in the Mimbres area are believed to have served both domestic and communal functions. Communal structures, primarily known as kivas or great kivas depending upon context (e.g., Anyon and LeBlanc 1980; Anyon and LeBlanc 1984; Cosgrove 1923; Creel and Anyon 2003), have been a concern of Mimbres archaeologists from the beginning of the discipline (see Introduction, this volume) and are a principal concern of this volume (see Arakawa and colleagues, this volume, for their discussion of an Early Pithouse period great kiva structure). In this chapter, we limit our comments to the early parts of the pithouse sequence. Anyon and LeBlanc (1980) indicate that Early Pithouse period communal structures (i.e., kivas) in the Mimbres area are distinguished by the presence of lobes inside the entryways. In the Pine Lawn Mogollon area of the Mogollon Highlands, other researchers have described these early structures as kidney or bean shaped (Martin

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1940; Martin and Rinaldo 1947). At the Early Pithouse period McAnally site in the Mimbres Valley, the 23.8 m^2 communal structure was the same general size as the domestic structures but had lobing, while the Winn Canyon site in the upper Gila River drainage, had a communal structure that was far larger at 61.2 m^2 (Anyon and LeBlanc 1980; Fitting 1973). These examples demonstrate the multiple changes in size, form, and construction styles of early communal structures (see this volume, Introduction, Anyon, Arakawa and colleagues, and Stone).

Other early communal structures are known from the Tucson Basin. Possible communal structures have been identified at multiple Early Agricultural period sites including the Santa Cruz Bend site (Mabry 1998), the Clearwater site (Thiel and Mabry 2006), and the Wetlands site (Freeman 1998. With a floor area of 44.5 m^2, over four times the area of the average domestic structure, the Big House at the Santa Cruz Bend site, a Cienega phase pit structure dated to 300 BC, has elaborate construction, including two rows of internal posts and a central post. It is centrally located and adjacent to a large open area thought to be a plaza or courtyard (Mabry 1998). Also, at Tumamoc Hill a centrally located, large, circular 16 m^2 subsurface pit structure was dug 70 cm into the hilltop's solid caliche conglomerate, indicating a substantial labor investment (Fish et al. 2013). The structure was reused during the Tortolita phase.

In summary, cerros de trincheras play a key role in understanding the emergence of public communal architecture during the Early Agricultural period and during the first millennium AD. These early site features are accompanied by the emergence of plazas in the Hohokam region and communal structures (i.e., kivas) in the Mogollon region that occur in multiple contexts. Change in communal structures through time is evident, but there is also regional variation of generally contemporary structures. We now move on to a detailed discussion of the Sanchez site and its early communal plaza.

Sanchez Site

The Sanchez site in the Safford Valley contributes new data to this knowledge of early communal features. We describe the plaza, the site, and other aspects of our work in some detail here as the site has yet to be fully described in a separate report. The Safford Valley is recognized as its own archaeological subarea with a local chronological sequence (Table 0.1). The temporal units relevant to our study are presented in Table 1.2 and are based on Neuzil and Woodson (2014) and Wallace (2014). The Safford Valley is considered a transitional culture area, as it is situated between the Hohokam to the west, the Mimbres area to the east, Point of Pines to the north, and the San Simon area to the south.

Encompassing 13.4 ha, the Sanchez site is among the largest cerros de trincheras, with 143 rock ring features and 1.5 km of walls. Most of the features are spread along a 0.5 km length of the upper slopes and crest of the ridge. There are two outlying small clusters of features, one on the western midslope and one on the southern lower slope (Figure 1.5).

The Sanchez site has evidence of three or perhaps four temporal components. The earliest is thus far confined to a single structure (Feature 71) that dates to the Early Cienega phase (800 BC–AD 50) in the Early Agricultural period. The most substantial occupation occurred during the Peñasco phase (AD 150–600), evidenced by widespread plain brown ware, virtual absence of decorated wares, and radiocarbon dated structures. Beyond the Safford Valley, this temporal unit is known as the Early Pithouse or Early Ceramic period. Based on a radiocarbon date and ceramics, the plaza was briefly reused during the Mimbres Classic period (AD 1000–1130), which falls into the Two Dog/Eden phases of the Safford Valley sequence. A single thirteenth- to fourteenth-century radiocarbon date, but no affiliated material culture, hints at the possibility of another later specialized reuse of the site or perhaps a natural fire.

The Sanchez site constructed plaza lies in

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TABLE 1.2. Temporal Units Used in this Study.

Safford Valley Phases	Date	Period	Correlations	References
Eden	AD 1100–1200	Late Formative	Mimbres Classic (AD 1000–1130)	Neuzil and Woodson 2014; Anyon et al. 2017
Two Dog	AD 1000–1100	Late Formative	Mimbres Classic (AD 1000–1130)	Neuzil and Woodson 2014
Peñasco	AD 150–600	Early Formative	Early Ceramic-Tucson Basin (AD 50–475); Early Pithouse-Mimbres (AD 200–550); Early Pit Structure, southeastern Arizona (AD 100–650)	Neuzil and Woodson 2014; Clark et al. 2004; Anyon et al. 2017; Gilman 1997
Whitlock	150 BC–AD 100	Early Formative		Neuzil and Woodson 2014; Clark et al. 2004
Late Cienega	400 BC–AD 50	Early Agricultural	Late Archaic (1200 BC–AD 50/200)	Mabry and Stevens 2014
Early Cienega	800 BC–400 BC	Early Agricultural	Late Archaic (1200 BC–AD 50/200)	Mabry and Stevens 2014

a small saddle just north of the aggregation of rock rings. The plaza is similar in construction style to the numerous features and walls across the site. It is but one element in the site core area located at the apex and uppermost slopes of the hill and was the focus of our 2018 investigations (Figure 1.6). The site's occupants cleared the core area of the plethora of andesite cobbles and constructed houses with rock foundations, storage structures, and walls. The core area is largely defined by encircling walls and includes a total of 39 rock rings, five discrete rock ring clusters, cleared areas, interior walls, the plaza, and a consistent scatter of sherds, lithics, and ground stone. Virtually all 5,186 m^2 of the core area (similar in size to an American football field) has been modified by clearing cobbles from the surface and constructing features.

History of Research

The Sanchez site was previously unknown to archaeologists when one of authors (Roney) noted potential features in satellite imagery from Google Earth. While working along the Gila River in the Duncan Valley in 2014, the UTSA Field School sent a team to the Safford Valley to inspect the steep ridge and they corroborated the scale of the site and identified the plaza. We made a few subsequent visits that summer to complete initial site recordation. In 2015 and 2016, we mapped the site and systematically recorded all features. During the 2018 field season, the team focused on the site and its core area; we also acquired detailed drone imagery. We conducted excavations in six features on the uppermost part of the ridge and revisited most of the features across the site, verifying and supplementing our original surface observations on the rock rings.

In 2018, two rock rings, Features 53 and 71, were completely excavated. Feature 71 was the only excavation outside the core area. Three units were excavated in Feature 48, a deep terrace deposit with a cobble wall. Features 32 and 51 are rock rings that were tested with single excavation units. Feature 1, located on the plaza, is a hearth or small roasting feature, defined by a cluster of cobbles that was explored with two test units. An additional unit examined the stratigraphy on the east side of the plaza.



FIGURE 1.5. Sanchez site map.

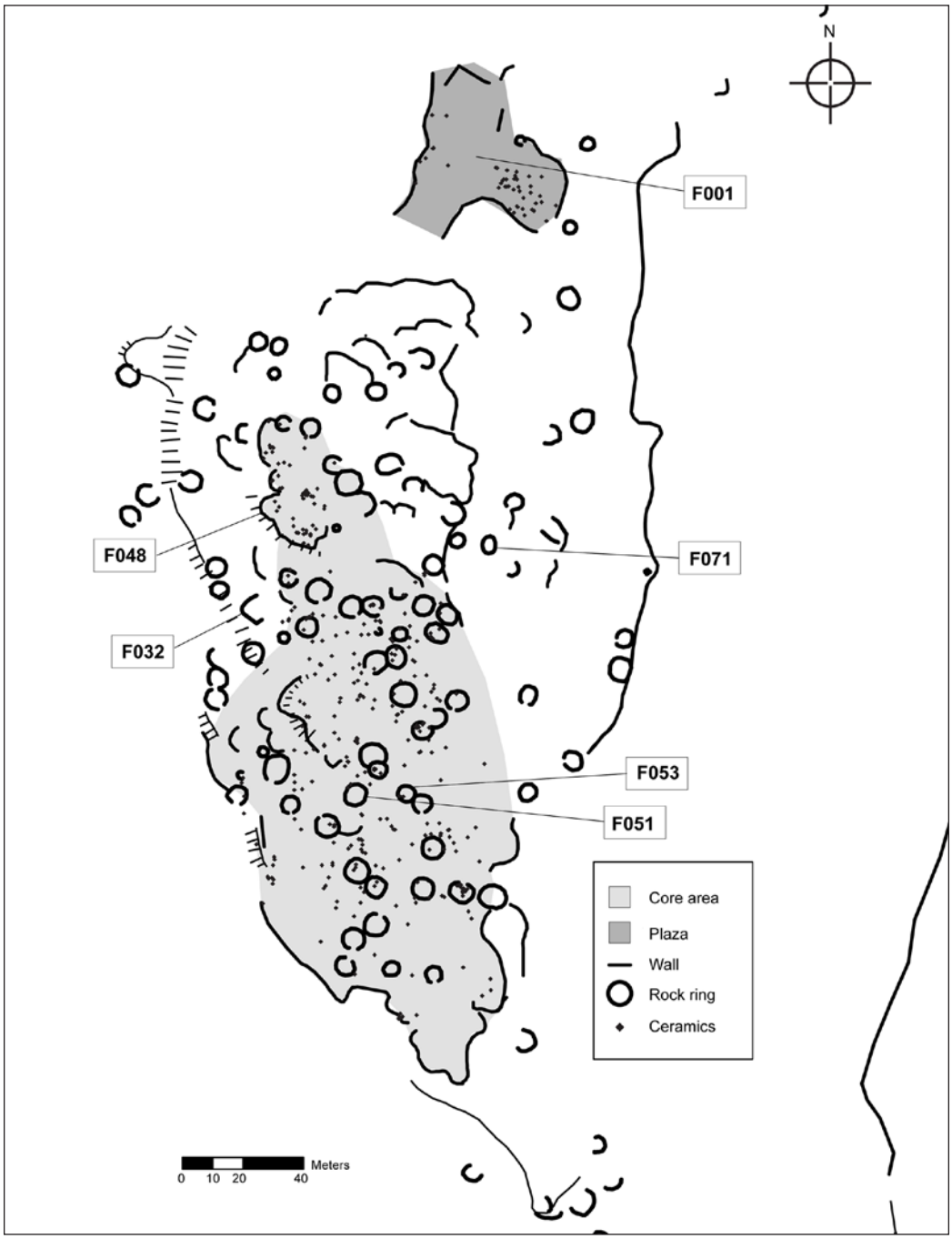


FIGURE 1.6. Sanchez site upper slopes showing core area, plaza, rock rings, and sherds. Virtually all the core area was modified by clearing rock from the surface and constructing features.

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TABLE 1.3. Sanchez Site Radiocarbon Dates.

C-14 Lab No	Feature-Subfeature	Level	Depth, cm bd	Unit	Bag	ID Charcoal-K. Adams	^{14}C age BP ^{13}C Corrected	Sigma	1-sigma Calibrated 68.2% Range[1]	2-sigma Calibrated 95.4% Range[1]	Median[1]	^{13}C‰
AA113537	1-A	3	50–60	567.5E, 929N	202	Possibly monocot, stem fragment, 8 pcs	966	26	1031–1150 cal. AD	1025–1158 cal. AD	1100 cal. AD	–23.0
AA113536	48	3	40–50	7	114	Larrea, 1 pc	687	20	1281–1377 cal. AD	1276–1384 cal. AD	1294 cal. AD	–22.6
AA113536 (rerun)							726	25	1270–1291 cal. AD	1233–1379 cal. AD	1280 cal. AD	
Aeon-2614	48	3	40–50	6	101	Unknown reproductive tissue, 3 pcs	1675	20	367–417 cal. AD	262–421 cal. AD	390 cal. AD	–25.0[2]
AA113535	53	5	70	1	153	Zea mays, 1 cupule	1734	73	247–404 cal. AD	130–534 cal. AD	325 cal. AD	–9.7
Aeon-2615	53-A	3	40–50	4	96	Unknown reproductive tissue, 2 pcs	1700	20	265–404 cal. AD	258–413 cal. AD	368 cal. AD	–25.0[2]
Aeon-2616	71	4	68–70	10	260	Ephedra wood, 1 pc	2515	20	772–572 cal. BC	777–547 cal. BC	634 cal. BC	–25.0[2]
AA113534	71	4	65–75	10	260	Larrea	2544	25	791–593 cal. BC	796–551 cal. BC	683 cal. BC	–24.6

[1] Calibration OxCal v4.4.2 (Bronk Ramsey 2020); Atmospheric data (Reimer et al. 2020).
[2] Estimated value.

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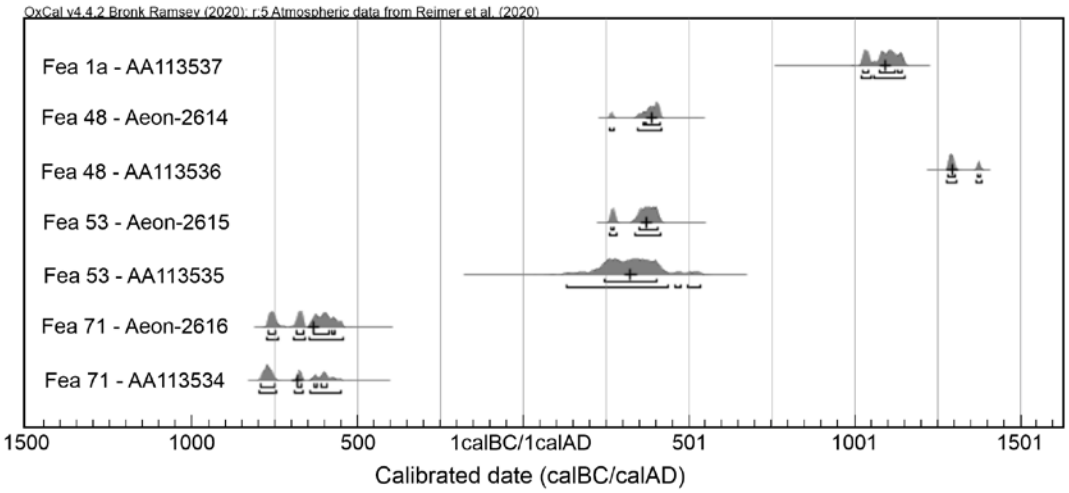


FIGURE 1.7. Probability distributions of calibrated radiocarbon dates. The lower lines under each probability distribution demarcate two sigmas, and the upper line is one sigma.

Finally, a total data station was used to point-locate all artifacts for a 100% surface collection of the core area. All sherds, chipped stone, and manos were collected, but the 33 metates were field recorded and left on site. Surface collected artifacts include 312 pieces of chipped stone, 42 manos, and 530 sherds with a few from outside the core area. Various aspects of these efforts have been reported elsewhere in preliminary formats (Carpenter and Hard 2019; Gardner 2019; Hard et al. 2018; Jenkins 2020; McKenzie and Shackley 2019; Zaragosa et al. 2019).

Dating

Table 1.3 and Figure 1.7 show the seven radiocarbon dates from the site. Three, possibly four, occupation events are apparent in the seven dates. The first occupation at house Feature 71 dates to the Early Cienega phase, at about 650 cal BC, of the Early Agricultural period. The primary site use was during the Peñasco phase, based on three samples from Features 48 and 53 that date to the fourth century AD and corresponding to the ubiquitous plain brown ware sherds. Reuse of the site occurred during the Two Dog/Eden phases at about AD 1100, based on a radiocarbon date from a thermal feature on the plaza and two Mimbres sherds. Another possible reuse of the site may be indicated by a thirteenth- to fourteenth-century single radiocarbon date. All radiocarbon date calibrations used OxCal v4.4.2 (Bronk Ramsey 2020; Reimer et al. 2020).

Given the widespread brown ware, we did not anticipate an Early Agricultural period use of the site. Located on the upper slopes, 25 m east of the core area, Rock Ring 71 is like other features and was selected for excavation, as surface evidence suggested the presence of deep deposits. Although sherds were found on the surface near the feature, none were found during excavation, consistent with its preceramic age. Two Early Agricultural period dates, 777–547 cal BC and 796–551 cal BC (Table 1.3), place Feature 71 in the Early Cienega phase (800–400 BC).

The second set of radiocarbon dates is consistent with the widespread plain brown ware and absence of painted wares, indicating an occupation of AD 200 to 550 during the Early Pithouse period (Peñasco phase). Two dates from this phase are from rock ring Feature 53; the third is from a deep terrace, Feature 48. Figure 1.7 indicates that the three Peñasco phase dates are indistinguishable from one another and have calibrated medians of AD 325, 368, and 390. One date, from a tiny (0.26 mg) fragment of a maize cupule, AA113535, yielded a radiocarbon age of 1734 ± 73 BP, which is the largest sigma in the batch and calibrated to AD 130 to 534

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with a median of 325 cal AD. The earliest end of this distribution appears unlikely, given that the boundary between the Archaic period and Early Pithouse period in the Mogollon region is placed at AD 200 (Anyon et al. 2017). The other two Peñasco phase dates, Aeon-2614 and Aeon-2615, reinforce this interpretation. They have two-sigma ranges of 262–421 cal AD and 258–413 cal AD. Placing less weight on AA113535, with its large sigma, and considering the ceramic age of AD 200 to 550 of the two-sigma calibrated ages of Aeon-2614 and Aeon-2615, we estimate the age of these two features to be AD 250 to 400.

The second date from Feature 48 (AA113536) was unanticipated. It came from a deeply buried charred piece of creosote bush in the rock ring and yielded a calibrated age of AD 1276 to 1384. This date is surprising, as there is no evidence of a thirteenth-to-fourteenth-century AD occupation anywhere on the site. The University of Arizona AMS Laboratory reran the remainder of the sample including further pretreatment that removed additional humates. The results of the redating (Table 1.3) are extremely close to the original (Todd Lange, personal communication February 2021). The provenience of this date is the same as Aeon-2614, which yielded a calibrated AD 262 to 421 date range, or Level 3, 40–50 cmbd. While this level did have rodent and insect disturbance, we saw no evidence of later cultural material. Assuming the date is correct, there may have been a natural fire or brief reuse of the site, with charred fragments introduced into the profile by disturbance we did not recognize in our excavation unit.

Feature 1, located on the plaza, is a cluster of cobbles partially protruding above the surface. This thermal feature yielded several charred small fragments of a C_3 plant identified as a possible monocot stem from a flotation sample (Karen Adams, personal communication, 2018). Much to our surprise, sample AA113537 produced a two-sigma range of AD 1025 to 1158 (Table 1.3), squarely in the Mimbres Classic period. The Feature 1 radiocarbon date, along with the two Mimbres sherds also found on the plaza, confirm a specialized reuse of the plaza during the Mimbres Classic period and is discussed below. We can eliminate the possibility that the plaza was constructed during the Mimbres Classic period, as there is no evidence that features of this type were built at this time, and the plaza construction style is consistent with the rest of the site. Plain brown ware similar to examples throughout the site was on the surface of the plaza, and a single brown ware sherd was in the eolian deposits just under the surface at Feature 1.

In summary, the chronological evidence indicates two periods of residential use of the site, one about 800–550 cal BC during the Early Cienega phase of the Early Agricultural period, and the second about AD 250 to 400 during the Peñasco phase (Early Pithouse period). Based on the widespread distribution of brown ware as shown in Figure 1.6, the scale of the Peñasco phase use included most of the core area and much of the rest of the site. Excavations in Rock Rings 48, 51, and 53 yielded brown ware, while the Early Cienega phase Rock Ring 71 did not. Feature 32, which only received a single test unit, also did not produce sherds. However, the single dated Early Agricultural period structure (71) just to the east of the core area opens the question as to the extent of the earlier occupation. Additional excavations are needed to address this issue. Remarkably, a specialized reuse of the plaza occurred during the Mimbres Classic period.

Sanchez Site Rock Rings

The walls and 143 rock ring features at the Sanchez site are well preserved and readily visible due to the minimal ground cover and scant soil deposition. Protected by steep slopes, there is almost no modern trash, looting, heavy equipment activity, or cattle grazing, though several collectors' piles of artifacts are present. Just west of the site there is active strip mining, but fortunately there are only a couple of mining probes on the site, including one in the core area, which did little damage.

With over 140 foundations, the site is perhaps one of the largest sites of this early period in the Mogollon region and represents overwhelming evidence of its domestic character. Of course it is unknown how many structures were occupied at a given time, but the sum of the

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features, circular clusters of rock rings, walls, plaza, and large areas cleared of stone indicate multiple families resided at the site simultaneously. The conspicuous rock ring foundations on the upper slopes are partially collapsed into low rubble walls, with some rising as much as a meter above the modern surface. The walls of the rock rings were not constructed with formal masonry but are dry laid in irregular courses constructed from the plethora of andesite cobbles and small boulders found on the surface. Entryways are visible on 56 of the structures and are simple openings in the circumference of the walls. Seventy-three percent faced south, southeast, or southwest (Wall et al. 2019).

None of the rock rings are large enough to be classified as a communal structure or feature, as we defined in this chapter. The median area is 4.9 m^2 (IQR = 3.20 min, = 0.24 m^2, max = 14.53 m^2, n = 143). Multimodal distributions seen in histograms of rock ring area indicate to us both storage and domestic units are represented (Wall et al. 2019). However, the effort involved in constructing any one of these rock ring houses was not large (Gardner 2019). Most rings exist as single features, but 29 structures share walls with one or two other rock rings. The morphology, construction, artifact associations, size distributions, and entryways of the conjoined rock rings are like the single rock rings found across the site. Both forms likely served a similar range of functions, and none appear to represent communal features (Carpenter and Hard 2019). However, there are five clusters of rock rings that contain four to 13 houses each, and the clusters range from 286 to 705 m^2 (Jenkins 2020).

Walls

There are 1.5 km of constructed walls on the Sanchez site. Some are large berms created by piling surrounding cobbles into low mounds, others are smaller and only a few cobbles in width. None are carefully stacked masonry, and many integrate bedrock outcrops. Most significant is the 240 m perimeter berm that encircles about three quarters of the uppermost ridge. In addition, there are three long walls on the midslopes (Figure 1.5). On the southwest flank, the longest wall is unbroken for 270 m. A linear, bare strip above the wall shows that rock was stripped from the upslope side to create this berm. Just below, a shorter, parallel wall was similarly fabricated. The third long wall on the southeast slope bounds a ravine below.

Plaza

The plaza (Figure 1.8) is obvious as a large, open, flat surface bounded by low, constructed walls. Unlike many archaeological plazas, houses do not surround it, but two structures are adjacent to it. The plaza lies on the northern edge of the core area with its dense clusters of houses and storage features. Using the only large, level space available, the plaza was constructed in a saddle between two peaks in the ridgeline (Zaragosa et al. 2019). The ridge is dense with dark andesite cobbles, but as they were removed from the plaza interior it now has a stark appearance. The builders apparently used the cobbles to construct the low walls that outline most of its perimeter. Remarkably, the surrounding creosote bush and sparse grasses have been unable to recolonize the plaza in the many centuries since its last use, leaving it largely bare. Apparently, without the cobbles, there was nothing to retain the thin soils in this windy saddle. The plaza surface is a moderately compact layer of small (< 15 cm), tabular andesite and eolian sediment (Zaragosa et al. 2019). The surface is largely flat, although the western side slopes slightly to the west, and the eastern side slopes even less so to the east. The plaza outline is an odd shape. The western side is rectanguloid, and an attached oval forms the eastern side, yielding an overall morphology inconsistent with known archaeological forms in the Mogollon region (see Figure 1.8).

The unusual shape of the plaza appears to be simply a product of fitting the plaza into the rare level space in the saddle rather than some culturally dictated form. The adjacent low slopes have the advantage of offering spectators an unobstructed view of the plaza. The east–west length is limited to 27 m, as the land drops off at the edges of both sides. The north–south dimension is 31 m, and at both ends the grade slopes upward more sharply toward opposite

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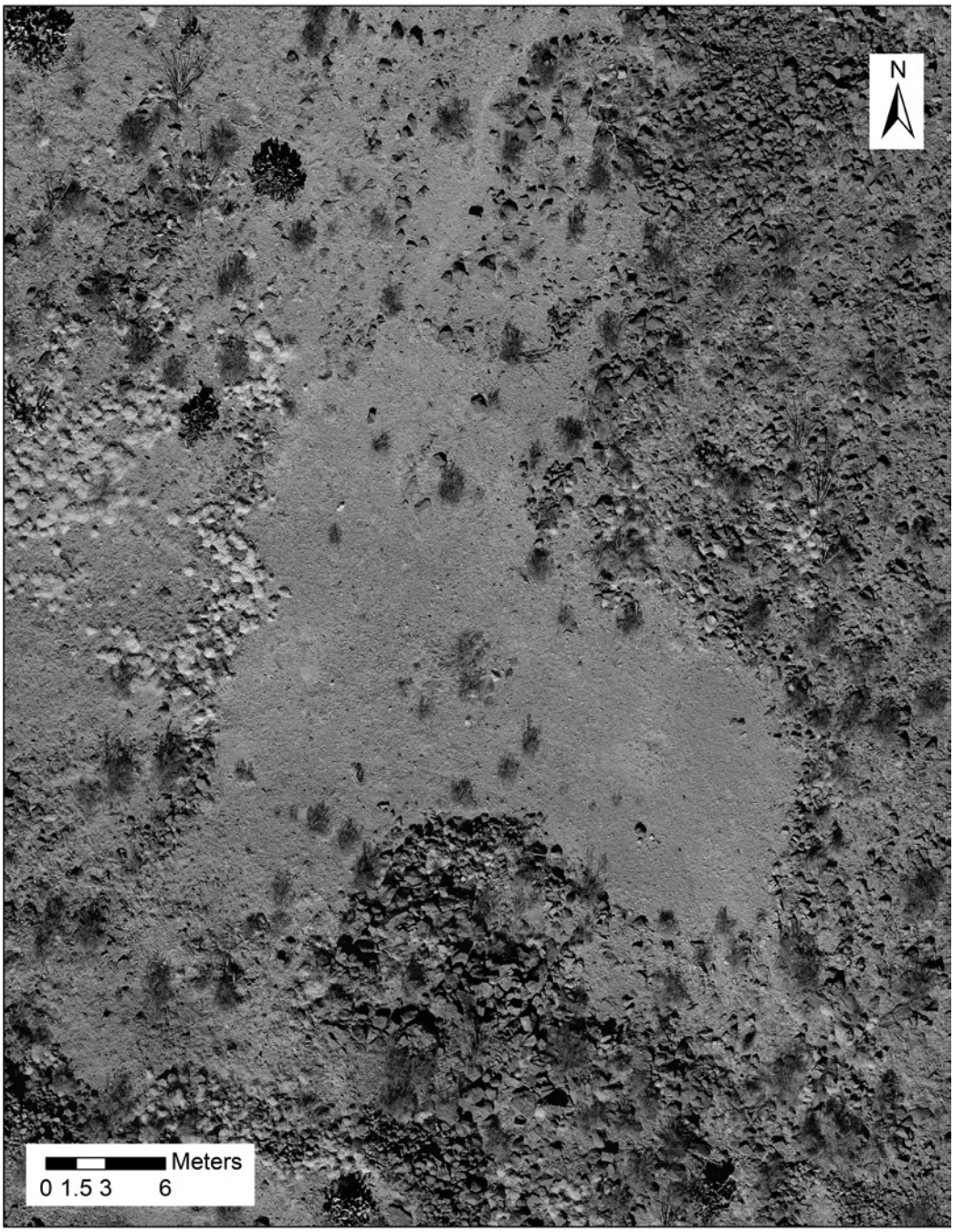


FIGURE 1.8. Drone image of the plaza (John Whisenhunt). Feature 1 is obscured by the shrub in the center of the plaza.

ridge peaks. The combined total area is 570 m^2 (Zaragosa et al. 2019).

At the constriction on the south side of the oval, where it articulates with the rectangular portion of the plaza, lies a bedrock outcrop, so the constriction is simply a product of accommodating the bedrock (Figure 1.8). The eastern limit of the ovoid is straight and defined by a cleft in the bedrock. The northern side of the oval is roughly comparable to the southern side. The angular form of the west side of the plaza is similarly laid out to maximize use of the level space. Much of the linear west wall is constructed along another cleft where the slope increases downward toward the west. The north and south ends both slope upward. The northeastern wall of the rectangular side partially consists of a bedrock outcrop that also defines the limit of the plaza. The southern end of the rectangle is not bounded with a wall, is 10 m wide, and is open toward the dense cluster of house foundations. To us, this is the likely plaza entryway.

The low rubble walls that bound the perimeter are informal and apparently included the cobbles cleared from the plaza. We estimate 560 cobbles are in the 93 m of perimeter walls. At their widest, the collapsed walls are 2 to 3 m (Zaragosa et al. 2019). The walls are similar in construction to the rock rings: they are roughly stacked and range from one to five informal courses and are all partially collapsed. Nowhere is there formally laid masonry. The wall is discontinuous along a few segments of the 122 m plaza perimeter. A 15 m wall segment on the southwestern side serves as retaining wall and prevents soil erosion, showing a concern for plaza maintenance. Based on profiles and surface sediments, we see no evidence that sediment was added to level the plaza surface.

Feature 1 in the Plaza

Feature 1 is the lone thermal feature on the plaza and is near its center (Figure 1.9). It consists of a 4.5 × 3.5 m cluster of about 47 andesite cobbles, 15 to 60 cm in size and appears to be a largely disarticulated hearth or small roasting feature. After we cleared the surface of loose tabular gravels and removed the isolated creosote bush growing among the cobbles, the feature morphology became clearer. The cobbles are partially buried and protrude up to 20 cm above the surface. Based on excavations, the cobbles are buried up to 5 cm in the uppermost eolian deposit and rest on the underlying compact clay zone. Given that the cobbles cluster but are not articulated, it is likely that it was disassembled after the feature's use, and the cobbles remained on the plaza surface. Through time they became slightly buried by eolian processes. Eolian sediments did not lie between the cobbles and the clay zone (Figure 1.10). Two of the cobbles are broken but remain articulated, indicating firecracking or weathering. About half the cobbles form an oval concentration 2.0 × 1.4 m in size at the northern edge of the feature. Excavations of two 1 × 1 m units recovered only one artifact, a plain brown sherd buried a few centimeters in the upper eolian deposit. Subfeature A is within the oval concentration. It exhibited a slight change in soil color from the surrounding matrix and is 1.3 m (east–west) wide and from 17 to 23 cm deep. The subfeature's north–south dimension is unknown, as the tabular, andesite regolith made it difficult to distinguish cultural from natural boundaries. This shallow pit was an element of the thermal feature excavated into the clay zone and terminated at the deteriorating bedrock.

A flotation sample from Level 3 yielded tiny, charred, likely monocot bits that were radiocarbon dated. Sample AA113537, calibrated at two sigmas, is AD 1025 to 1158, consistent with the Mimbres Style III Black-on-white sherd found elsewhere on the plaza surface. The second Mimbres sherd on the plaza cannot be assigned to a style. Given the embedded cobbles and the recovery of charcoal from the subfeature, Feature 1 is interpreted as a thermal feature, perhaps a hearth or small roasting feature, constructed and utilized during the Mimbres Classic period. The feature is dissimilar to any other feature on the site and appears incongruous with the otherwise open plaza surface.

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FIGURE 1.9. Feature 1 in its 5 × 4 m grid after completion of excavation. White flags are at one-meter intervals. Grid is oriented north–south. Loose surface gravels were cleared from grid. (Drone image by John Whisenhunt.)

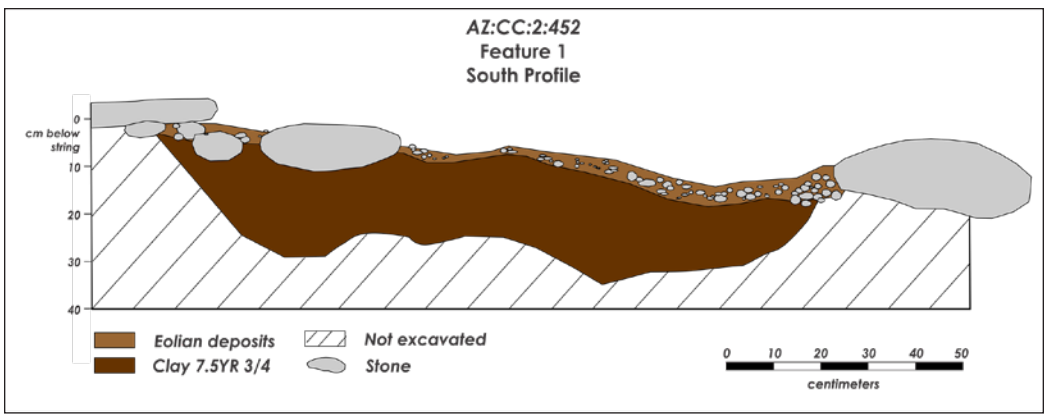


FIGURE 1.10. Profile of Feature 1. Top of the profile is the modern surface after loose gravels were removed.

Artifacts

The site and its features, including the plaza, contain a scatter of sherds, chipped stone, and ground stone artifacts that appear comparable across the site.

Ceramics

Plain brown ware sherds, consistent with Alma Plain, are found in low density but are widespread throughout the core area and in multiple feature excavations as described above (Figure 1.6). There are 528 plain brown ware sherds from the 100% collection of the surface of the core area. A few of these are from outside that area. A detailed technological analysis of the sherds has not been completed, but the 13 rim sherds have been inspected. Nine are from surface contexts and four from excavation. None is decorated in any form, and all have a smooth to matte finish, although some surfaces are eroded. Four are from unknown vessel forms and nine rims are from tecomates or seed jars, based on their small size and inwardly sloping rims. The plain brown ware sherds with tecomate forms are consistent with other examples found throughout the Mogollon and Hohokam areas (e.g., Garraty 2011; Whittlesey 1998) and with the primary occupation of the Sanchez site of AD 250 to 400.

Chipped Stone

The surface collection in the core area produced 312 items. The assemblage is dominated by core and flake reduction. Cores and core fragment frequencies comprise a substantial proportion of the assemblage. Tool production was ongoing on the site, as the assemblage contains a notable number of biface thinning flakes, bifaces, and unifaces. Multiple raw material sources are represented, with the white chert likely obtained from chert exposures on the lower slopes of Sanchez ridge. Igneous tool stone, including andesite, rhyolite, basalt, and gabbro, were likely sourced from the alluvial slopes and Quaternary gravels on the lower gradients of the Sanchez ridge.

Energy-dispersive X-ray spectroscopy (EDXRF) source analysis of the obsidian from the site determined that all 20 pieces are from the Upper Gila River Basin, with 85% from Cow Canyon and the balance from two different Mule Creek localities, Antelope Creek and North Sawmill Creek (McKenzie and Shackley 2019). Based on a source analysis of obsidian nodules from the Quaternary Gila River gravels at the base of hill, the Sanchez lithic artifacts are almost certainly made from the local alluvial obsidian nodules (McKenzie and Shackley 2019). Despite the material's excellent flaking qualities, the small size of the nodules limited their utility as tool stones, as they are only large enough for the manufacture of some of the Sanchez projectile points described below.

Three identifiable projectile points were found in the excavation of Feature 48, a constructed terrace with deep deposits at the apex of the core area (AD 262–421). One of the points is a Tularosa Corner-notched; the other two are Tularosa Basal-notched. Two are made from obsidian and the third from gray chert (McKenzie and Shackley 2019). These two closely related forms of Tularosa points are variously dated from the Late Archaic into the Ceramic periods. Date ranges include 100 BC to AD 700 or 900 (Justice 2002:217) and 800 to 400 BC (Sliva 2015:89–90). Cerro Juanaqueña yielded 41 Tularosa Corner-notched and Basal-notched points dated 1300 to 1100 BC and based on a large suite of radiocarbon dates (Hard and Roney 2020:95–97). The three radiocarbon-dated Sanchez Tularosa-style points are consistent with Justice's chronology, as well as the plain brown ware from the site.

Ground Stone

Metates and manos are common in the core area. We collected data on each of the 33 metates and left them on site but collected the 42 manos. The manos are dominated by one-hand types, with little evidence of shaping and do not exhibit extensive wear. Mano raw materials are akin to those of the metates and are consistent with the stone found in the Quaternary gravels below the site: andesite/basalt, granite, and rhyolite. The metates are largely unshaped, small, and blocky and do not readily fall into

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standard categories. They appear to be lightly used basin metates.

Depth of wear can be used as a proxy for the amount of grinding that occurred at the site, and these data are instructive (Hard and Roney 2020). The median depth of wear is 0.0 cm. For over half of the 22 measurable metates, there was no detectable depth to the wear present on the metate. The maximum depth of wear on those that exhibited more wear was 5.4 cm (which was significantly deeper than any others), and the interquartile range of the assemblage was 1.3 cm. The minimal wear on the manos is consistent with that of the metates. Experimental work has shown that basalt metates used for intensively grinding maize wear at a rate of 0.3 to 0.5 cm a year (Hard and Roney 2020). However, we do not know how much grinding involved maize rather than wild seeds, nor do we know how important food grinding was in the economy. Regardless, these data suggest that the accumulated wear on the metates represents either a relatively short period of domestic occupation and food processing or a limited need for grinding across the occupation range of the site. If the former, then occupation was certainly no more than a few years and perhaps as short as a few months.

Discussion and Conclusion

There are two residential components at the Sanchez site, one belonging to the Early Cienega phase and the second, larger, occupation dating to the Peñasco or Early Pithouse period. The radiocarbon dated range of 250–400 cal AD places the plain brown ware near the onset of early ceramic production in our study area. The plaza, a precocious example of communal architecture, was part of the Peñasco phase occupation, whereas Feature 1, a circular cluster of cobbles embedded in the plaza, is a later thermal feature that yielded a radiocarbon date placing this specialized reuse in the Mimbres Classic period. A single radiocarbon date from the thirteenth to fourteenth century, without contemporaneous associated material culture beyond two Mimbres sherds, indicates it was out of context with the third to fourth century plaza. This date raises the possibility there was another late, specialized reuse of the site or a natural fire.

Mimbres Classic period reuse of earlier communal architecture is not unique. At Old Town in the lower Mimbres Valley, an adult male (Burial 18) was interred in the early AD 1100s, putting him in indirect contact with the floors of two great kivas that had been ritually closed in the AD 800s to 900s and denoting a symbolic connection with the past (Creel and Anyon 2003:82). Further, Burial 18 was in front of a large platform that supported a 5 m long isolated wall. The Classic period wall footings extend down to the floor of the two kivas in another symbolic articulation with these much older, specialized structures (Creel and Anyon 2003). These earlier communal structures had been ceremonially terminated but remained key parts of the ritual landscape long after their physical closure (Creel et al. 2015a). At the Woodrow site, a great kiva was closed in the AD 900s during the Late Pithouse period, but during the Classic period a cobble alignment was constructed in the center but below the kiva floors by digging through the kiva fill (Sedig 2020, and this volume).

The Sanchez case adds to this pattern of Classic period articulation with or reuse of earlier communal features. At least six centuries had elapsed between the last use of the plaza and the Classic period visit, far longer than the examples noted above. The Sanchez plaza Classic period reuse differs in other respects as well. The other cases represent recognition of a retired place within a village, likely by descendants. With Sanchez, people visited this feature on the landscape even though the site had been unoccupied for many centuries. Finally, the other examples of Classic period integration of earlier communal features are from the central part of the Mimbres area; the Sanchez example extends this pattern beyond the generally recognized western boundary of the Mimbres area. Sites in the Safford Valley and San Simon Valley yield Mimbres ceramics. Many archaeologists do not consider them part of the Mimbres area (Neuzil and Woodson 2014), although

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purported Mimbres pueblos are reported along the Gila River between Virden and Safford. The reuse of the Sanchez plaza during the Mimbres Classic period suggests that this ancient feature remained an important and known location on the landscape.

Open, constructed public spaces on cerros de trincheras are not currently recognized as one of the earliest forms of communal architecture in the Northwest Mexico/U.S. Southwest area, but the examples from Cerro el Canelo, the Sanchez site, and three sites in southern Chihuahua alter that understanding. At Cerro el Canelo, a 70 m diameter plaza, dated 1300 to 1100 BC, is perhaps the earliest evidence of communal architecture in the region. Not only could the plaza, at 3,840 m^2, contain a mass of performers, but its construction in a saddle would also have provided a throng of spectators a clear view of the venue. No such communal feature was found at Cerro Juanaqueña. The population that used the Cerro el Canelo plaza was potentially larger than the site population. The Sanchez plaza, dated ca. AD 250 to 400, at 570 m^2, also takes advantage of a saddle that provides the largest level surface on the site, and the adjacent north and south slopes may also have provided spectators a clear view. The 143 structure foundations, substantial walls, and the plaza itself imply that a sizable population occupied the site, although how many structures were occupied at any one time remains unknown.

The three southern Chihuahuan cerros de trincheras—Cerro Talamantes, Cerro Maynez I, and Cerro Maynez II—are estimated to date between AD 540 and 790, all with constructed plazas in landscape saddles. These plazas easily could accommodate more than the residents of the five to seven structures found on each of the sites. Perhaps the plazas were gathering points for more people than resided at the site. This stands in contrast to the evidently much larger populations that resided at Cerro el Canelo and the Sanchez site.

In summary, between 1300 BC and AD 700, cerros de trincheras that are found along major streams in the basin and range country, including portions of the Mogollon and Hohokam regions and as far south as the southern edge of the Northwest Mexico/U.S. Southwest area, have early public architecture. The plazas are the material expression of the need for these ancient societies to hold large public gatherings that served as mechanisms of social integration. However, communal architecture has not been documented on most early hilltop sites, notwithstanding their substantial complexes of walls and terraces. Late prehispanic hilltop sites in the trincheras area of northern Sonora and the Hohokam region are also recognized as places of social integration, including Cerro Prieto, Linda Vista, Cerro de Trincheras, and others (Fish and Fish 2007; Hard and Roney 2020; Wallace et al. 2007). Evidence includes rock art, large unroofed stone corrals in summit precincts, and unusual stone features. The five early cerros de trincheras with communal features, Cerro el Canelo, the Sanchez site, and the three southern Chihuahua sites, are widely dispersed in space and time and are not a case for direct linkages among sites. More reasonably, they are another example of enduring, widely shared knowledge, as is the case for cerros de trincheras more generally.

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up and down Sanchez's steep slopes in the roasting summer months earned our respect and gratitude for their endurance. John Whisenhunt was a vital member of the Sanchez team, and his adroit drone use produced images that contributed to the project in many ways. Mark Willis captured the initial drone imagery, which was critical to the project. Karen Adams processed the ethnobotanical samples also critical to our work. Raymond Mauldin and Cynthia Munoz traveled from the Center for Archaeological Research (CAR), UTSA, to Safford to conduct the total data station mapping for the surface collecting in 2018. CAR also generously supported the project with vehicles, equipment, supplies, and advice. Clint McKenzie was a vital member of the 2018 excavation team whose many skills were essential to our work. We were comfortably housed at the remarkable Simpson Hotel in Duncan, Arizona, and our hosts Deborah Mendelsohn and Clayton Jarvis were always accommodating. Roger Anyon examined images of the Mimbres sherds and provided advice on the Mimbres-region literature and the reuse of communal features. Peggy Wall assisted with preparing Figure 1.7. We appreciate the support we have received from all.

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