THE JEWELRY OF POTTERY MOUND

With a Comparison to Tijeras Pueblo

By

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Chapter 1

INTRODUCTION

This study of jewelry from Pottery Mound (LA 416) is a continuation of research begun with jewelry from Tijeras Pueblo (LA 581) (Schuyler 2011). The objectives are (1) to identify jewelry artifacts from Pottery Mound and the contexts in which they were found; (2) to compare Pottery Mound jewelry artifacts to those found at Tijeras Pueblo; and (3) to make the data and results available to other researchers.

Pottery Mound is a Pueblo IV (Classic) period site located on the Rio Puerco 40 km (25 miles) southwest of Albuquerque and 19 km (12 miles) west of the Rio Grande, in Valencia County, New Mexico. Eleven of the 17 kivas at Pottery Mound contained murals (P. Schaafsma 2007a:2). This unusual concentration of kiva art suggests that the site had special ceremonial significance.

Based on initial ceramic studies and four tree-ring dates (from 1381 to 1427 [Franklin 2007:91]), Pottery Mound was first thought to have been occupied between about 1300 and 1475 (Franklin 2008:3). Based on later ceramic analyses, the "primary occupation" was thought to fall between 1370 and 1450 (C. Schaafsma 2007:293). The most recent ceramic analyses indicate that the earliest pottery types made at Pottery Mound date from 1325 (Franklin 2007:88), while rare Glaze D sherds suggest an end date between 1490 and 1525 (Franklin 2007:94–95). Recent radiocarbon dates on maize cobs suggest an occupancy extending close to 1500, consistent with the latest ceramic analyses (Franklin 2008:6–7). David Phillips, who directed the most recent fieldwork at the site, uses an occupation span of 1350 to 1500. Much of the vagueness in the dating of Pottery Mound is due to the lack of structural wood from datable species.

Frank C. Hibben, who directed most of the fieldwork at Pottery Mound, concluded that there were three major occupations at the site, one of which included construction of a platform mound (Hibben 1975:xii). Phillips (2013 personal communication) suspects that there were at most two (and that Hibben's platform mound is a natural clay deposit). The main profile through the site (Adler 2007c:272) shows upper room walls that are offset from the room walls below, and floating on fill—suggesting a sequence of room construction, followed by abandonment and room filling, followed by new room construction.

Hibben wrote a number of papers and articles about Pottery Mound but his definitive statement about the site is found in his 1975 book, *Kiva Art of the Anasazi at Pottery Mound.* That book focused on the murals found in excavated kivas, and provides little information about other aspects of the site. More recent overviews of the site can be found in *New Perspectives on Pottery Mound Pueblo* (P. Schaafsma 2007), in *Pottery and Practice: The Expression of Identity at Pottery Mound and Hummingbird Pueblo* (Eckert 2008), and in the online Maxwell Museum Technical series. For a general introduction to jewelry in Pueblo IV times in the Southwest, see *The Jewelry of Tijeras Pueblo* (Schuyler 2011:2-4).

Pottery Mound was the property of the Huning Land and Cattle Company during the excavations from 1954 through 1961 (Schorsch 1962:5). In 1979 the Huning Land Trust deeded the Pottery Mound site to the University of New Mexico to encourage continued scientific study of the site (Vivian 2007:17). Isleta Pueblo later acquired the surrounding ranch from the trust, and in 2012 the University of New Mexico transferred ownership of the site to the Pueblo.

Excavations at Pottery Mound

Thor Warner estimated Pottery Mound to be about 500 rooms when he exposed a small portion of it in 1926. He reported finding a stone pendant and half of a turquoise bead (Warner 1928:87–91).

Frank C. Hibben led University of New Mexico archaeological field schools at Pottery Mound in 1954, 1955, 1957, and 1958. In 1960 and 1961 Hibben hired students to conduct additional excavations at the site, with funding from the National Science Foundation. During the combined efforts, UNM students excavated at least 150 rooms (Vivian and Vivian 2004:12–13), as well as kivas (Frisbie 2007) and trenches through plaza and midden areas.

In 1962, UNM's anthropology club excavated at the site (Skinner 1966; Vivian 2007:18). Beginning in 1962 (if not earlier), the Huning family, which owned the site, also allowed private individuals to dig there. Richard Renwick, an amateur archaeologist, dug at Pottery Mound in 1962–1964 (Phillips and Ballagh 2011:6). Dan Adams also dug at the site, in 1971–1973; his collections from Pottery Mound are now at the Maxwell Museum. The jewelry items collected by Adams are listed on a separate tab in the Pottery Mound Jewelry Catalogue (an Excel spreadsheet) and in Table A.6, but are not included in this analysis.

In the 1970s and 1980s, Hibben recruited a variety of individuals including UNM students, friends, and Elder Hostel participants to dig at the north edge of Pottery Mound, where the Rio Puerco was undercutting the site. This effort at Pottery Mound is sometimes referred to as the "Salvage Years." Kiva 17 was excavated in 1975 (Vivian 2007:16). The Duck Unit room block was excavated in 1979 (Phillips and Ballagh 2011:11).

The number of rooms actually excavated under Hibben's direction is unknown. A few rooms were excavated in multiple years and may have been assigned a different room number each year. Some locations were initially identified as rooms and later determined to be exterior areas. Some rooms were assigned two room numbers and later determined to be a single large room. Some rooms were not numbered (Ballagh and Phillips 2006:67).

In 1979, Linda Cordell directed UNM field school studies, including a stratigraphic test, at Pottery Mound. The 5 by 5 m test was placed in the North Midden of the former village, near Hibben's "Salvage Years" work, and the uppermost deposits contained backdirt from his prior excavations (Cordell 1980:3). The test was excavated in 20 cm levels. After the first five levels, the test was divided into four quadrants and excavations continued through Level 22 in the southeast quadrant and Level 20 in the northwest quadrant (Vivian 2007:16). Linda Cordell

wrote a preliminary report on the test (Cordell 1980) and later published a description of the stratigraphy (Cordell et al. 2008).

Methods

This study addresses artifacts from Frank C. Hibben and Linda Cordell's excavations that are housed (or at least documented) at the Maxwell Museum of Anthropology. Over the years, only a few selected artifacts from Pottery Mound had been catalogued; most of the artifacts had simply been placed in boxes for storage. Between 2007 and 2010, volunteers led by Karen Armstrong completed the reorganization of the Hibben and Cordell collections. A few additional artifacts were collected from the surface of Pottery Mound between 2006 and 2011, as part of a site monitoring program led by David Phillips.

All artifacts originally described as jewelry were examined. Artifacts described as worked or drilled or as fetishes were also examined, and were included in the study if their form suggested that they could have been worn as a piece of jewelry. Pieces of shell, turquoise, and bone from the collection that were unworked or minimally worked were included in the study, as these materials were often fashioned into pieces of jewelry. Unworked fossilized shells were not included.

The material, shape, condition, and provenience of each artifact were recorded. A set of calipers was used to measure the artifacts. Length, width, thickness, and hole diameter, rounded to the nearest millimeter, were recorded for dimensions for which the artifact was sufficiently intact. For some artifacts, not found for examination, measurements from specimen cards or other documents were used, which at times involved conversion from inches to millimeters.

All of the data available for the jewelry artifacts are detailed in Appendix A, including methods used to identify and categorize artifacts, definitions, and classifications. Pottery Mound artifacts are documented in several places, including handwritten notes originally packaged with artifacts, specimen cards, field notebooks, and written reports. Several issues arose in using these documents, including multiple catalogue numbers for a single artifact, documented artifacts that cannot be located for physical study, and incomplete site maps. My handling of these issues is detailed in Appendix A. Issues arising from inconsistent provenience recording are discussed in Chapter 3, along with my resolution of those issues. Some parts of the study use only the jewelry artifacts successfully located within the collections, while others include documented jewelry artifacts that are missing. The specific analyses indicate which approach was used.

No jewelry items from Pottery Mound are currently on display in the Maxwell Museum, or on loan to researchers or other museums. None of the photographs depict items associated with burials; the report does include sketches of some jewelry artifacts from burials. The Pottery Mound burial artifacts, including jewelry, are stored separately from other Pottery Mound artifacts at the Maxwell Museum.

The Pottery Mound Jewelry Catalogue created during the study is an Excel spreadsheet that may be obtained from the curator of archaeology at the Maxwell Museum.

Overview of the Artifacts

The collections catalogued and housed at the Maxwell Museum include 1,429 Pottery Mound artifacts related to jewelry. These were divided into *jewelry artifacts* (n = 1308), *raw material* (n = 108), and *unknown* (n = 13). Jewelry artifacts are items of adornment that were worn on the body (such as beads, pendants, bracelets, and earrings) or were attached to clothing. The raw material category includes materials that may have been kept on hand for creating jewelry. Unknown includes items of shell that were so damaged that they could not be classified as either jewelry or raw material, or that were unavailable for examination (Table A.5).

I found records for 623 jewelry-related artifacts that I have been unable to match with pieces in the collection. Some of those artifacts were assigned a catalogue number or documented on a specimen card; others were documented in field notes or other written documents. Among these 623 missing artifacts, several types of materials were reported that are not found among the 1,429 artifacts housed at the Maxwell Museum. Unfortunately, without visual inspection it is not possible to determine if these were described accurately. It is possible that these "missing" artifacts correspond to artifacts in the collections, but if so the data are insufficient to allow a match. It is also possible that the records identify artifacts that were excavated but did not find their way into the collections. The analysis of the 623 missing artifacts is explained in more detail in Appendix B. Data associated with these missing artifacts are provided in Appendix A.

Chapter 2

JEWELRY AND RELATED ARTIFACTS IN THE COLLECTIONS

Jewelry discussed in this chapter include those found and examined at the Maxwell Museum (Table 2.1). Jewelry items in the collections are made of shell, bone, stone, and ceramic (Table 2.2). Ceramic sherds with a hole near the rim and with unsmoothed or unshaped edges were not included as jewelry artifacts.

Table 2.1. Jewelry Artifacts.

Type	Count	Percent
Beads	784	60
Pendants	482	37
Pendant blanks	15	1
Bead blanks	14	1
Beads or pendants	4	<1
Gorgets	2	<1
Earrings	2	<1
Rings	2	<1
Bracelets	2	<1
Earring blanks	1	<1
Total	1308	100

Table 2.2. Jewelry Artifacts by Material.

Type	Bone	Shell	Stone	Ceramic	Total
Beads	627	117	33	7	784
Pendants	10	373	90	9	482
Pendant blanks	1	3	10	1	15
Bead blanks	10	1	2	1	14
Beads or pendants	1		3		4
Gorget	1		1		2
Earrings			2		2
Rings	1		1		2
Bracelets		2			2
Earring blanks				1	1
Total	651	496	142	19	1308

Four jewelry items were either beads or pendants (Table 2.1) but form could not be determined due to their condition. Three of these are turquoise and one is a piece of plastron from an ornate box turtle. One of the turquoise pieces and the ornate box turtle item had multiple holes.

The shell items used as jewelry at Pottery Mound are both freshwater and marine, with most of the marine varieties coming from the Gulf of California (R. J. Bradley, 2012 personal communication).

Gypsum and selenite are the same material chemically; the translucent variety is classified as selenite. The gypsum found in the Rio Puerco area is consistent with that found in the jewelry pieces from Pottery Mound (B. Huckell, 2012 personal communication).

Following A. V. Kidder (1932:184), a bead was defined as having a hole at its center, and a pendant as having its hole off-center, near an edge. Some artifacts that were classified as pendants may actually have been used as beads or earrings. Unless artifacts were found in situ it is difficult to determine how they were worn. Blanks are unfinished pieces that were worked sufficiently to identify the pieces intended for completion as beads, pendants, or earrings. The categories of jewelry that follow are based on morphology and not on function.

Beads

Beads with a diameter of 5 mm or less were classified as "tiny beads." Most of the beads from Pottery Mound are larger (Table 2.3). No beads were found with a diameter of less than 3 mm; thus, no beads in the Pottery Mound collections fall in Haury's (1931:81–83) category of "minute" beads, i.e., 2 mm or less in diameter.

Table 2.3. Beads.

Material	Larger Beads (> 5 mm diam.)	Tiny Beads (5 mm diam. or less)	Total	Percent
Bone	626	1	627	80
Shell	112	5	117	15
Stone	16	17	33	4
Ceramic		7	7	1
Total	754	30	784	100

Bone

Bone accounts for four-fifths of all beads. Of the larger bone beads, 607 are tubular beads made from bone shafts (in most cases not identifiable to species, though some are documented as bird or turkey bones). Emslie (1981:855) noted that Pottery Mound seemed to have a very large number of bird bones.

Tubular bone beads vary widely in size. In Table 2.4 and other tables for beads, the number of beads included in averages and size ranges may vary from one dimension to the next because size data were recorded only for those dimensions that are complete and measurable. After length was measured, the width was taken as the larger of the two orthogonal dimensions. The hole was recorded as the minimum diameter in order to track the thickest stringing material that could be used.

Figure 2.1 illustrates the shortest and longest bone beads in the collections. Three tubular bone beads are more than 100 mm long. Eliminating these three very long beads (sometimes described as tubes), the average length of tubular beads from the site is 19.5 mm.

Figure 2.1. Tubular bone beads. Top: 8 mm long; Catalogue No. 80.61.392. Bottom: 172 mm long; Catalogue No. 58.1.148.

Table 2.4. Tubular Bone Bead Sizes (mm).

	Length	Width	Thickness	Hole
Size Range	8–172	2–20	2–15	1–12
Average	20.0	8.5	6.8	4.3
Number of Beads	592	544	509	513

Six bone beads in the collections are transverse, meaning that they have a tubular shape and additional holes on the long sides. Transverse beads could have been strung in more than one direction. A smaller transverse bead (Figure 2.2, left) has one hole through the length of the otherwise tubular bone bead. A longer transverse bead (Figure 2.2, right) has a set of holes 2 mm and 3 mm in diameter on the complete end and evidence of another 3 mm diameter hole at the broken end.

Figure 2.2. Transverse bone beads. Left: 18 mm long; Catalogue No. 57.6.388. Right: 72 mm long; Catalogue No. 98.53.100.

Two beads are fashioned from fish bone (Figure 2.3). The bead on the left is made from an operculum (the bony flap covering the gills) and is conical with 2 jagged appendages. The bead on the right is made from a vertebra and is cylindrical.

The single tiny bone bead was disc-shaped and 5 mm in diameter. Fourteen of the larger beads were not found for examination and their shapes are unknown.

Shell

The predominant shell used for beads is *Olivella*, from the Gulf of California, but larger beads were made from at least four other types of shell (Table 2.5).

Figure 2.3. Beads fashioned from fish bone. Left: 10 mm diameter; Catalogue No. 2007.46.1997b. Right: 9 mm diameter, Catalogue No. 58.1.73a.

Table 2.5. Larger Shell Beads by Material.

Material	No. of Beads
Olivella	104
Oliva	3
Agaronia testacea	1
Columbella	1
Nassarius	1
Unidentified	2
Total	112

All but two of the *Olivella* beads are fashioned from a whole shell (Figure 2.4, left) with the spire lopped off. One of the whole shell *Olivella* beads is unusual in that in addition to the normal hole at the spire, there is a second drilled hole on its side (Figure 2.4, middle). Both holes in this shell are 1 mm in diameter. Two *Olivella* beads in the collections are tubular (such beads are sometimes described as "barrel beads") (Figure 2.4, right). The largest whole shell *Olivella* bead (18 mm) is more than twice the length of the smallest one (7 mm) (Table 2.6).

All five tiny shell beads are of unidentified shell and disc shaped (Figure 2.5). The other shell beads that can be identified as to type of shell are all whole shells (Figure 2.6).

The remaining two beads, of unidentified shell, include a disc bead (9 mm in diameter) and a second bead that could not be found for examination.

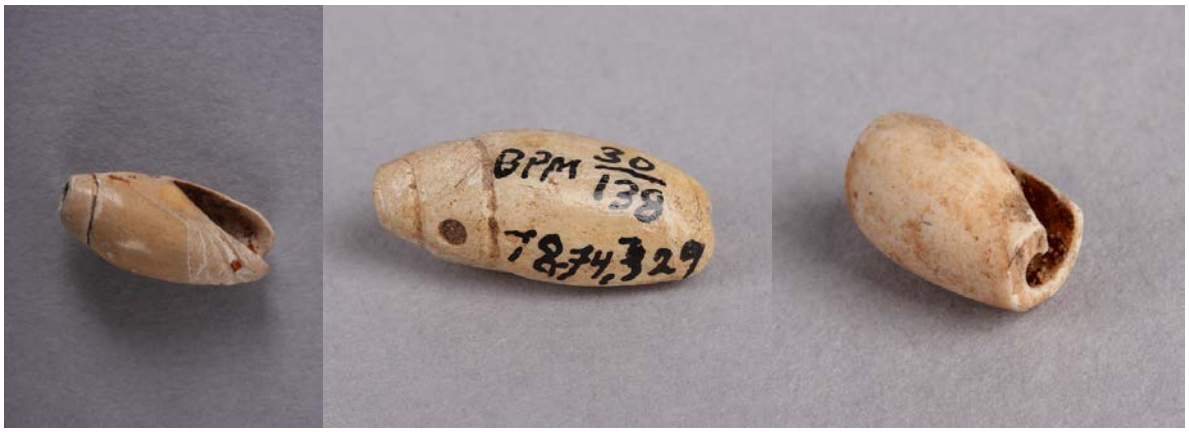

Figure 2.4. *Olivella* beads. Left: whole shell (15 mm long); Catalogue No. 99.22.1983a. Middle: whole shell with two holes (17 mm long); Catalogue No. 78.74.329. Right: tubular bead (10 mm long); Catalogue No. 2007.46.4923a.

Table 2.6. Whole Shell *Olivella* Bead Sizes (mm).

	Length	Width	Thickness	Hole
Size Range	7–18	5–9	5–8	1–4
Average	14.0	6.9	6.2	1.9
Number of Beads	97	102	100	89

Figure 2.5. Tiny shell beads. Each is 4 mm in diameter. Left: Catalogue No. 58.1.71a. Right: Catalogue No. 58.1.72a.

Figure 2.6. Whole shell beads. Upper left: *Oliva* (19 mm long), Catalogue No. 78.74.328. Upper right: *Columbella* (15 mm long); Catalogue No. 57.6.385. Lower Left: *Agaronia Testacea* (26 mm long); Catalogue No. 98.56.157. Lower Right: *Nassarius* (6 mm long); Catalogue No. 57.6.335.

Stone

One of the more unusual beads in the collection (Figure 2.7) is made from an unidentified type of stone, with a design very similar to Hohokam flying bird motifs in pottery and bird forms on shell pendants from the Sacaton and Santa Cruz phases (Gladwin et al 1965, Plate 165). It is not known whether this piece is a trade item traded and retained for a couple of hundred years or whether some Pottery Mound or other jeweler saw a Hohokam design and copied it.

More than three-quarters of the stone beads in the collections are turquoise (Table 2.7). Almost 90 percent of the tiny stone beads are turquoise.

Figure 2.7. Stone bead with stylized bird design. The bead is 36 mm long. Catalogue No. 66.102.51.

Table 2.7. Stone Beads by Material.

Material	Larger Beads	Tiny Beads	Total
Turquoise	11	15	26
Argillite	1	2	3
Gypsum	2		2
Travertine	1		1
Unidentified	1		1
Total	16	17	33

More than three-quarters of the stone beads in the collections are disc-shaped (Table 2.8). The shape of the larger argillite bead is unknown, as it could not be found for examination. Figure 2.8 illustrates disc beads, including nine beads that were found together. Two tubular stone beads were found at Pottery Mound (Figure 2.9).

Table 2.8. Stone Beads by Shape.

	Disc	Tubular	Rect-angular	Other*	Total
Larger Beads					
Turquoise	11				11
Gypsum	1	1			2
Travertine		1			1
Unidentified				1	1
Tiny Beads					
Turquoise	13		1	1	15
Argillite	2				2
Total	27	2	1	2	32

* Other: 1 bead of unidentified stone, stylized bird shape (Figure 2.7);
1 tiny bead of turquoise, round top and square base.

Figure 2.8. Stone disc beads. Upper left, larger turquoise beads found together (7–8 mm); Catalogue Nos. 78.74.1a–i. Upper right: larger gypsum bead (11 mm); Catalogue No. 78.74.83. Lower left: tiny turquoise bead (3 mm); Catalogue No., 2010.57.99b. Lower right: tiny argillite bead (3 mm), Catalogue No. 2006.47.4b.

Figure 2.9. Tubular stone beads. Left: travertine (14 mm long); Catalogue No. 98.56.127. Right: gypsum (11 mm long); Catalogue No. 2007.46.5762.

Ceramic

Seven tiny ceramic beads were found at Pottery Mound. Six were found together (Figure 2.10) and measured 3 to 4 mm in diameter and 1 to 2 mm thick, with 1 to 2 mm diameter holes. Four are thin enough to be classified as heishi.

Figure 2.10. Tiny ceramic beads. Catalogue No. 2007.46.2010a–f.

Bead Blanks

Bead blanks are artifacts that are partly worked. Based on their shape, they were intended to be completed as beads. Fourteen bead blanks were found and are evidence that people at Pottery Mound made jewelry. The bead blanks include bone, shell, stone and ceramic (Table 2.9).

Table 2.9. Bead Blanks by Material.

	Bead Blanks	Tiny Bead Blanks	Total
Bone	10		10
Argillite	1	1	2
Shell	1		1
Ceramic	1		1
Total	13	1	14

The bone blanks are all shafts with cut marks indicating that given further work, a tubular bone bead would have been the result. An example is shown in Figure 2.11.

Figure 2.11. Bone bead blank. The blank is 15 mm long. Catalogue No. 2005.27.643.

Three bead blanks are shown in Figure 2.12. The argillite bead blank measures less than 4 mm in diameter, and when finished would have been a tiny bead. The ceramic bead blank is spherical and has an unfinished hole. The bead blank of unidentified shell is disc shaped and also has an unfinished hole.

Figure 2.12. Bead Blanks. Left: argillite (< 4 mm); Catalogue No. 2006.47.4c. Middle: ceramic (9 mm); 2007.46.2009. Right: shell (7 mm); Catalogue No. 2007.46.1363.

Pendants

Pendants found at Pottery Mound were made of shell, stone, bone and ceramic. Five pendants in the collections contained multiple holes (Table 2.10).

Table 2.10. Pendants by Material.

Material	Single Hole	Multiple Holes	Total	Percent
Shell	370	3	373	77
Stone	88	2	90	19
Bone	10		10	2
Ceramic	9		9	2
Total	477	5	482	100

The function of pendants with multiple holes is not clear. Some may have been reworked after the original hole was damaged. Others may have had multiple holes to begin with. Such pendants vary in terms of material, number of holes, and size of the drilled holes (Figure 2.13). The *Nassarius* pendant has one hole at the base (1 mm diameter) and another hole on one side (2 mm diameter). The selenite pendant is a fragment with two 4 mm holes, and the damage includes a break through the second hole. The gypsum pendant has two holes of 2 mm each. The first *Haliotis* pendant has two holes of 1 mm each. The second *Haliotis* pendant has two holes of 2 mm each; one hole is smoothed and at an edge, which may indicate that the piece was reworked.

Pendants were made from more types of material and worked into more shapes than was the case for beads. Table 2.14 identifies the shapes of pendants with a single hole.

Figure 2.13. Pendants with multiple holes. Top left: *Nassarius* (10 mm long), Catalogue No. 80.61.374. Top middle: selenite (fragmentary, with hole at edge); Catalogue No. 98.53.258. Top right: gypsum (41 mm long); Catalogue No. 99.22.1998. Bottom row: *Haliotis.* Left: 20 mm long; Catalogue No. 99.22.1982. Right: 26 mm long; Catalogue No. 2007.46.747.

Pendant length was defined as the maximum length from top to bottom when the pendant was suspended from its hole. The width was also measured at the maximum point. Thickness was the maximum distance from the front to the back, and the hole was measured at its narrowest diameter.

Shell

Shell accounts for more than three-quarters of the pendants, including 318 pendants made from *Nassarius* shells. The *Nassarius* shells are quite small, ranging from 5 to 10 mm long, and are made from the whole shell. Some researchers might call these beads, but because the hole is not in the center of the bead, they were classified as pendants for this study. The *Nassarius* pendant with multiple holes (Figure 2.13, top left) was found separate from the 317 single hole *Nassarius* pendants that were found together and may be associated with a burial (see Appendix B). The latter were the largest group of jewelry artifacts found in one place at Pottery Mound.

The shell pendants with a single hole are made from a wide variety of shells (Table 2.11), but only four taxa of shell account for more than two artifacts.

Table 2.11. Single Hole Shell Pendants by Taxon.

Taxon	Number
Nassarius	317
Conus	24
Glycymeris	7
Haliotis	4
Turitella	2
Unionidae	2
Cerithidea	1
Bivalve	1
Laevicardium	1
Cardiidae	1
Pecten vogdesi	1
cf. *Spondylus*	1
cf. *Trivia*	1
Unidentified	7
Total	370

Conus shells were used to create pendants in various shapes (Figure 2.14), including tinklers that may have been attached to dance regalia as they are in the Pueblos today. The triangular *Conus* pendant with the damaged hole may have been reworked.

Figure 2.14. *Conus* pendants. Left: triangular (27 mm long); Catalogue No. 80.61.32.
Middle: trapezoid (15 mm long); Catalogue No. 78.74.334.
Right: tinkler (22 mm long); Catalogue No. 58.1.70a.

Glycymeris pendants are often made from a whole valve (Figure 2.15). The pendant in Figure 2.15 has a hole in the umbo. The arc-shaped pendant may have been reworked from a broken bracelet. The pendant broken into two pieces appears to have been disc-shaped with an open center.

Figure 2.15. *Glycymeris* pendants. Top left: whole valve (35 mm long); Catalogue No. 58.1.57. Top right: arc-shaped (27 mm long); Catalogue No. 2007.46.4937a4. Bottom: disc with open center, now in two pieces (27 mm long); Catalogue No. 2007.46.5058a.

Haliotis from the west coast of North America was worked into at least three different shapes (Figure 2.16). The serrated and diamond-shaped *Haliotis* pendants were found together.

Figure 2.17 includes several pendants made from whole valves and shells. The report cover depicts an ovoid *Pecten vogdesi* pendant (40 mm long; Catalogue No. 2011.100.129). It is in perfect condition and the most beautiful pendant in the collection.

Figure 2.16. *Haliotis* pendants. Left: triangular (19 mm long); Catalogue Nos. 58.1.163. Middle: serrated (16 mm wide); Catalogue No. 2007.46.2019a. Right: diamond (19 mm long); Catalogue No. 2007.46.2019b.

Figure 2.17. Six shell pendants. Top left: Cardiidae whole valve (21 mm long); Catalogue No. 2007.46.4422g3. Top middle: *Turitella* whole shell (60 mm long); Catalogue No. 2007.46.2023. Top right: cf. *Spondylus* (20 mm long); Catalogue No. 98.53.266. Bottom left: cf. *Trivia* whole shell (15 mm long); Catalogue No. 78.74.308. Bottom middle: *Cerithidea* whole shell (24 mm long); Catalogue No. 58.1.68a. Bottom right: Unionidae (24 mm long); Catalogue No. 57.6.37.

Stone

The single hole stone pendants are listed in Table 2.12. The gypsum and selenite pendants with multiple holes are shown in Figure 2.13. As was mentioned previously, the gypsum and selenite items suggest that there were jewelers at Pottery Mound who worked with local materials. The selenite pendants are quite fragile and half of them are so damaged that their original shapes cannot be determined. Figure 2.18 shows a number of selenite and gypsum pendants. The triangular selenite pendant has three step levels at the base. The serrated and "cleaver-shaped" gypsum pendants have unusual shapes. The trapezoidal gypsum pendant appears to have some sort of adhesive at the cut etches; it may have been an inlay.

Table 2.12. Stone Pendants by Material.

Material	Number
Selenite	32
Gypsum	20
Turquoise	18
Argillite	9
Travertine	6
Calcite	1
Muscovite	1
Limestone	1
Total	88

Four turquoise pendants found together are shown in Figure 2.19. Their shape, color, and matrix all vary. One is described as "cowbell-shaped," which refers to its general shape; the pendant is solid. The two "five-sided" (but rounded) pendants, along with other pendants illustrated in this report, indicate that strict symmetry was not an overriding concern.

Three argillite pendants are shown in Figure 2.20. One pendant is serrated and shaped remarkably like an oak leaf. Another appears to have been painted or coated. The fragment may have been reworked.

Two travertine artifacts do not have stringing holes but have been classified as pendants based on other possible means of stringing. One is burned and incised at the top and the other has two notches at the top. The third pendant illustrated has a 2 mm diameter hole (Figure 2.21).

Figure 2.18. Selenite and gypsum pendants. Top row: selenite. Top left: triangular (25 mm long); Catalogue No. 57.6.118. Top middle: D-shaped (29 mm long); 78.74.267. Top right: ovoid (28 mm long); Catalogue No.78.74.274. Bottom row: gypsum. Left to right: serrated (21 mm long), Catalogue No. 2010.55.39; "cleaver-shaped" (18 mm wide), Catalogue No. 98.53.296; trapezoid (17 mm long), Catalogue No. 2007.46.1444; ovoid (23 mm long), Catalogue No. 99.22.3233.

Figure 2.19. Turquoise pendants. Left to right: subrectangular (16 mm long), Catalogue No. 78.74.3; "Cowbell-shaped" (13 mm long), Catalogue No. 78.74.4; five-sided (13 mm long), Catalogue No. 78.74.5; five-sided (14 mm long), Catalogue No. 98.53.225.

Figure 2.20. Argillite pendants. Left: leaf-shaped (33 mm long); Catalogue No. 58.1.42. Center: painted or coated (21 mm wide); Catalogue No. 99.22.1994. Right: fragment, possibly reworked (14 mm long); Catalogue No. 58.1.322.

Figure 2.21. Travertine pendants, showing three suspension techniques. Left: incised line circling the top of the pendant (43 mm long); Catalogue No. 58.1.190. Middle: two notches at the top of the pendant (54 mm long); Catalogue 80.61.401. Right: cylindrical pendant with drilled hole (23 mm long); Catalogue No. 2007.46.2022.

Bone

The collections include ten bone pendants, all with a single hole (Table 2.13). Most of the bone is unidentified as to taxon or element. One trapezoidal pendant was made from the rib of a large mammal and another trapezoidal pendant appears to have “use wear” on the concave side at the end opposite the hole (Figure 2.22).

Table 2.13. Bone Pendants by Material.

Material	Number
Unidentified	4
Fish operculum	5
Ornate Box Turtle plastron	1
Total	10

Figure 2.22. Bone pendants. Left: from a large mammal (54 mm long); Catalogue No. 80.61.278. Right: pendant with ‘use wear’ along the bottom (93 mm long); Catalogue No. 58.1.394.

One bone pendant was made from a long bone shaft in a process similar to the one used to make bone beads. The pendant is three-quarters of a tube (in cross-section) and may have been reworked from a broken bead (Figure 2.23).

Figure 2.23. Bone pendant. Pendant is 21 mm long. Catalogue No. 2007.46.5596.

Five pendants in the collections are made from fish opercula (the bony flaps covering the gills). Figure 2.24 is a sketch of the most interesting of these. It was found in association with Burial D-38. The pendant is fragile—it has split into three pieces—and is shaped like a projectile point.

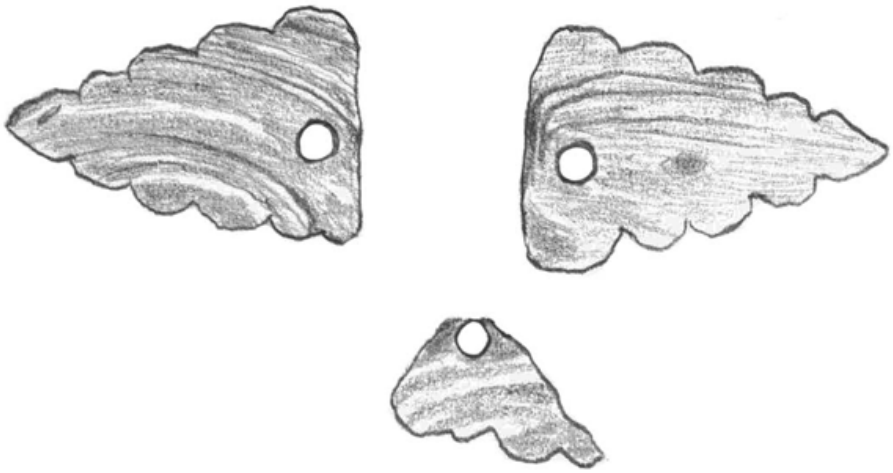

Figure 2.24. Sketch of bone pendant shaped like a projectile point. The pendant is 18 mm long and in three pieces. Catalogue No. 2007.46.4287b. Sketch by Alex Kurota.

Another unusual pendant, fashioned from a fish operculum, is illustrated in Figure 2.25.

Figure 2.25. Fish operculum pendant. The pendant is 14 mm long. Catalogue No. 2007.46.1997a.

The final bone pendant is a fragment, made from an Ornate Box Turtle plastron; its condition prevents identification of the original pendant shape.

Ceramic

Each of the nine ceramic pendants in the collections had only a single complete hole. Sherds with a drilled hole near the rim but lacking edge modification were not included in the study, as such sherds usually represent a repair made to a cracked pot. The ceramic pendants (Figure 2.26) include a number of shapes (Table 2.14). The condition of a number of pendants prevented identification of their original shape.

One pendant was identified as being made from an Agua Fria Glaze-on-red vessel. Three molded pendants are bell-shaped and hollow, and may represent imitations of copper bells. The D-shaped pendant appears to be smoothed at a second hole, which suggests the pendant was reworked after breaking.

Figure 2.26. Ceramic pendants. Top left: Agua Fria Glaze-on-red (53 mm long); Catalogue No. 58.1.28. Top right: fragment of a bell-shaped pendant with a 2 mm hole; Catalogue No. 99.22.1079. Bottom row, left to right: D-shaped (24 mm long), Catalogue No. 2007.46.647; subrectangular (29 mm long); Catalogue No. 80.61.406; Circular (35 mm diameter), Catalogue No. 99.22.1392.

Table 2.14. Single-hole Pendants by Material and Shape.

Shape	Shell	Stone	Bone	Ceramic	Total
Whole (shell)	325				325
Trapezoidal	6	7	2		15
Subrectangular	1	10		2	13
Tinkler	11				11
Ovoid	3	8			11
Triangular	4	4	2	1	11
Round top, square bottom	2	6			8
Rectangular		7			7
Five-sided	1	4			5
Serrated	1	3	1		5

Table 2.14. Single-hole Pendants by Material and Shape.

Shape	Shell	Stone	Bone	Ceramic	Total
Irregular		4	1		5
D-shaped		2	1	1	4
Bell		1		3	4
Cylinder		2			2
Arc	1		1		2
Round	1			1	2
Whole valve	3				3
Teardrop		1			1
Disc	1				1
Diamond	1				1
Ovoid, concave	1				1
Square		1			1
Unknown	8	28	2	1	39
Total	370	88	10	9	477

Pendant Blanks

Pendant blanks are similar to bead blanks in that they are incomplete items, but sufficiently worked to indicate what the final product would be. Pendant blanks in the collections were made of stone, shell, bone, and ceramic (Table 2.15.).

Table 2.15. Pendant Blanks by Material.

Material	Number
Selenite	5
Argillite	2
Gypsum	1
Hematite	1
Schist	1
Conus	1
Spondylus	1
Unidentified shell	1
Bone	1
Ceramic	1
Total	15

Three pendant blanks are shown in Figure 2.27. Only one of the selenite blanks in the collections is in good enough condition for its shape to be identified; it is diamond-shaped. One of the argillite blanks has an unfinished side with a partial second hole, indicating that it may be a reworked damaged pendant. The gypsum blank may have been intended as a pendant with multiple holes, as it has one complete and one partial hole.

Figure 2.27. Pendant blanks. Top left: diamond-shaped piece of selenite (35 mm long); Catalogue No. 57.6.178. Top right: possibly reworked argillite pendant fragment (17 mm long) with partial second hole; Catalogue No. 98.53.46. Bottom: gypsum blank (22 mm long) with one complete and one partial hole; Catalogue No. 57.6.114.

Gorgets

Two artifacts in the collection are described as gorgets, meaning jewelry items intended for suspension at the throat. One gorget, of bone, could not be found for study. The other, of selenite, is a three-dimensional bird that might be termed a fetish if not for the suspension hole and context of discovery. This gorget was found below the chin of 1954 Burial No. 24 (Ballagh and Phillips 2006:91). Figure 2.28 is a sketch of the selenite gorget.

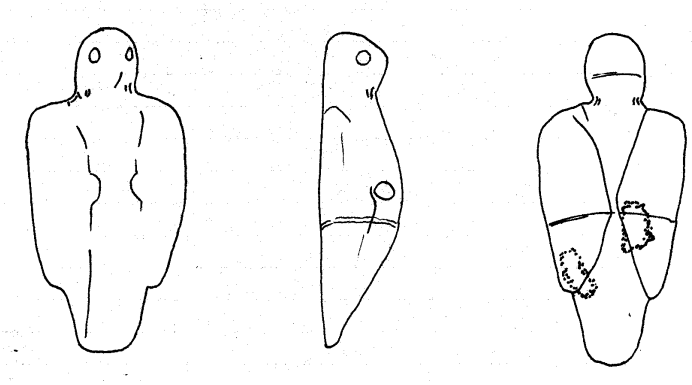

Figure 2.28. Sketch of the selenite gorget. Left: view of front. Middle: view of side. Right: view of back. The gorget is 63 mm long. Catalogue No.58.1.47. The sketch is from Notebook 2003.23.5.

Earrings and Earring Blank

Two artifacts in the collections were identified as earrings because in 1983, they were found at the sides of the skull in Burial D-23. Unlike most modern earrings, the two turquoise earrings are not a matched pair. One is irregular shape and the other is subrectangular (Figure 2.29). If these pieces had not been found in situ, they could easily have been classified as pendants.

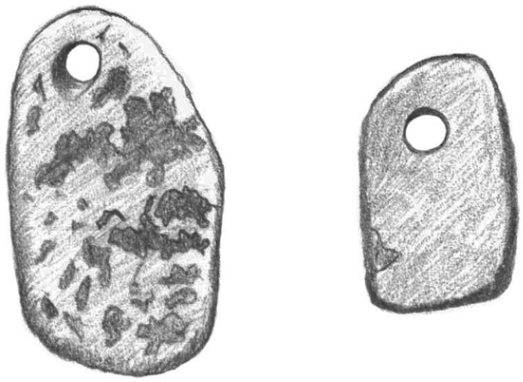

Figure 2.29. Sketch of turquoise earrings found with a burial. Left: 13 mm long. Right: 9 mm long. Catalogue Nos. 99.22.1979a1 and 99.22.1979a2. Sketch by Alex Kurota.

The artifact shown in Figure 2.30 was identified as an earring blank by a Hopi informant, according to the Pottery Mound project records. It was not found associated with a burial so the basis of the identification is unclear. Made from a glazeware sherd, the blank is smoothed, triangular, and lacks a hole. But for the informant's identification, this artifact would have been classified as a worked sherd.

Figure 2.30. Earring blank. Length, 30 mm. Catalogue No. 2007.46.4987.

Rings

The collections include two rings (Figure 2.31). One is made from a vertebra and the other from sandstone. Neither is perfectly round; the bone ring measures 24 by 18 mm and the stone ring measures 22 by 21 mm.

Figure 2.31. Rings. Left: vertebra; Catalogue No. 78.74.233.
Right: sandstone; Catalogue No. 98.53.255.

A third artifact (Catalogue No. 80.61.180), of sandstone, resembles half a ring, but due to its condition its original shape is unknown and it was not included in this study as a piece of jewelry.

Bracelets

The collections include two *Glycymeris* bracelet fragments. One is shown in Figure 2.32.

Figure 2.32. *Glycymeris* bracelet fragment. Catalogue No. 2007.46.5439.

Raw Material

Minimally worked and unworked shell, turquoise, and bone (Table 2.16) were examined, as they could have been acquired with the intent of turning them into jewelry. Pieces were classified as minimally worked when they could not be identified as a specific kind of blank. Two of the minimally worked pieces of stone are selenite; the remaining minimally worked and unworked stones are all turquoise. The minimally worked piece of bone is a shaft with one visible cut mark. Shell taxa are listed in Table 2.17.

Table 2.16. Minimally Worked and Unworked Materials.

	Minimally Worked	Unworked	Total
Shell	17	29	46
Stone	25	36	61
Bone	1		1
Total	43	65	108

Table 2.17. Minimally Worked and Unworked Shell.

	Minimally Worked	Unworked	Total
Olivella		7	7
Bivalve	3	3	6
Unionidae	4	1	5
Gastropod	1	3	4
Snail		3	3
Haliotis	2	1	3
Glycymeris	1	2	3
Conus	2		2
Cerithium		1	1
Nacreous	1		1
Spondylus	1		1
Turitella		1	1
Unidentified	2	7	9
Total	17	29	46

Unknown

The collections include 13 artifacts that could not be classified as either jewelry or raw material. Three unidentified shells and one snail were missing from their original packaging. The remaining nine were in such poor condition that they could not be classified. These last nine items included one gastropod, one snail, one Unionidae, two *Olivella,* and four pieces of shell not identified by taxon (Table A.5).

MAXWELL MUSEUM OF ANTHROPOLOGY

Chapter 3

THE ARTIFACTS BY EXCAVATION AND PROVENIENCE

Excavations were conducted in different parts of Pottery Mound in different years. The maps resulting from that work are incomplete and at times conflicting. Figure 3.1 provides a general map of the site. A complete set of the available maps can be found in *A Guide to Collections and Proveniences for Pottery Mound* (Schuyler et al. 2013), which also describes the assignment of Standardized Proveniences to facilitate analysis.

In discussing artifacts by provenience, a distinction is made between completed jewelry artifacts and blanks or raw materials. Completed jewelry artifacts indicate jewelry that was worn or otherwise used. Blanks and raw materials suggest jewelry-making at Pottery Mound. Thirteen pieces in the collections are possibly re-worked, an indication of jewelry repair or re-use of damaged jewelry pieces. Artifacts that could not be definitely identified as jewelry or raw materials (i.e., "unknown") were included in the study but are not covered in detail in this chapter; they are listed in Table A.5.

Some pieces of completed jewelry and blanks or raw material were identified in project records but could not be matched to any artifacts in the collections. These fall into two categories.

The first category includes 167 artifacts assigned catalogue numbers, or documented with specimen cards (or both), based on documents in the Maxwell Museum archives (Table B.1). I attempted to match artifacts described in these records to those in the collections, based on provenience, excavator, date of excavation, and size, but could not do so in 167 cases. The most we can say about the currently missing jewelry artifacts, blanks, and pieces of raw material is that at some point they were seen and catalogued by someone other than the student excavator.

The second category includes 456 artifacts that were described by students or other excavators in field notebooks or were listed in inventories (Table B.2). Again, efforts were made to match records of these artifacts to items in the collections; when that failed, I tried to match them to items in the first category of missing artifacts, also based on provenience, excavator, date of excavation, and size. The intent was to identify artifacts not in the collections nor previously catalogued yet missing from the collections. Artifacts are included in this category if associated with an excavator name or date (or both). A few included items had no provenience. The descriptions of these 456 artifacts may be less reliable than those for the 167 catalogued items discussed above.

This chapter addresses the 1,416 pieces of completed jewelry, blanks, and raw material in the collections as well as the 623 "missing" pieces (Table 3.1). Additional details can be found in Appendix B. It is important to understand as much as possible about the proveniences of the jewelry artifacts in the collections as these are available for future study. However, in order to gain a broader view of jewelry artifacts and their distribution across Pottery Mound, I chose to include the many jewelry artifacts which, for whatever reason, did not find their way into the collections, as together they represent the "minimum set" of jewelry from the site.

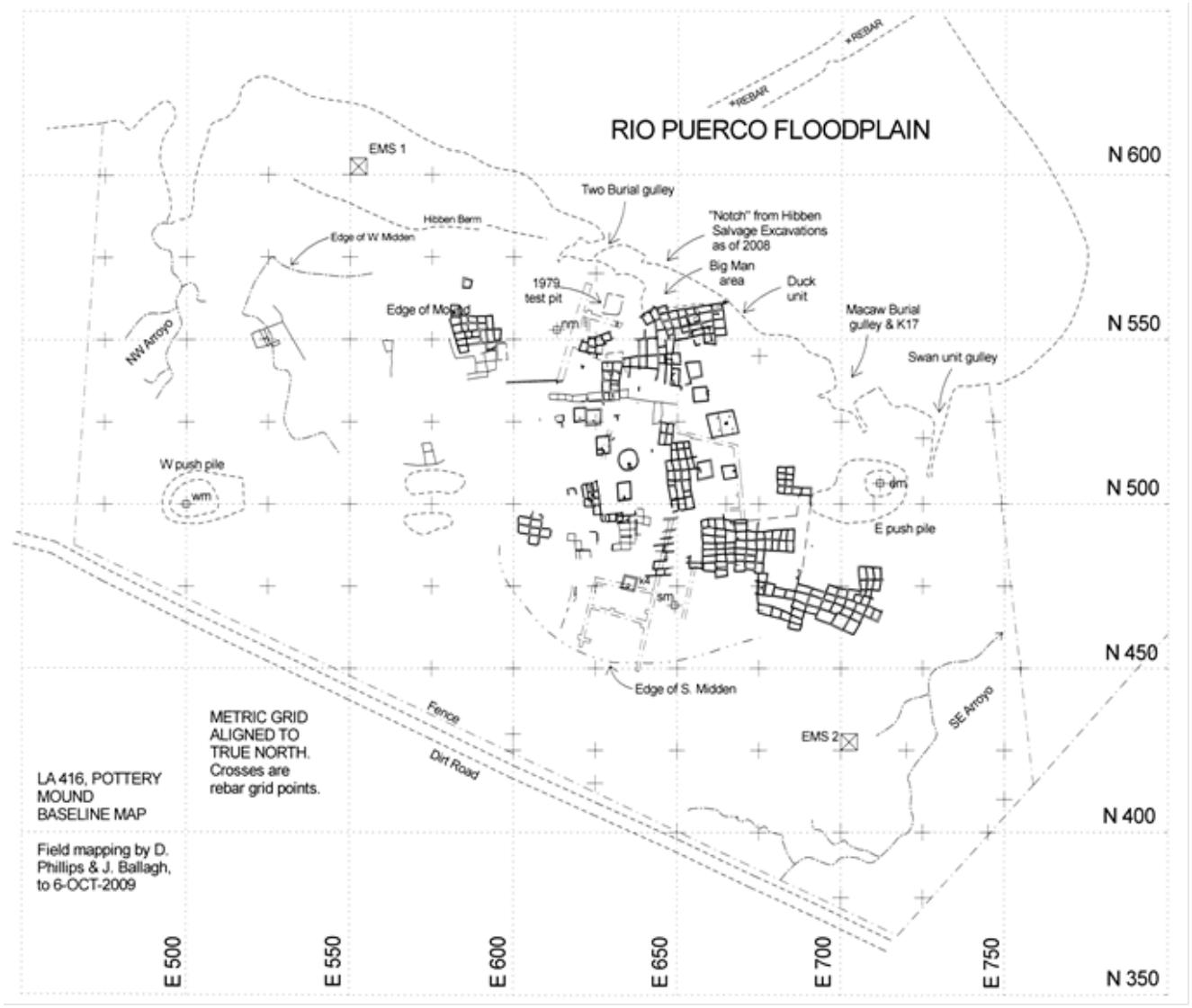

Figure 3.1. Map of Pottery Mound, showing rooms documented by Frank Hibben. Grid is in meters east and north, oriented to true north. From Phillips and Ballagh (2010, Figure 5).

Table 3.1. Jewelry from Pottery Mound: In the Collections versus Missing.

Artifact Type	In Collections		Missing		Total	
	Count	Percent	Count	Percent	Count	Percent
Beads	784	55.4	392	62.9	1176	57.7
Pendants	482	34.0	166	26.6	648	31.8
Beads or pendants	4	<1			4	<1
Gorgets	2	<1	1	<1	3	<1
Earrings	2	<1	1	<1	3	<1
Rings	2	<1			2	<1
Bracelets	2	<1			2	<1
Hair ornaments			1	<1	1	<1
Bead blanks	14	<1	2	<1	16	<1
Pendant blanks	15	1.1	3	<1	18	<1
Earring blanks	1	<1			1	<1
Worked raw material	43	3.0	9	1.4	52	2.6
Unworked raw material	65	4.6	34	5.5	99	4.9
Unident. raw material			14	2.2	14	<1
Total	1416	100.0	623	100.0	2039	100.0

Beads and pendants comprise 89.4 percent of the jewelry found in the collections and 89.6 percent of the "missing" jewelry.

Excavations

Frank Hibben's excavations occurred in 1954, 1955, 1957, 1958, 1960-1961 and during the 1970s and 1980s; the post-1961 work sometimes is referred to as the "Salvage Years." Each excavation season prior to the Salvage Years tended to focus on different parts of the site but at times, excavations were resumed in areas studied earlier. Also, Linda Cordell led the excavation of a 5 by 5 meter test pit at Pottery Mound in 1979, as part of that year's field school.

A few jewelry items were collected from the site surface between 2006 and 2011, as part of a site monitoring project led by David Phillips. In 2013 Dan Adams, a private individual who dug at Pottery Mound with the Hunings' permission in 1971–1973 (David Phillips, 2013 personal communication), donated a small collection of artifacts from the site to the Maxwell Museum. The Dan Adams items are listed in a separate tab in the Pottery Mound Jewelry Catalogue and in Table A.6, but are not included in this analysis.

Excavation dates were not provided for many artifacts. If the excavator was identified by name, the year of excavation can usually be determined based on that excavator's work records or field notebook. Still, many artifacts cannot be related to a specific excavation time frame. Table 3.2 identifies the artifacts by excavation season. In each cell of the table, the figure before the slash is the count of artifacts found in the collections and the figure after the slash is the count for missing items.

Table 3.2. Jewelry from Pottery Mound, by Year of Field Studies.
(See text for discussion of format.)

	1954	1955	1957	1958	1960–1961	1970s–1980s	Cordell 1979	2006–2011	Year Unknown	Total
Beads	61/38	93/53	56/41	22/30	43/113	157/30	207/55	5/0	140/32	784/392
Pendants	45/5	6/87	4/3	4/3	10/26	42/24	337/11	3/0	31/7	482/166
Beads or pendants		1/0	1/0						2/0	4/0
Gorgets	1/0	1/0				0/1				2/1
Earrings					0/1	2/0				2/1
Rings					2/0					2/0
Bracelets		1/0			1/0					2/0
Hair ornaments	0/1									0/1
Bead blanks	1/0	1/1	1/0	1/0	0/1	4/0	3/0	1/0	2/0	14/2
Pendant blanks	3/0	1/2	2/0	1/0	2/1	3/0			3/0	15/3
Earring blanks						1/0				1/0
Worked	4/0	1/0	4/0	2/2	2/2	16/1	6/4		8/0	43/9
Unworked	2/3	6/6	5/4	1/0	7/5	27/0	5/13		12/3	65/34
Unident. raw	0/1	0/3	0/4		0/6					0/14
Total	117/48	111/152	73/52	31/35	67/155	252/56	558/83	9/0	198/42	1416/623

Thirty of the 784 beads in the collection were classified as tiny beads (Table 2.3). One tiny bead was found in 1954, three in 1955, 18 during the 1970s and 1980s, and five during site monitoring in 2006–2011; for three tiny beads, the collection year is unknown. Two tiny beads missing from the collections were reported found in 1961. Of the 482 pendants in the collections, five were pendants with multiple holes (Table 2.10). One pendant with multiple holes was found in 1960–1961, three in the 1970s and 1980s, and one during Linda Cordell's testing in 1979. One pendant with multiple holes, missing from the collections, was reported found in 1981 (during the Salvage Years).

In 1954 the emphasis was on pottery and that may have been the only artifact class that was collected consistently (Ballagh and Phillips 2006:9). The 1955 season focused on collecting animal bone (Ballagh and Phillips 2008:6). In 1957 one emphasis was on describing, but not counting, stone artifacts of particular interest (Ballagh 2011:7). In 1960, excavations were confined primarily to kivas. Excavations in 1961 covered many rooms and included the large South Bulldozer Trench; excavation of rooms may have been hurried. Hibben's focus that year was on locating the boundaries of the platform mound that he believed underlay much of the site (Jean Ballagh, 2013 personal communications).

Table 3.3 examines completed jewelry versus blanks and raw material, for items in the collections versus missing items. The percentages are almost identical, suggesting that the current collections are not a biased sample of the items originally excavated. A Chi-square test value of 0.02 indicates that the null hypotheses (the missing items do not bias the sample) cannot be rejected.

Table 3.3. Completed Jewelry and Blanks or Raw Material: In the Collections versus Missing.

	In the Collections	Missing	Both
Completed	1278 (90.3 %)	561 (90.0 %)	1839 (90.2 %)
Blanks/Raw	138 (9.7 %)	62 (10.0 %)	200 (9.8 %)
Total	1416 (100.0 %)	623 (100.0 %)	2039 (100.0 %)

This discussion by excavation season includes jewelry artifacts in the collections and those documented as described above but missing from the collections. The artifacts listed in *Pottery Mound: The 1954 Field Season* (Ballagh and Phillips, 2006), *Pottery Mound: The 1955 Field Season* (Ballagh and Phillips, 2008) and *Pottery Mound: The 1957 Field Season* (Ballagh, 2011) include artifacts only reported in excavator/student notebooks for those years. Some jewelry artifacts in the collection were not discussed in the notebooks and likewise, some of the artifacts described in the notebooks are not in the collections (Appendix B, Tables B.1 & B.2). Not all of the excavator/student notebooks are in the collections.

The number of documented jewelry-related artifacts varies by excavation year, reflecting variations in excavation practices (Table 3.2). For 1955 and 1960–1961, more jewelry-related artifacts are missing than found their way into the collections. Relatively few artifacts were documented in 1957 and 1958. About 14 percent of the artifacts in the collections and 7 percent of the missing artifacts have no recorded provenience. Linda Cordell's excavation appears to have employed stricter field and lab methods, increasing the count of jewelry-related artifacts; she required screening, for example, while Frank Hibben usually did not (David Phillips, 2015 personal communication). In only one field session, Cordell's excavators found almost 40 percent of all jewelry-related artifacts in the Pottery Mound collections.

Provenience Categories

Frank Hibben's excavations included rooms, kivas, and middens and other exterior (non-structural) spaces. Linda Cordell's 5 by 5 m stratigraphic test in 1979 was placed in the site's North Midden and did not uncover any structures.

Definite proveniences are not available for all artifacts. Comparisons were built on categories of proveniences including structures (rooms plus kivas) and non-structural areas (trenches, areas surrounding room blocks) and middens. A few artifacts described as found "in a room or a kiva" are categorized as items from structures. Many artifacts have no documented provenience. Table 3.4 identifies the number of jewelry artifacts (in the collections, and missing) by provenience categories.

Beads (large or tiny) and pendants (with single or multiple holes) make up 99.0 percent of the completed jewelry in the collections and 99.5 percent of the missing completed jewelry. Pendants with multiple holes, gorgets, earrings, rings, bracelets, and the missing hair ornament may be considered "less common" types of completed jewelry. Those are evenly split: the collections include eight from structures and eight from external areas; while two missing pieces came from structures and two from external areas (Table 3.4).

The distributions shown in Table 3.5 are a simpler way of looking at where these artifacts were found, excluding items whose provenience is unknown. The results may provide an insight as to the care given to artifacts reported found in various types of provenience. Roughly one-third (35.9 percent) of beads now in the collections were found in structures, but two-thirds (67.2 percent) of the missing beads were reported as found in structures.

At first it appears that a very large proportion of pendants was found in non-structural areas, but this result is influenced by the 317 *Nassarius* pendants found together in the North Midden and the 85 missing selenite pendants reported from the South Midden. Excluding these two groups of items results in a very different pattern (Table 3.6) that suggests that pendants may have been more likely to be found in structures.

Table 3.4. Jewelry Artifacts by Provenience Category: In the Collections versus Missing.
(Format: [in the collections]/[missing from the collections])

	Rooms	Kivas	Rooms or Kivas	Non-Structural	Middens	No Prov.	Total
Beads	178/240	53/18	7/0	109/55	308/71	99/5	754/389
Tiny beads	7/2			14/1	6/0	3/0	30/3
Pendants	66/45	6/2		21/6	360/111	24/1	477/165
Pendants, multiple holes	3/0			0/1	2/0		5/1
Beads or pendants	2/0			1/0		1/0	4/0
Gorgets	1/0				1/1		2/1
Earrings	0/1				2/0		2/1
Rings	1/0			1/0			2/0
Bracelets	1/0			1/0			2/0
Hair ornament	0/1						0/1
Completed jewelry	259/289	59/20	7/0	147/63	679/183	127/6	1278/561
Blanks or raw material	34/24	4/3	1/0	29/13	46/21	24/1	138/62
Total	293/313	63/23	8/0	176/76	725/204	151/7	1416/623

Table 3.5. Distribution of Jewelry Artifacts by Provenience Category.

	In Collections		Missing		Total	
	Structure	**Non-Structural**	**Structure**	**Non-Structural**	**Structure**	**Non-Structural**
Beads	245 (35.9%)	437 (64.1%)	260 (67.2%)	127 (32.8%)	505 (47.2%)	564 (52.8%)
Pendants	75 (16.4%)	383 (83.6%)	47 (28.5%)	118 (71.5%)	122 (19.6%)	501 (80.4%)
Completed	325 (28.2%)	826 (71.8%)	309 (55.7%)	246 (44.3%)	634 (37.2%)	1072 (62.8%)
Blanks/raw materials	39 (34.2%)	75 (65.8%)	27 (44.3%)	34 (55.7%)	66 (37.7%)	109 (62.3%)
Total	364 (28.8%)	901 (71.2%)	336 (54.5%)	280 (45.5%)	700 (37.2%)	1181 (62.8%)

Table 3.6. Distribution of Pendants, Excluding Two Finds.

	Collections		Missing		Total	
	Structure	**Non-structural**	**Structure**	**Non-Structural**	**Structure**	**Non-Structural**
Pendants	75 (53.2%)	66 (46.8%)	47 (58.8%)	33 (41.2%)	122 (55.2%)	99 (44.8%)

Clearly, the inclusion or exclusion of a group of artifacts can change the conclusions about what was found, rather dramatically. Since we know that the entire site was not excavated, that some sections were excavated more completely than others, and that not all field notebooks have survived, "conclusions" drawn in this study must be viewed in context.

Neighborhoods

David Phillips, Hayward Franklin, and others are examining sherd distributions at Pottery Mound to explore possible ethnic variability within the site. In particular, they have noticed that Hopi sherds (including those from plainware vessels) are more concentrated in the southwestern quadrant of the site than elsewhere. In light of this ongoing research, the third analysis approach for proveniences splits jewelry artifacts into eight areas across the site (Figure 3.2 and Table 3.7). Three sections—East, Middle and West—–extend southeast to northwest and intersect with a division between North and South (just north of Kiva 7 and just south of Kiva 5), creating six "neighborhoods" based purely on the spatial distribution of features. These "neighborhoods" were chosen to incorporate known room blocks and kivas as well as excavations identified in non-structural areas. Thus, the dividing lines between neighborhoods bend to keep a given room block or trench in a single neighborhood. Given the excavation approach used at the site, a more rigorous approach to defining room clusters is not possible. The final two site areas are the North and South Middens.

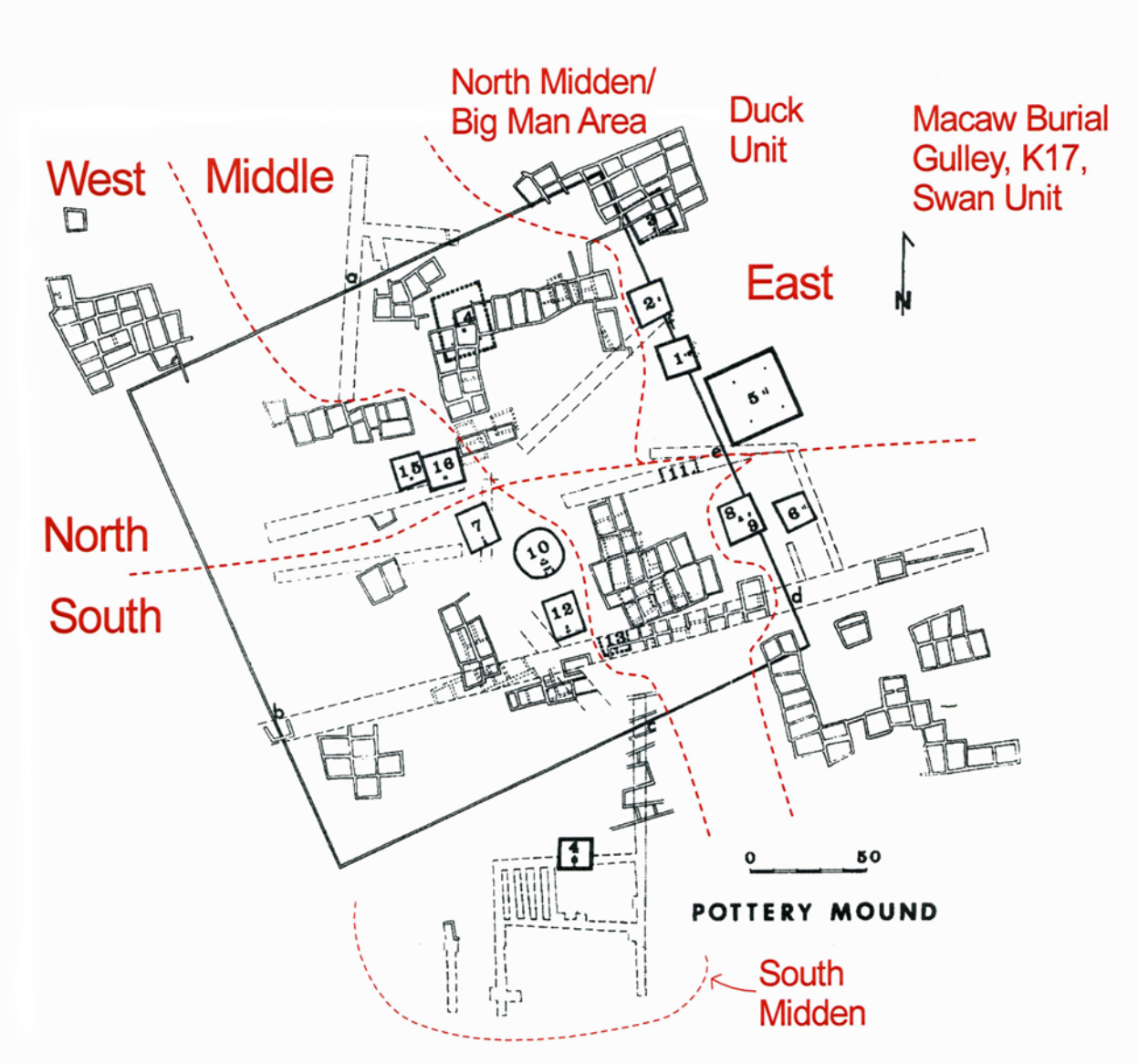

Figure 3.2. Pottery Mound “neighborhoods.”

Table 3.7. Neighborhood Definitions.

	North Area	South Area
East Area	Rooms A-1 through A-12 Room north of Kiva 3 Room east of room north of Kiva 3 Duck Unit Rooms 1–30 Swan Unit Rooms 99–101	Rooms C-1 through C-10 and C-11/12 Rooms C-13 through C-28
Middle Area	Rooms A-13 through A-15 Rooms A-17 through A-19 Rooms A-21 through A-24 Rooms H-9, H-10, I-9, and I-10 Rooms D-1 through D-6, D-26, and D-27 Room below Room D-27 Rooms F-14 through F-22, F-45, and F-46 Room north of Room F-45 Rooms SF-23, SF-33, SF-35, and SF-36	Rooms F-23 through F-37 Room north of Room F-23 Rooms F-70 and F-82 Rooms SF-1 and SF-3 Rooms SF-50 through SF-58 Rooms SF-60 through 64
West Area	Rooms F-1 through F-12 Room north of Kiva 7 Rooms B-2 through B-22 Rooms F-52 and F-63 Rooms SF-40 and SF-41	Rooms D-7 through D-20 Rooms D-22, D-24, and D-25 Rooms F-40, F-41, F-47, F-53, and F-54 Rooms SF-9 through SF-11 and SF-13 Rooms SF-70, SF-71, and SF-75 South Midden Rooms 2–5 and 7

The available maps do not identify the exact locations of rooms excavated in the South Midden; they are believed to have been located in the SE Trench. The only walls indicated in the Southeast trench are at its north end, north of Kiva 4. Since jewelry artifacts were found in only one South Midden room, the South Midden rooms have been included in the Southwest neighborhood for this study. No rooms were identified in the North Midden.

For 14 rooms, provenience is unknown so the rooms were not assigned to a neighborhood (Table 3.7). All rooms are included in Table B.3.

Found in Rooms

This study documented 270 rooms reported at Pottery Mound (Table B.3). The original and rendered maps for the site depict 242 rooms. The collections contain artifacts from 219 rooms. Currently missing artifacts were found in 105 of the reported rooms. The reports for 1954, 1955, and 1957 (Ballagh and Phillips 2006, Ballagh and Phillips 2008, Ballagh 2011) describe 78 rooms (Table B.3). A number of field notebooks are missing and a number of artifacts were documented as found in rooms that are not uniquely identified, so the number of rooms actually excavated may exceed 270. Also, some rooms may have been numbered differently in different years, or were numbered and not excavated, which would result in the number of excavated rooms being less than 270.

The discrepancy between the number of rooms depicted on maps and the number of rooms that were actually excavated is difficult to understand. This study attempts to identify proportions of rooms that contained jewelry artifacts. To this end, the base number of excavated rooms is defined as those that yielded any kind of artifact in the collections (219), plus all those mentioned in field notebooks (an additional 14) (Table 3.8). "Unidentified" rooms are those that cannot be assigned to a neighborhood. An explanation of the room counts can be found in Appendix B. More rooms were excavated in the North area than in the South area, while the numbers of rooms excavated in the East, Middle, and West areas are almost the same (Table 3.8).

Table 3.8. Excavated Rooms by Neighborhood.

	North	South	Unidenti-fied	Total
East	47	27		74
Middle	39	34		73
West	38	34		72
Unidentified			14	14
Total	124	95	14	233

The collections include only one or two bags of artifacts (of any kind) from some rooms, which suggests that those rooms were not excavated thoroughly, but the "missing" artifacts indicate that at least some rooms yielded artifacts that did not find their way into the collections. Also, as was typical at the time, the crews often discarded pottery and other artifacts after tallying them. Yet another perspective comes from a discussion of ceremonial rooms at Pottery Mound; Ballagh and Phillips (2015:411) mention that most rooms appear to have been "cleaned out when their use came to an end, and most of the artifacts found in rooms are from post-occupation fill."

Table 3.9 shows the most likely number of excavated rooms with jewelry artifacts at Pottery Mound—rooms yielding jewelry artifacts currently in the collections, and additional rooms documented as yielding jewelry that did not find its way into the collections. To provide one example, the Middle North Neighborhood includes 18 rooms with jewelry artifacts in the collections plus an additional six rooms documented as having jewelry artifacts that did not find their way into the collections, for a total of 24 rooms.

In Table 3.9 one room yielding only missing jewelry was identified by room number; since the room number does not appear on any map, that room could not be assigned to a neighborhood. Later in this report, Table 3.16 lists all of the jewelry artifacts by room and shows that 46 of the 92 rooms with jewelry artifacts in the collections also are reported to have yielded jewelry artifacts that did not find their way into the collections. A number of jewelry artifacts both in and missing from the collections were described as having come from rooms that are not included in Table 3.9, as neither their corresponding room number nor their neighborhood is known.

Table 3.9. Rooms with Jewelry Artifacts, by Neighborhood.
(Format: [in the collections]/[in or missing from the collections])

	North	South	Unidenti-fied	Total
East	20/22*	17/19		37/41
Middle	18/24	6/16		24/40
West	23/27	8/14		31/41
Unidentified			0/1	0/1
Total	61/73	31/49	0/1	92/123

*One unidentified Duck Unit room was assumed to be located among the 14 identified Duck Unit rooms.

The collections include completed jewelry, blanks, and raw material found in 92 identified excavated rooms at Pottery Mound. Thus, almost 40 percent of the 233 excavated rooms yielded jewelry artifacts currently in the collections. This figure jumps to about 53 percent if we include rooms that yielded only missing jewelry artifacts. The rest of the analysis in this chapter will consider both the story told by jewelry artifacts in the collections as well as the total number of jewelry artifacts (including missing ones).

Table 3.10 presents the percentages of rooms in each neighborhood with jewelry artifacts (in the collections, and when the missing pieces are included). The differences in the total percentages from those mentioned previously is due to the omission of rooms that cannot be assigned to a neighborhood. A comparison of the two sets of percentages in Table 3.10 suggests that in both cases, the likelihood of a room in the North containing jewelry artifacts is higher than for a room in the South. For the East, Middle and West areas, the artifacts in the collections suggest that rooms in the East are most likely to yield jewelry artifacts, while the three areas are quite similar when all rooms documented as having jewelry artifacts are considered.

Table 3.10. Percentages of Rooms with Jewelry Artifacts, by Neighborhood.

	In the Collections			In the Collections or Missing		
	North	South	Total	North	South	Total
East	42.6%	63.0%	50.0%	46.8%	70.4%	55.4%
Middle	46.2%	17.6%	32.9%	61.5%	47.1%	54.8%
West	60.5%	23.5%	43.1%	71.1%	41.2%	56.9%
Total	49.2%	32.6%	42.0%	58.9%	51.6%	55.7%

Chi-square tests were used to examine the null hypothesis that there is no difference between the North and South, for rooms with jewelry artifacts in the collections and then for the total number of rooms (including missing jewelry) (Table 3.11). The result for the former test indicate that the null hypothesis can be rejected at the 0.05 level of significance. However, the result for all rooms (including missing jewelry artifacts) suggests that the null hypothesis should not be rejected at the 0.05 level of significance.

Table 3.11. Chi-square Tests for Rooms With and Without Jewelry Artifacts: North versus South.

	In the Collections		In the Collections or Missing	
	North	**South**	**North**	**South**
Rooms with jewelry artifacts	61	31	73	49
Rooms without jewelry artifacts	63	64	51	46
Chi-square	6.06		1.16	

Chi-square tests were also used to test the null hypothesis that there is no difference between the East area and the combined Middle and West areas, and similarly no difference for the combined East and Middle areas versus the West areas (Table 3.12). The Middle area was combined with the West and then East Areas because kivas in the West area appear to have different architectural characteristics than those in the East and Middle areas (see Chapter 4). The results for both tests in Table 3.12 indicate that the null hypothesis cannot be rejected at the 0.05 level of significance.

Table 3.12. Chi-square Tests for Rooms With and Without Jewelry Artifacts: East, Middle, and West.

	In the Collections		In the Collections or Missing	
	East	**Middle + West**	**East**	**Middle + West**
Rooms with jewelry artifacts	37	55	41	81
Rooms without jewelry artifacts	37	90	33	64
Chi-square	2.93		0.004	
	East + Middle	**West**	**East + Middle**	**West**
Rooms with jewelry artifacts	61	31	81	41
Rooms without jewelry artifacts	86	41	66	31
Chi-square	0.048		0.066	

Based on these tests, and considering all of the rooms that are reported to have contained jewelry artifacts, I cannot argue that one part of the site was more likely than another to have jewelry artifacts in rooms.

Of the 293 jewelry artifacts in the collections found in rooms, 15 were from rooms that cannot be identified by neighborhood. Similarly, of the 313 missing jewelry artifacts documented as found in rooms, five were found in an identifiable room whose neighborhood is unknown and 39 were from unidentified rooms whose neighborhoods cannot be identified.

The average number of jewelry artifacts per room follows a different pattern (Table 3.13). For both the jewelry artifacts in the collections and for the total counts (including missing artifacts), the North area has a higher average number of jewelry artifacts per room than the South area. For both sets of numbers, the West has fewer jewelry artifacts per room, on average, than the Middle and East areas.

Table 3.13. Average Number of Jewelry Artifacts per Room, by Neighborhood.

	In the Collections			In the Collections or Missing		
	North	South	Total	North	South	Total
East	3.7	3.0	3.4	4.6	4.0	4.3
Middle	4.0	1.5	3.4	6.4	4.2	5.5
West	2.6	1.6	2.3	3.9	3.1	3.6
Total	3.4	2.4	3.0	4.9	3.8	4.5

The frequency distribution of jewelry artifacts per room also varies by neighborhood (Table 3.14). As we are confident that the excavators found jewelry artifacts above and beyond those in the collections, it is important to look at the distribution of rooms for "In the Collections or Missing," as that addresses the "minimum set" of recorded jewelry artifacts. The details behind Tables 3.13 and 3.14 are provided in Table B.4.

Table 3.14. Frequency Distributions for Jewelry Artifacts by Neighborhood.

	Artifacts per Room	In the Collections			In the Collections or Missing		
		North	South	Total	North	South	Total
East	1–9	18	16	34	20	17	37
	10–19	1	1	2	1	2	3
	30+	1		1	1		1
Middle	1–9	15	6	21	19	15	34
	10–19	3		3	2		2
	20–29				2		2
	30+				1	1	2
West	1–9	22	8	30	23	14	37
	10–19	1		1	4		4
Total	1–9	55	30	85	62	46	108
	10–19	5	1	6	7	2	9
	20–29				2		2
	30+	1		1	2	1	3
No. of Rooms		61	31	92	73	49	122

More than one-third (43) of the 122 rooms listed in Table 3.14 yielded only one jewelry artifact; more than half (65) yielded two to nine jewelry artifacts; nine yielded 10 to 19 jewelry artifacts; two yielded 20 to 29 such artifacts and three (one room each in the Northeast, Middle North, and Middle South neighborhoods) yielded more than 30 jewelry artifacts. Chi-square tests did not

point out significant differences among the neighborhoods (Table 3.15). Nonetheless, the Southwest neighborhood stands out for having no rooms with more than eight jewelry artifacts.

Table 3.15 Chi Square Tests: Frequency Distributions for Rooms with Jewelry Artifacts, by Neighborhood.
(In the collections or missing, and using two different cutoff values)

Items per Room	Combined Neighborhoods					
	North	**South**	**East**	**Middle/ West**	**East/ Middle**	**West**
1	24	19	18	25	30	14
2+	49	30	23	56	51	27
Chi-square	0.447		2.028		0.099	
	North	**South**	**East**	**Middle/ West**	**East/ Middle**	**West**
1–5	59	41	33	67	66	34
6+	14	8	8	14	15	7
Chi-square	0.161		0.091		0.038	

Table 3.16 lists jewelry artifacts found by room in each neighborhood, for both jewelry artifacts in the collections and for missing items. Table B.12 further separates missing jewelry artifacts into those previously catalogued versus those only known from notebooks and inventories.

Some rooms stood out, based upon their contents or architectural features or both. Frank Hibben identified Duck Unit Rooms 2, 9, and 10 in the Northeast neighborhood as ceremonial, based on artifacts found in them (Ballagh and Phillips 2015:411–412). The roof of Duck Unit Room 2, also known as the Shaman's Room, was sealed with a triple layer of adobe (Hibben 1987b:2). Doors to adjacent rooms (Duck Unit Rooms 3 and 4) and a fire pit had also been sealed (Hibben 1987b:3). The collections include three jewelry artifacts from Duck Unit Room 2 (Table 3.16); a pink quartz pendant and a siltstone pendant shaped like a cloud terrace, mentioned by Rapier (1985), are missing. Duck Unit Room 9 yielded five pendants in the collections plus four missing pendants. Duck Unit Room 10 yielded the largest number of jewelry artifacts (38) of any excavated room at Pottery Mound (Table 3.16), referred to in notes as a "treasure room," held a cache of ritual artifacts (Adler 2007b:264). The jewelry artifacts found in Duck Unit Room 10 (32 in the collections, six missing) included a little bit of everything: ordinary beads and pendants, tiny turquoise beads found together, a pendant with multiple holes, a pendant blank, and a piece of worked turquoise. Hibben's volunteer crew called Duck Unit Room 24 "the Conservatory" because it contained musical instruments, but it yielded only two jewelry artifacts.

Table 3.16. Jewelry Artifacts by Room and Neighborhood.

In Collections		Missing from Collections
Northeast (22 rooms)		
Room A-1	*Olivella* whole shell bead	2 bone beads, reported together Pendant of unidentified stone
Room A-2	Worked piece of turquoise	2 bone beads, reported together *Conus* pendant
Room A-3		Pendant of unidentified stone
Room A-6	Tubular bone bead	Bone hair ornament *Conus* pendant Gypsum pendant *Conus* shell
Room A-9		Bone bead
Room A-10	9 turquoise disc beads, found together (Figure 2.8: Cat. Nos. 78.74.1a-i) 2 Bone beads (1 tubular)	
Room A-12	2 tubular bone beads *Cerithidea* whole shell pendant (Figure 2.17: 58.1.68a)	
Room E of Room N of Kiva 3	Worked piece of *Haliotis*	Bone bead
Duck Unit, Room 1	Bone bead blank	
Duck Unit, Room 2	*Olivella* whole shell bead Selenite pendant blank Unworked snail shell	Siltstone pendant Pink quartz pendant
Duck Unit, Room 3	Tubular bone bead	
Duck Unit, Room 4	Round ceramic pendant	
Duck Unit, Room 9	Argillite pendant 4 gypsum pendants	Pendant of unidentified shell 2 selenite pendants Siltstone pendant
Duck Unit, Room 10	8 tubular bone beads 12 *Olivella* whole shell beads 6 tiny turquoise disc beads, found together *Haliotis* pendant with 2 holes (Figure 2.13: Cat. No. 99.22.1982) Unionidae pendant Argillite pendant *Conus* pendant Hematite pendant blank Worked piece of turquoise	2 bone beads 2 *Olivella* beads, reported together Siltstone pendant “Mother of pearl” pendant
Duck Unit, Room 11	Tubular bone bead	
Duck Unit, Room 12	Unworked piece of turquoise	

Table 3.16. Jewelry Artifacts by Room and Neighborhood.

	In Collections	Missing from Collections
Duck Unit, Room 13	2 Tubular bone beads 2 *Olivella* whole shell beads Argillite pendant	*Olivella* bead
Duck Unit, Room 14	Tubular bone bead	Bead of unidentified shell
Duck Unit, Room 19	Selenite pendant	Bone bead
Duck Unit, Room 24	Gypsum pendant with 2 holes (Figure 2.13: cat. no. 99.22.1998) Worked piece of *Haliotis*	
Duck Unit, Room 25	*Olivella* whole shell bead	
Duck Unit, Room 27	*Olivella* whole shell bead	
Duck Unit, no room no.		Bone bead
Middle-North (24 rooms)		
Room A-15	Tubular bone bead Pendant of unidentified shell *Glycymeris* whole shell pendant	2 beads of unidentified stone, reported together
Room A-17	4 tubular bone beads 3 selenite pendants 2 selenite pendant blanks	15 bone beads, reported together
Room A-18	Tiny rectangular turquoise bead 10 selenite pendants, found together 8 turquoise pendants, 4 found together	9 turquoise beads, reported together
Room A-19	Gypsum pendant	
Room A-21	10 selenite pendants Worked piece of selenite	
Room A-22	2 selenite pendants	
Room A-24	10 tubular bone beads Bone bead	22 bone beads, (3 groups, of 17, 2 [1 transverse], and 2)
Room D-1	Argillite pendant blank	Pendant of unidentified shell
Room D-2	3 *Olivella* whole shell beads	*Olivella* bead
Room D-4	Tubular bone bead	
Room D-5	Tubular bone bead Ceramic pendant	
Room D-6	Tubular bone bead, incised	
Room D-26	Incised bivalve shell	
Room below Room D-27	Tubular bone bead Bead blank of unidentified shell	
Room F-14		3 bone beads, reported together 2 pendants of unidentified shell, reported together Selenite pendant
Room F-16	2 tubular bone beads	7 bone beads, 2 reported together Tiny bone bead

Table 3.16. Jewelry Artifacts by Room and Neighborhood.

In Collections		Missing from Collections
Room F-16, contd.		Crystal pendant Bone bead blank
Room F-17	Tubular bone bead	Bone bead Piece of turquoise
Room F-18		Turquoise disc bead Pendant of unidentified stone Bone pendant, serrated edge Worked turquoise
Room F-19		Turquoise bead 2 *Olivella* beads Pendant of unidentified stone Unworked turquoise
Room F-22		Unworked shell
Room F-45	Five-sided *Spondylus* pendant (Figure 2.17; cat. no. 98.53.266)	Bone bead
Room F-46		Turquoise pendant
Room SF-23	Cleaver- shaped gypsum pendant	Pendant of unidentified material
Room SF-36		Bone bead
Northwest (27 rooms)		
Room F-2		Pendant of unidentified shell
Room F-3	*Olivella* whole shell bead	2 bone beads
Room F-4		13 bone beads
Room F-6		Bone bead
Room F-7	Banded travertine pendant	Bear canine pendant Worked *Conus*
Room F-8	Agua Fria Black-on-red triangular pendant	Bone bead
Room F-10	Gypsum pendant with 2 holes	
Room F-12		Bone bead Bone pendant
Room F-63	2 tubular bone beads *Olivella* whole shell bead	Bone bead
Room B-2	*Olivella* whole shell bead Turquoise bead or pendant	
Room B-3	*Olivella* whole shell bead Calcite pendant	Unworked *Olivella* 2 brachiopod shells
Room B-4	Tubular bone bead	2 bone beads *Olivella* bead Chlorite schist pendant blank
Room B-5	*Olivella* whole shell bead	
Room B-6	2 *Conus* pendants	
Room B-7	Tubular bone bead	
Room B-8	Tubular bone bead, possibly reworked Bone gorget	
Room B-9	*Glycymeris* bracelet fragment	
Room B-10	Tubular bone bead	

Table 3.16. Jewelry Artifacts by Room and Neighborhood.

	In Collections	Missing from Collections
Room B-12	Tubular bone bead	Unworked shell
Room B-13	Unworked *Olivella*	
Room B-14	5 tubular bone beads	
Room B-15	10 tubular bone beads Tubular gypsum bead	2 bone beads Pendant of unidentified shell
Room B-16	5 tubular bone beads *Olivella* whole shell bead Gypsum pendant blank Unworked *Olivella*	3 Bone beads Ceramic pendant blank
Room B-17	3 tubular bone beads *Olivella* whole shell bead Pendant of unidentified shell 2 unworked pieces of turquoise Unworked *Olivella*	Bone bead 2 *Olivella* beads Unidentified shell
Room B-18	Tubular bone bead *Olivella* whole shell bead	Bone bead Tiny disc bead of unidentified shell
Room B-21	Tubular bone bead Turquoise disc bead	
Room B-22	Unworked piece of turquoise	Bone bead
Southeast (19 rooms)		
Room C-1	*Nassarius* bead	
Room C-2	Tubular bone bead	
Room C-3	Tubular bone bead	
Room C-4	3 tubular bone beads	
Room C-5	Tubular bone bead *Conus* pendant	
Room C-6	3 tubular bone beads, found together	
Room C-7	*Olivella* whole shell bead	Selenite pendant
Room C-10	3 tubular bone beads Worked piece of turquoise	Shell
Room C-11/12	3 tubular bone beads	13 bone beads (2 groups, of 6 and 5, and 2 single finds) Siltstone pendant
Room C-13	4 tubular bone beads *Conus* pendant Worked unidentified shell	
Room C-16	*Olivella* whole shell bead	
Room C-17	Tubular bone bead	
Room C-18	3 tubular bone beads 5 *Olivella* whole shell beads, 4 found together *Columbella* whole shell bead (Figure 2.6; cat. no. 57.6.385) Ornate box turtle plastron bead or pendant (reworked) *Conus* pendant blank 2 unworked *Olivella* shells	Bone bead 2 *Olivella* beads, reported together 2 unworked shells, reported together

Table 3.16. Jewelry Artifacts by Room and Neighborhood.

	In Collections	Missing from Collections
Room C-20	*Olivella* whole shell bead	
Room C-22	4 tubular bone beads *Olivella* whole shell bead Selenite pendant blank	Bone bead Unworked turquoise
Room C-23	Worked piece of Unionidae	
Room C-25		Bone bead
Room C-27	Tubular bone bead *Agaronia testacea* whole shell bead (Figure 2.6; cat. no. 98.56.157) Gypsum pendant	
Room C-28		Bone bead
Middle South (16 rooms)		
Room F-23		Turquoise bead Pendant of unidentified stone
Room F-24		2 bone beads, reported together
Room F-25		Bead of unidentified shell Bone bead Unworked shell
Room F-26	Tubular bone bead	Bone bead Bead of unidentified material Pendant of unidentified stone
Room F-28		Bone bead "Mother of pearl" pendant
Room F-30		2 bone beads
Room F-31	3 tubular bone beads	
Room F-32	Tubular bone bead	Ceramic bead
Room F-33	Tubular bone bead	
Room F-35		Selenite pendant
Room F-36	*Turitella* whole shell pendant	33 bone beads; 4 groups (13, 10, 6, 2) and 2 reported individually Pendant of unidentified shell *Glycymeris* pendant Unidentified shell
Room F-70	Tubular bone bead Bone ring (Figure 2.31; cat. no. 78.74.233)	Bone earring
Room SF-53		Unworked *Olivella*
Room SF-55		Travertine bead Pendant of unidentified stone
Room SF-60		Bead of unidentified material
Room SF-61		Bone bead
Southwest (14 rooms)		
Room D-9	Tubular bone bead	3 bone beads, reported together
Room D-10	4 Tubular bone beads (1 reworked) *Olivella* whole shell bead	2 bone beads
Room D-11		Bone bead

Table 3.16. Jewelry Artifacts by Room and Neighborhood.

	In Collections	Missing from Collections
Room D-13	*Glycymeris* whole shell pendant	
Room D-14	Tubular bone bead Worked piece of Unionidae shell	
Room D-15	Tubular bone bead	
Room D-16	Tubular bone bead	6 bone beads
Room D-18		8 bone beads, 6 reported together
Room D-20		Bone pendant
Room D-22		2 bone beads Selenite pendant
Room F-40	Unworked piece of gastropod	Bone bead
Room F-54		Unidentified shell
Room SF-71		3 bone beads
So Midden, Room 7	Bivalve pendant	Unworked brachiopod
Not Assigned to a Neighborhood		
Room SF-65		3 bone beads, reported together Quartz bead Pendant of unidentified shell
Unidentified rooms	Disc bead of unidentified shell 6 tubular bone beads Transverse bone bead *Olivella* whole shell bead Argillite pendant (reworked) 2 bone pendants Worked bivalve Worked piece of turquoise Unworked piece of turquoise	20 bone beads, 7 reported together 12 *Olivella* beads, 10 reported together 4 Selenite pendants Ceramic pendant Pendant of unidentified shell Unworked shell

The predominant types of completed jewelry in the collections are beads and pendants with single holes. These were found across the site; many are shown in Chapter 2. There are also a number of "unusual" pieces of completed jewelry. These include the less common types (in terms of numbers), single pieces, and groups. In the collections the *less common* category includes pendants with multiple holes, gorgets, rings, earrings, and bracelet fragments, and a hair ornament (reported but not found in the collections). The *single pieces* category includes any one-of-a-kind completed jewelry type made from a unique material. The *groups* category includes multiples of completed jewelry pieces reported together. ("Found together" is used for groups in the collections. "Reported together" is used for groups missing from the collections.)

Table 3.17 summarizes the turquoise jewelry artifacts (both completed jewelry and blanks or raw material) and unusual pieces of completed jewelry found in rooms. Turquoise may be counted multiple times, by virtue of its being turquoise and also by being part of a group of artifacts. A group is counted as one instance, regardless of the number of jewelry items in the group. A group of turquoise jewelry is counted once as a group and once as turquoise.

Table 3.17. Instances of Unusual Completed Jewelry and Turquoise in Rooms, by Neighborhood.

	In the Collections				In the Collections or Missing			
	East	**Middle**	**West**	**Total**	**East**	**Middle**	**West**	**Total**
Unusual Completed Jewelry								
North	5	3	4	12	9	13	5	27
South	5	1	1	7	8	7	2	17
Total	10	4	5	19	17	20	7	44
Turquoise								
North	5	2	5	12	5	9	5	19
South	1			1	2	2		4
Total	6	2	5	13	7	11	5	23
Combined								
North	10	5	9	24	14	22	10	46
South	6	1	1	8	10	9	2	21
Total	16	6	10	32	24	31	12	67

Table B.5 lists unusual completed jewelry and turquoise found by room, for jewelry artifacts in and missing from the collections.

Most (75 percent) of the combined unusual completed jewelry and turquoise in the collections was found in rooms in the North area. Including missing items, 69 percent were found in North rooms. Only four instances of turquoise (including missing items) were reported from rooms in the South area.

However, 124 rooms were excavated in the North area and only 95 rooms were excavated in the South. The number of rooms containing jewelry varies quite a lot from neighborhood to neighborhood (Tables 3.9 and 3.16). If we look at the percentage of excavated rooms that contained jewelry (Table 3.10) as well as the percentage of excavated rooms that contained unusual completed jewelry and turquoise (Tables 3.16 and B.5), we find some interesting patterns.

For jewelry found in the collections, 49 percent of the excavated North rooms contained some sort of jewelry and 13 percent of the excavated rooms contained jewelry that was unusual and/or turquoise. In the South however, only 33 percent of the excavated rooms contained some sort of jewelry and 7 percent of the excavated rooms contained jewelry that was unusual or turquoise or both.

When we include the missing jewelry, we find that 59 percent of the excavated North rooms contained some sort of jewelry and 23 percent of the excavated rooms contained jewelry that was unusual or turquoise or both. In the South, while 52 percent of the excavated rooms contained some sort of jewelry, only 15 percent contained jewelry that was unusual or turquoise or both.

Not only was there a greater percentage of rooms in the North with jewelry, but there was also a greater percentage of rooms in the North that contained finds of unusual jewelry and turquoise.

The presence of blanks and raw material suggests the ability to create or repair jewelry. Almost one-quarter of rooms with jewelry artifacts in the collections yielded blanks or raw material or both; when missing artifacts are included, 30 percent of rooms with jewelry artifacts had such materials. Table 3.18 indicates the number of rooms with blanks or raw material (excluding or including missing artifacts) and the percentage of rooms with jewelry with the ability to make or repair jewelry in each neighborhood.

Table 3.18. Rooms Containing Blanks or Raw Materials, by Neighborhood.

	In the Collections				In the Collections or Missing			
	East	**Middle**	**West**	**Total**	**East**	**Middle**	**West**	**Total**
North	7 (35%)	4 (22%)	4 (18%)	15 (25%)	8 (36%)	9 (38%)	8 (30%)	25 (34%)
South	5 (29%)	0%	2 (25%)	7 (23%)	5 (26%)	3 (19%)	4 (29%)	12 (24%)
Total	12 (32%)	4 (17%)	6 (19%)	22 (24%)	13 (32%)	12 (30%)	12 (29%)	37 (30%)

If only jewelry artifacts in the collections are considered, one might conclude that rooms in the East area had more materials for jewelry making or repair. When the missing jewelry artifacts are included, the numbers and percentages of rooms with such jewelry-working capacity is about the same for the East, Middle, and West areas. The Middle South neighborhood stands out as the area with the least jewelry making or repair materials, in both cases.

No turquoise blanks were found anywhere at Pottery Mound, but worked and unworked turquoise was found in rooms. Six pieces in the collections were found in the North, only one piece in the South. When missing turquoise raw material is included, nine were found in the North and two in the South. Two pieces in the collections came from rooms in unidentified neighborhoods. Continuing the earlier pattern, although the likelihood of finding raw material was not that different from North to South, more turquoise raw materials were found in rooms in the North area than in the South area.

Four pieces of jewelry in the collections found in rooms appear to have been reworked. These include a bone bead found in Room B-8 (Northwest neighborhood), a bone bead found in Room D-10 (Southwest neighborhood), a box turtle plastron bead or pendant found in Room C-18 (Southeast neighborhood), and an argillite pendant (Figure 2.20) found in a room in an unidentified neighborhood. Reworked jewelry is another indication of jewelry making activities. No missing jewelry artifacts documented as “reworked” were found in rooms.

Excluding jewelry without a provenience below the site level, rooms contained 22.5 percent of all completed jewelry found at Pottery Mound (16.9 percent when missing jewelry is included). Rooms contained about half of the less common jewelry types (pendants with multiple holes, gorgets, rings, earrings, bracelets, and the missing hair ornament).

Because the number of completed jewelry artifacts found in rooms is quite small for certain neighborhoods, Table 3.19 summarizes the distributions for completed jewelry in the collections, and for completed jewelry including missing pieces, by the larger geographic sections defined earlier. It appears that a higher proportion of beads and a lower proportion of pendants were found in rooms than in the site as a whole.

Table 3.19. Completed Jewelry in Rooms, Percentages by Area.
(Format: [in the collections]/[in or missing from the collections]. Excludes completed jewelry found in rooms that could not be assigned to a neighborhood.)

	North	South	East	Middle	West	Total, Rooms	Site Total
Beads	62/69%	88/88%	78/75%	44/71%	81/85%	68/76%	59/62%
Pendants	31/26%	9/10%	14/19%	53/28%	13/11%	26/20%	37/35%
Tiny Beads	4/3%		6/4%	1/<1%	0/<1%	3/2%	2/2%
Bead/Pendant	<1/<1%	2/<1%	<1/<1%		2/<1%	<1/<1%	<1/<1%
Pendant, multiple holes	2/<1%		2/1%		2/<1%	1/<1%	<1/<1%
Gorgets	<1/<1%				2/<1%	<1<1%	<1/<1%
Earrings		0/<1%		0/<1%		0/<1%	<1/<1%
Rings		2/<1%		1/<1%		<1/<1%	<1/<1%
Bracelets	<1/<1%				2/<1%	<1/<1%	<1/<1%
Hair Ornament	0/<1%		0/<1%			0/<1%	<1/<1%
Total	100%	100%	100%	100%	100%	100%	100%
Number	183/325	64/168	109/158	75/207	63/128	247/493	1278/1839

More completed jewelry was found in rooms in the North than in the South. If only the completed jewelry in the collections is considered, it would appear that rooms in the East contained more completed jewelry than those in the Middle or West, but when missing completed jewelry are included, rooms in the West section appear to contain less jewelry than those in the East or Middle. Four of the six types of less common jewelry were found in rooms in the North, only two in the South. Except for the missing quartz bead reported from Room SF-65, completed jewelry found in rooms that could not be identified by neighborhood contained only the more common types of completed jewelry. Table B.6 contains detailed counts of completed jewelry.

Found in Kivas

Kivas were also assigned to neighborhoods. Table B.7 indicates the years of excavation for each kiva. Table 3.20 lists the jewelry artifacts (in and missing from the collections) found in kivas, by neighborhood. “Found in kivas” means that the items came from post-occupation fill, since none of the excavated kivas at Pottery Mound had an intact floor assemblage. Table B.13 lists the missing jewelry artifacts separated into those that were catalogued versus those only reported in notebooks and inventories.

Table 3.20. Jewelry Artifacts Found in Kivas, by Neighborhood.

	In the Collections	Missing from the Collections
Northeast		
Kiva 1	3 tubular bone beads 2 bone beads, found together (1 transverse) *Olivella* whole shell bead D-shaped gypsum pendant Unworked bivalve half shell	Bone bead
Kiva 2	4 tubular bone beads Drum-shaped fish vertebra bead	4 bone beads, 2 reported together *Olivella* bead Turquoise pendant
Kiva 3	6 tubular bone beads *Olivella* whole shell bead Bone pendant (reworked)	7 bone beads, 6 reported together Bead of unidentified shell
Kiva 2 or Kiva 3	6 tubular bone beads, found together 4 tubular bone beads, found together 10 tubular bone beads *Olivella* whole shell bead Selenite pendant blank	
Kiva 5	Tubular bone bead 2 *Olivella* whole shell beads	
Kiva 17	(no jewelry artifacts)	
Middle North		
Kiva 14	2 tubular bone beads	3 shells, 2 reported together
Northwest		
Kiva 15	(no jewelry artifacts)	
Kiva 16	(no jewelry artifacts)	
Southeast		
Kiva 6	6 tubular bone beads Travertine pendant	2 bone beads
Kiva 8	Gypsum pendant	
Kiva 9	Tubular bone bead Worked piece of turquoise Worked piece of *Conus*	
Middle South		
Kiva 11	(no jewelry artifacts)	
Kiva 13	(no jewelry artifacts)	
Southwest		
Kiva 4	Gypsum pendant	
Kiva 7	Tubular bone bead	2 bone beads Turquoise pendant
Kiva 10	(no jewelry artifacts)	
Kiva 12	*Glycymeris* disc pendant	
Not assigned to a Neighborhood		
Unidentified kiva	Tubular bone bead	

The travertine pendant found in Kiva 6 (Figure 2.21) is cylindrical with a pointed bottom, incised around the top for stringing. This pendant was burned. The piece of turquoise found in Kiva 9 has an irregular pyramid shape and was originally described as a possible fetish. The worked *Conus* shell found in Kiva 9 was burned.

Jewelry artifacts were documented as found in "kivas" that were not uniquely identified (see Schuyler et al. [2013] regarding the renumbering of kivas during the 1954 field season). These artifacts were found in either Kiva 2 or Kiva 3, both of which fall in the Northeast neighborhood. One tubular bone bead was documented as found in Kiva 4 but with no excavation date. Kiva 4 was renumbered and without an excavation date, the bone bead could have come from Kiva 4 in the Southwest neighborhood or from Kiva 2 in the Northeast neighborhood. In either case, it is not from one of the kivas listed above as having no jewelry artifacts, and has not been assigned to a neighborhood. Kiva 4 was found in the South Midden and has been assigned to the Southwest Neighborhood, along with one room (No. 7) in the same area.

Very few jewelry artifacts were found in kivas in the Middle or West area of Pottery Mound (Table 3.21). Four of the five kivas in the Northeast neighborhood yielded jewelry artifacts and those kivas yielded more jewelry artifacts than kivas in all other neighborhoods combined. The only blank and all three pieces of raw material found in kivas came from the East area of the site.

Table 3.21. Number of Jewelry Artifacts Found in Kivas.

	In the Collections				In the Collections or Missing			
	East	Middle	West	Total	East	Middle	West	Total
North	46	2		48	61	5		66
South	11		3	14	13		6	19
Total	57	2	3	62	74	5	6	85

More jewelry artifacts were found in the eight North kivas than in the nine South kivas. The East area produced 92 percent of the jewelry artifacts from kivas in the collections (87 percent when missing jewelry artifacts are included). No jewelry artifacts were reported found in Kivas 10, 11, 13, 15, 16 or 17 (Table 3.20).

About two-thirds of the kivas yielded jewelry artifacts (Table 3.22). Kivas that did not yield jewelry currently in the collections did not yield any missing jewelry artifacts.

Table 3.22. Percentage of Kivas with Jewelry Artifacts, by Neighborhood.

	In the Collections				No. of kivas
	East	Middle	West	Total	
North	80%	100%		63%	8
South	100%		60%	67%	9
Total	88%	50%	43%	65%	
No. of kivas	8	2	7		17

For turquoise and unusual jewelry artifacts, five items are in the collections (four from the Northeast, one from the Southeast) and four are missing (three from the Northeast, one from the Southwest). Only two such items are from the South. Two missing turquoise pendants were documented; one from Kiva 2 in the Northeast neighborhood, the other from Kiva 7 in the Southwest neighborhood. One worked piece of turquoise in the collections was found in Kiva 9 in the Southeast neighborhood. The drum-shaped fish vertebra bead in the collections (Figure 2.3), found in Kiva 2 in the Northeast neighborhood, was the only one-of-a-kind piece from a kiva. Three groups of bone beads were found in the Northeast neighborhood; two such groups from that neighborhood are missing. None of the less common jewelry types (pendants with multiple holes, gorgets, rings, earrings, bracelets, hair ornaments) was found in kivas.

Seven bone beads and one bone bead blank were documented as coming from a "room or kiva," so may have come from one or more of the kivas. None of these pieces was unusual.

Found in Non-Structural Areas Other than Middens

Non-structural areas (sometimes referred to as extramural space) surrounded rooms and room blocks and included trenches (Table 3.23). The boundaries between neighborhoods were adjusted so trenches could be associated with specific neighborhoods (Figure 3.2).

Table 3.23. Non-Structural Areas by Neighborhood.

	North	South
East	Around Rooms A-1 through A-12 Around Duck and Swan Units Kiva 17 Ravine	Around rooms in the C block 1957 Trench 1 1957 Trench 2
Middle	Around Rooms A-13 through A-24 "Fill Substructure West" (FSW) NW Stratigraphic Test NW Trench Around Rooms D-1 through D-6 and D-26 through D-28 Around Rooms F-14 through F-22	1961 Trench 7 Around Rooms F-23 through F37
West	Around Rooms F-1 through F-12 Area B-1 Around rooms in the B-block	Around Rooms D-7 through D-15 and D-16 through D-25 1958 South Trench

The excavated non-structural space in the Northeast neighborhood is extensive and includes the area around the Duck Unit room block excavated in 1979, the Kiva 17 Ravine, the Macaw Unit, and the Swan Unit in the far northeast section of the site (Figures 3.1 and 3.2). Kiva 17 and the Macaw Burial area were in a gully called the Kiva 17 Ravine (Hibben 1987a:6). Excavations of the Macaw Burial area occurred in 1977 (field notebook, Catalogue No. 2003.36.25).

Table 3.24 lists jewelry artifacts in and missing from the collections, for non-structural areas by neighborhood. The missing unworked crinoid stem in the Northwest neighborhood was the only piece of crinoid stem reported at Pottery Mound. Table B.14 further separates missing jewelry artifacts into those previously catalogued versus those only reported in notebooks and inventories.

Table 3.24. Jewelry Artifacts Found in Non-Structural Areas, by Neighborhood.

In the Collections	Missing
Northeast	
13 tubular bone beads	11 bone beads (3 groups, of 4, 2, and 2)
Operculum bead (Figure 2.3; Cat. No. 2007.46.1997b)	2 *Olivella* beads
8 *Olivella* whole shell beads	Bead of unidentified shell
Argillite bead	Worked turquoise
Tiny turquoise disc bead	
6 tiny ceramic beads, found together (Figure 2.10)	
3 bell-shaped ceramic pendants	
Conus pendant	
Argillite pendant	
Turquoise pendant	
D-shaped operculum pendant (Figure 2.25)	
Bone bead blank	
Spherical ceramic bead blank	
3 worked pieces of turquoise	
3 unworked pieces of unidentified shell	
Unworked piece of turquoise	
Unworked snail shell	
Unworked piece of *Haliotis*	
Middle North	
15 bone beads	7 bone beads (5 reported together)
Shell pendant	Gypsum pendant
Oval selenite pendant	Quartzite pendant
Glycymeris bracelet fragment	Unworked brachiopod
Worked piece of fossilized shell	Unworked turquoise
Northwest	
11 bone beads	5 bone beads, 2 reported together
	2 *Olivella* beads
	Bead of unidentified shell
	Unworked crinoid stem
Southeast	
6 bone beads	4 bone beads
Pecten vogdesi pendant (see cover photo)	*Olivella* bead
Ovoid Unionidae pendant	
3 unworked pieces of turquoise	
Middle South	
4 bone beads	Bone bead

Table 3.24. Jewelry Artifacts Found in Non-Structural Areas, by Neighborhood.

In the Collections	Missing
	Pendant of unidentified shell
	Pendant blank of unidentified stone
Southwest	
7 bone beads, 5 found together (3 tubular, 2 transverse)	2 bone beads
Gypsum pendant	Ceramic pendant
Sandstone ring (Figure 2.31; Cat. No. 98.53.255)	Pendant of unidentified stone
Bone pendant blank	2 worked shells, reported together
Unworked piece of *Glycymeris*	Unworked *Olivella*
Not Assigned to a Neighborhood	
34 tubular bone beads	18 bone beads (3 groups of 2 each)
7 *Olivella* whole shell beads	1 tiny bead of unidentified shell
Olivella barrel bead	Siltstone pendant with 2 holes
Stylized bird stone bead (Figure 2.7)	"Mother of pearl" pendant
2 tiny shell disc beads	Unworked *Olivella*
2 tiny argillite disc beads	Unworked shell
3 tiny turquoise disc beads	3 pieces of turquoise, reported together
Turquoise bead or pendant	
2 serrated argillite pendants	
3 turquoise pendants	
Oval muscovite pendant	
Travertine pendant	
Operculum pendant	
Conus pendant	
Argillite bead blank	
Bone bead blank	
Tiny argillite bead blank	
Argillite pendant blank (reworked)	
Worked piece of turquoise	
2 unworked pieces of unidentified shell	
5 unworked pieces of turquoise	

Of the items listed in Table 3.24, more than 40 percent of the items in the collections and about one-third of the missing items came from proveniences that cannot be assigned to a neighborhood (Table 3.25). More than half of the jewelry artifacts from extramural areas (in and missing from the collections) were bone beads. With or without the missing jewelry, more jewelry artifacts from non-structural areas were found in the North than in the South, and the East area yielded more jewelry artifacts than the Middle and West areas combined.

Table 3.25. Counts of Jewelry Artifacts Found in Non-Structural Areas.

	In the Collections				In the Collections or Missing			
	East	Middle	West	Total	East	Middle	West	Total
North	48	19	11	78	63	30	20	113
South	11	4	11	26	16	7	18	41
Unidentified neighborhood				72				98
Total	59	23	22	176	79	37	38	252

Table 3.26 shows the distribution of completed jewelry items from non-structural areas by neighborhood. With so many pieces of completed jewelry found in areas that could not be assigned to a neighborhood, it becomes difficult to draw any conclusions—but of those jewelry artifacts in identified neighborhoods, more were found in the North than in the South.

Table 3.26. Completed Jewelry from Non-Structural Areas, by Neighborhood.
(Format: [in the collections]/[in or missing from the collections])

	East	Middle	West	Total
North				
Beads	23/37	15/22	11/19	49/78
Tiny beads	7/7			7/7
Pendants	7/7	2/4		9/11
Bracelets		1/1		1/1
Total, North area	37/51	18/27	11/19	66/97
South				
Beads	6/11	4/5	7/9	17/25
Pendants	2/2	0/3	1/3	3/8
Rings			1/1	1/1
Total, South area	8/13	4/8	9/13	21/34

Table 3.27 summarizes the unusual pieces of completed jewelry and turquoise (both completed jewelry and blanks or raw material) from non-structural areas. A complete list can be found in Table B.8. The North area yielded more instances of turquoise and less-common completed jewelry artifacts than the South area, and the East area yielded more examples of such items than the Middle or West areas (whether or not missing pieces are included). However, again there are many instances of unusual completed jewelry pieces and turquoise in non-structural areas that could not be tied to neighborhoods, making it difficult to draw conclusions.

Blanks and raw materials are summarized in Table 3.28. More blanks and raw materials were found in the North than in the South but with so many pieces not identified by neighborhood, it is difficult to draw any conclusions. One argillite pendant blank (Figure 2.27; Cat. No. 98.53.46) appears to have been reworked. It may have been smoothed at a damaged hole. The position of the new but partial hole suggests that the item was being refashioned into a pendant. This pendant blank was found in the Middle South neighborhood, in a non-structural context.

Table 3.27. Unusual Completed Jewelry and Turquoise from Non-Structural Areas, by Neighborhood.

	In the Collections				In the Collections or Missing			
	East	**Middle**	**West**	**Total**	**East**	**Middle**	**West**	**Total**
North	10	1		11	14	3	1	18
South	4		2	6	4		2	6
Unidentified area				15				21
Total	14	1	2	32	18	3	3	45

Table 3.28. Blanks and Raw Materials Found in Non-Structural Areas, by Neighborhood.

	In the Collections				In the Collections or Missing			
	East	**Middle**	**West**	**Total**	**East**	**Middle**	**West**	**Total**
North	11	1		12	12	3	1	16
South	3		2	5	3	1	5	9
Unidentified area				12				17
Total	14	1	2	29	15	4	6	42

Found in Middens

The last "neighborhoods" to be considered are two of the three large middens at Pottery Mound. Both the South and North Middens were extensively tested, yielding jewelry items included in this study. Both contained numerous burials. The West Midden was not tested during the various excavations, but was surface sampled by Franklin (2014:5), who did not find any jewelry artifacts there. East of the room blocks, trash may have been dumped into a prehistoric arroyo that carried away most of the trash (David Phillips, 2014 personal communication).

In 1954 the South Midden was trenched (Figure 3.2). The work that year included the Southwest and Southeast Trenches and the First and Second Laterals to these two trenches. In 1955 four parallel trenches were excavated between the First and Second Laterals. In 1958 the South Trench and a stratigraphic test were added.

The North Midden work includes Linda Cordell's excavation of a stratigraphic test in 1979 and Frank Hibben's excavations in Big Man Area, the NW Refuse area, and almost all of the non-structural area north of the room blocks and west of the Kiva 17 Ravine (Figure 3.1). As part of Hibben's work, an east-west trench was cut from Two Burial Gully to the Big Man Area (Hibben 1987a:8–10) and additional excavations were conducted there in 1983 at least (field notebook, Catalogue No. 2003.30.27). The North Midden yielded large numbers of artifacts of all kinds, including jewelry. Table 3.29 lists the jewelry artifacts found in the middens. Table B.15 further separates missing jewelry artifacts into those previously catalogued versus those only reported in notebooks and inventories.

Table 3.29. Jewelry Artifacts Found in Middens.

In the Collections	Missing
North Midden	
255 bone beads (249 tubular [2 reworked], 1 transverse)	51 Bone beads (4 groups: 3, 5, 2, 3)
31 *Olivella* whole shell beads	7 *Olivella* beads (2 groups: 3, 2)
Shell bead	5 beads of unidentified shell
2 tiny turquoise disc beads	6 siltstone beads, reported together
Tiny shell disc bead	Bead of unidentified material
Tiny bone disc bead	*Conus* pendant
Tiny ceramic disc bead	"Mother of pearl" pendant
Nassarius pendant with 2 holes (Figure 2.13; Cat. No. 80.61.374)	2 pendants of auger [Terebridae] shell
Haliotis pendant with 2 holes (reworked) (Figure 2.13; Cat. No. 2007.46.747)	2 pendants of unidentified shell
317 *Nassarius* pendants, found together	6 turquoise pendants, 2 reported together
11 *Conus* pendants (1 reworked)	Travertine pendant
2 *Haliotis* pendants	3 selenite pendants
3 *Glycymeris* pendants (1 reworked)	3 aragonite pendants
3 shell pendants	2 siltstone pendants
5 gypsum pendants (1 reworked)	5 pendants of unidentified stone
3 turquoise pendants	Bone gorget
2 travertine pendants	4 worked shells
Selenite pendant	5 unworked pieces of turquoise, 3 reported together
Argillite pendant	11 unworked shells (2 groups of 2 each)
Limestone pendant	
2 ceramic pendants (1 reworked)	
2 operculum pendants	
Bone pendant	
Ornate box turtle plastron pendant	
2 turquoise earrings, found together (Figure 2.29)	
4 bone bead blanks	
Spondylus pendant blank	
12 worked pieces of turquoise	
Worked piece of Unionidae shell	
Worked piece of *Conus* shell	
Worked piece of bivalve shell	
Worked piece of gastropod shell	
17 unworked pieces of turquoise	
Unworked snail shell	
Unworked bivalve	
Unworked piece of gastropod shell	
Unworked *Cerithium* shell	
Unworked *Olivella* shell	

Table 3.29. Jewelry Artifacts Found in Middens.

In the Collections	Missing
Unworked piece of Unionidae shell	
South Midden	
21 tubular bone beads, 5 found together	Bone bead
Tiny turquoise disc bead	85 selenite pendants, reported together
2 *Conus* pendants (1 reworked)	Bone bead blank
Selenite pendant	
Gypsum pendant	
Argillite pendant	
Selenite gorget (Figure 2.28)	
Bone bead blank	
Worked piece of nacreous shell	

The records for Hibben's "Salvage Era" work are ambiguous about the relationship between his excavations in the North Midden and Duck Unit and his Room Block A excavation of 1954. The current thinking is that the Duck Unit is an eastern extension of Room Block A. Also, Hibben's Big Man Area (named after a burial containing a tall individual) and North Refuse are part of the extensive North Midden, which extends north and west of the Room Block A-Duck Unit rooms.

Multiple burials were found in the Big Man Area of the North Midden (Hibben 1987a; Phillips and Ballagh 2011:26). Some slips filled out by excavators and included with artifacts state that jewelry artifacts from those burials came from "Duck," without a room designation. Wade (2004:9) states that "forty-one burials were associated with the northern side of the site, in a location eventually named Duck Unit (also called Big Man Area)." In this study I treat items found in the Big Man Area as part of the assemblage from the North Midden, and items identified as coming from non-structural areas around the Duck Unit as being from the non-structural portion in the Northeast neighborhood. With one exception: the few pieces of jewelry from burials in the Big Man Area have been grouped in with the North Midden jewelry artifacts even when some of the provenience documentation suggests that they were in the non-structural area of the Northeast neighborhood.

The North Midden contained far more jewelry artifacts than the South Midden (Table 3.30). The North Midden assemblage includes Linda Cordell's 1979 stratigraphic test, which produced 544 documented beads and pendants (including a group of 317 *Nassarius* pendants) in the collections. Adding in the missing jewelry artifacts increases the number of such artifacts from the South Midden, but even so the North Midden yielded almost seven times as many.

Table 3.31 summarizes the completed jewelry found in the two middens. No bracelets, rings, or hair ornaments were found in the middens. The counts of jewelry by type are listed in Table B.9.

The North Midden yielded many more instances of unusual completed jewelry and turquoise (completed jewelry and blanks or raw material) (Table 3.32) than the South Midden. However, the selenite gorget (Figure 2.28), one of the most elegant jewelry artifacts at Pottery Mound, was found in the South Midden.

Table 3.30. Distribution of Jewelry Artifacts Found in Middens.

	In the Collections			In the Collections or Missing		
	Completed	Blanks/ Raw	Total	Completed	Blanks/ Raw	Total
N Midden	651	44	695	748	64	812
S Midden	28	2	30	114	3	117
Total	679	46	725	862	67	929

Table 3.31. Distribution of Completed Jewelry Found in Middens.

	In the Collections			In the Collections or Missing		
	North	South	Total	North	South	Total
Beads	44.1%	75.0%	45.4%	47.7%	19.3%	44.0%
Pendants	54.5%	17.8%	53.0%	50.9%	78.9%	54.6%
Tiny Beads	<1.0%	3.6%	<1.0%	<1.0%	<1.0%	<1.0%
Pendants, multiple holes	<1.0%		<1.0%	<1.0%		<1.0%
Earrings	<1.0%		<1.0%	<1.0%		<1.0%
Gorgets		3.6%	<1.0%	<1.0%	<1.0%	<1.0%
Total	100%	100%	100%	100%	100%	100%
Number	651	28	679	748	114	862

Table 3.32. Unusual Completed Jewelry and Turquoise Found in Middens.

In the Collections	Missing
North Midden	
Tiny bone disc bead	4 groups of bone beads (of 5, 3, 3, and 2)
2 tiny turquoise disc beads	2 groups of *Olivella* beads (of 3 and 2)
Nassarius pendant with 2 holes (Figure 2.13; Cat. No. 80.61.374)	6 siltstone beads, reported together
Haliotis pendant with 2 holes (reworked) (Figure 2.13; Cat. No. 2007.46.747)	6 turquoise pendants, 2 reported together
3 turquoise pendants	Bone gorget
Ornate box turtle plastron pendant	5 unworked pieces of turquoise, 3 reported together
Limestone pendant	
317 *Nassarius* pendants, found together	
2 turquoise earrings, found together (Figure 2.29)	
12 worked pieces of turquoise	
17 unworked pieces of turquoise	
South Midden	
5 tubular bone beads, found together	85 selenite pendants, reported together
Tiny turquoise disc bead	
Selenite gorget (Figure 2.28)	

The North Midden yielded seven jewelry pieces in the collections that might have been reworked, including two beads, the pendant with two holes, and four additional pendants. The North Midden also yielded most of the blanks and pieces of raw material from middens. The South Midden yielded one *Conus* pendant that appeared to have been reworked.

Items Lacking a Provenience

The study identified 151 jewelry artifacts in the collections and seven missing but recorded items without any provenience data below the site level (Table 3.33). Table B.16 further separates missing jewelry artifacts into those previously catalogued versus those only reported in notebooks and inventories.

Table 3.33. Jewelry Artifacts Without Proveniences.

In the Collections	Missing
80 tubular bone beads	2 bone beads
Transverse bone bead	3 beads of unidentified material, reported together
Turquoise disc bead	Pendant of unidentified material
Travertine tubular bead	Unworked brachiopod shell
3 *Oliva* whole shell beads (Figure 2.6)	
Gypsum disc bead	
11 *Olivella* whole shell beads	
Olivella barrel bead (Figure 2.4; Cat. No. 2007.46.4923a)	
2 tiny disc beads of unidentified shell	
Tiny turquoise bead	
Pendant of unidentified shell	
3 Selenite pendants	
3 Turquoise pendants	
Ceramic pendant	
4 *Conus* pendants	
Travertine pendant	
Operculum pendant	
Turitella pendant	
3 gypsum pendants	
cf . *Trivia* pendant	
Laevicardium pendant	
Cardiidae pendant	
Glycymeris pendant	
2 *Haliotis* pendant	
Turquoise bead or pendant	
Ceramic earring blank	
Bone bead blank	
Pendant blank of unidentified shell	

Table 3.33. Jewelry Artifacts Without Proveniences.

In the Collections	Missing
Ceramic pendant blank	
Schist pendant blank	
Worked piece of Unionidae	
Worked piece of selenite	
2 worked pieces of turquoise	
Worked bone shaft	
Worked piece of cf. *Spondylus*	
Worked piece of *Glycymeris*	
2 unworked pieces of unidentified shell	
5 unworked pieces of turquoise	
Unworked piece of *Turitella*	
Unworked bivalve shell	
Unworked gastropod shell	
Unworked piece of *Glycymeris*	
Unworked *Olivella*	

Several unusual pieces and turquoise in the collections lacked a provenience (Table 3.34).

Table 3.34. Unusual Completed Jewelry and Turquoise Without Proveniences.

Travertine tubular bead
cf. *Trivia* pendant (Figure 2.17; Cat. No. 78.74.308)
Laevicardium pendant
Cardiidae pendant (Figure 2.17; Cat. No. 2007.46.4422g3)
Turquoise disc bead
Tiny turquoise bead
3 turquoise pendants
Turquoise bead or pendant
2 worked pieces of turquoise
5 unworked pieces of turquoise

Table 3.35 provides one final look at jewelry artifacts by neighborhood. The table shows the distribution of turquoise and unusual pieces of completed jewelry for combined contexts (rooms, kivas, non-structural areas, and middens) but excludes pieces that could not be assigned to a neighborhood. The North area accounted for far more instances of turquoise and unusual completed jewelry (81.8 percent for pieces in the collections, 79.9 percent including missing pieces) than the South area. Very few pieces of turquoise were found in the South area (10.2 percent of turquoise in the collections, 12.3 percent including missing pieces). In looking at instances of unusual completed jewelry and turquoise in the collections, it appears that the East area yielded more than the Middle and the West areas combined. When the missing pieces are included, the West area clearly has less unusual completed jewelry and turquoise than either the East or Middle areas.

Table 3.35. Instances of Unusual Completed Jewelry and Turquoise by Neighborhood.
(Format: [in the collections]/[in or missing from the collections])

		East	Middle	West	Middens	Total
North	Turquoise	4/5	2/6	2/2	6/11	14/24
	Raw turquoise	7/8	0/4	3/3	29/32	39/47
	Singles	5/6	1/2	2/3	3/3	11/14
	Groups	6/14	2/13		2/11	10/38
	Less common	2/2	1/1	2/2	2/3	7/8
	Total	24/35	6/26	9/10	42/60	81/131
South	Turquoise	3/3	0/2	0/1	1/1	4/7
	Raw turquoise	2/3				2/3
	Singles	4/4		1/1		5/5
	Groups	2/5	0/5	1/2	1/2	4/14
	Less common		1/2	1/1	1/1	3/4
	Total	11/15	1/9	3/5	3/4	18/33
Total	Turquoise	7/8	2/8	2/3	7/12	18/31
	Raw turquoise	9/11	0/4	3/3	29/32	41/50
	Singles	9/10	1/2	3/4	3/3	16/19
	Groups	8/19	2/18	1/2	3/13	14/52
	Less common	2/2	2/3	3/3	3/4	10/12
	Total	35/50	7/35	12/15	45/64	99/164

Based on the distribution of blanks and raw material, there was no specialized jewelry-making district at Pottery Mound. Instead, most neighborhoods yielded some evidence of jewelry making, including blanks, raw materials, and reworked completed jewelry. However, many blanks and pieces of raw material were from unknown proveniences.

Burials

Excavations at Pottery Mound yielded at least 153 burials with as many as 158 skeletons.

During Hibben's excavations from 1954 through 1961, 110 burials were found in room fill and the South Midden (Schorsch 1962:19). These burials were numbered 1 to 110. Information from Schorsch's thesis (1962:80–88), the Maxwell Museum's osteology records, and notes included with artifacts indicate that grave goods were found with 50 of the 110 burials. Jewelry was reported to be associated with eight burials and "near" six others.

A possible jewelry artifact was found with a medicine bag. A male found in Kiva 4 in 1957 (Burial No. 54) was buried with a medicine bag about 38 cm long and made of woven cloth. The medicine bag was still in place on the male's chest and contained 17 items, including what was described and sketched as a claw-shaped obsidian ceremonial point with a hole at the blunt end (field notebook, Catalogue No. 2003.37.4). This piece may have been worn as a piece of jewelry. It was not found for examination and was not included in the counts in this report, but deserves a brief mention in this discussion of grave goods.

During Hibben's excavations in the 1970s and 1980s, additional burials were found in the Big Man Area. Forty-one burials were found and numbered D-1 through D-38 (three burials included two individuals); five additional burials were mentioned but not numbered (Hibben 1987c). Three of the five additional burials were in the North Midden, while the other two are categorized below as being found in the North area of the site. Again using information from Frank Hibben's report (1987c), the Maxwell Museum's osteology records, and excavator notes, 31 of these burials included grave goods of some kind, 10 of which included jewelry artifacts.

Two burials were uncovered during the excavation of Linda Cordell's stratigraphic test in 1979. The first (Burial 9.1, Catalogue No. 79.17.1) came from the 9th level of the southeast quadrant of the test. The second (Burial 9.2, Catalogue No. 79.17.2) was a cremation found in the 14th level of the northwest quadrant of the test.

Burial 9.1 was recorded as having no jewelry. However, four burned bone beads in the collections are marked as associated with Burial 9.1. The beads were found near and just below the burial, in Level 10 of the test. An Artifact/Photo Serial Record in the Maxwell Museum archives refers to a Feature 9.1 below the burial in the southeast quadrant of Level 9, as including four bone beads; I have included those in Table B.11 as "near a burial." Two missing unworked shells were also documented (in Table 3.39) for Burial 9.1.

The field records provide a confused picture of the jewelry associated with Burial 9.2. The burial was documented as a cremation with 35 *Olivella* beads, but those beads are not in the collections and they have not been included in the Missing category in this study. A tubular bone bead and 317 Nassarius pendants in the collections are associated with Burial 9.2. See Appendix B for a more complete explanation of the problem.

Table 3.36 summarizes the jewelry artifacts associated with burials from the different excavation efforts. While 53 percent of the burials contained some type of grave good, only about 13 percent of the burials contained jewelry artifacts.

Table 3.36. Jewelry Associated with Burials.

Excavations	Sets of Remains	With Grave Goods	With Jewelry
Hibben 1954–1961	110	50	8
Hibben 1970s–1980s	46	31	11
Cordell 1979	2	2	2
Total	158	83	21

Table 3.37 presents the distribution of excavated Pottery Mound burials by neighborhood. More than half (56 percent) of the burials were found in the two middens. Burials are almost equally divided between the North and South areas of the site and similarly almost equally divided between the North and South Middens. The number of burials appears to increase as one moves from East to West, across both the North and South areas of the site, but only slightly. Table B.10 indicates the number of excavated burials by neighborhood.

Table 3.37. Burials by Neighborhood.

	East	Middle	West	Middens	Unident.	Total
North	7	7	13	46	2	75
South	9	11	12	43	2	77
Unident.					6	6
Total	16	18	25	89	10	158

Jewelry artifacts were clearly associated with 14 burials, based on their locations relative to those burials (Table 3.38). Burials D-9 and D-10 were found together and it is not known which jewelry artifacts were associated with which burial. Other than one numbered burial in the Northeast neighborhood and one unnumbered burial in the North area, all burials with jewelry artifacts were found in middens.

Table 3.38. Jewelry Artifacts in the Collections Associated with Burials, by Neighborhood.

Burial	Jewelry Artifacts
Northeast	
No. 52, male (age 30–35)	Transverse bone bead Tubular bone bead, found near head
North Midden	
D-9, female; D-10, small child	2 tubular bone beads Worked piece of turquoise*
D-21, male	Tubular bone bead Tiny bone disc bead*
D-23, female	2 turquoise earrings, found at ears*
D-29, adult	Argillite pendant
D-37	Tubular bone bead
D-38, adult	Tubular bone bead *Olivella* whole shell bead Operculum pendant
No. 9.2 (cremation)	Tubular bone bead 317 *Nassarius* pendants*
Child; no burial number	Turquoise pendant*
North Area	
Partial burial; no number	*Olivella* whole shell bead
South Midden	
No. 6, male (age 35–39)	5 tubular bone beads, found above right elbow*
No. 17, young adult	Tubular bone bead
No. 24, female (age 35–39)	Selenite gorget, found under chin*

*Counts as unusual completed jewelry or turquoise or both.

Table 3.39 lists missing additional jewelry artifacts associated with seven burials. This group of artifacts includes one burial in the Middle South neighborhood and another in an unidentified area, in addition to those found with burials in middens.

Table 3.39. Missing Jewelry Artifacts Associated with Burials, by Neighborhood.

Burial	Jewelry Artifacts
North Midden	
D-21, male	Bone gorget*
Adult; no number	Bone bead *Olivella* bead Turquoise pendant*
No. 9.1	2 unworked shells
North Area	
Partial burial; no number	Bone bead
Middle South	
No. 82, age 13–16	2 Bone beads Shell
South Midden	
No. 7	Bone beads (unknown number)*
No. 45, child	Bone bead blank 85 selenite pendants*
Unidentified	
No. 94, child	3 bone beads, near right hand* Rounded triangular shell pendant, near skull Quartz disc bead

*Counts as unusual completed jewelry or turquoise or both.

Burial D-21, excavated in 1982 (and listed in Table 3.38), was reported to have one additional jewelry artifact (a bone gorget) that is not in the collections. This is a different artifact than the bone gorget in the collections (found in 1955, in Room B-8).

Three artifacts found with an unnumbered "adult" burial (Table 3.39) are assumed to have come from a single adult burial because they were documented on the same date. The turquoise pendant is included in the Missing artifact counts, but the bone bead and *Olivella* bead are not, as there was no mention of them other than by Hibben (1987c). The partial burial with no assigned number in Table 3.39 is the same burial as in Table 3.38.

Schorsch's thesis (1962:80–88) mentions that Burial 7 was found with bone beads; the quantity was not specified so they are not included in the Missing artifact counts. There is no other documentation of jewelry associated with Burial 7.

Burial 45 in the South Midden was reported to include 243 selenite fragments, 96 of which were "pendants and tablets" (Ballagh 2008:156–157). They have been counted in this study as 85 pendants, as 11 tablets in the collections are associated with the burial (Catalogue No. 2007.46.4170).

A Chi-square test was used to evaluate the hypothesis that there is no difference between North and South in the number of burials with jewelry artifacts (Table 3.40). Based on the results, the null hypothesis can be rejected at the 0.05 level of significance.

Table 3.40. Burials and Jewelry Artifacts: North versus South.

Burial Type	Number of Burials	
	North	South
With jewelry artifacts	14	6
Without jewelry artifacts	61	71
Chi-square		3.93

Table 3.41 indicates the number of burials with jewelry artifacts and the percentage of burials in a given neighborhood that included jewelry artifacts (in and missing from the collections). As might be expected from the results in Table 3.40, North Midden burials were more likely to include jewelry artifacts than South Midden burials. None of the burials in the West area was associated with jewelry artifacts.

Table 3.41. Burials with Jewelry Artifacts, by Neighborhood.

	Number of Burials with Jewelry Artifacts, and Percentage of All Burials									
	Middle		East		Middens		Unident.		Total	
North			1	14%	12	26%	1	50%	14	19%
South	1	9%			5	12%			6	8%
Unident.							1	17%	1	17%
Total	1	6%	1	6%	17	19%	2	20%	21	13%

Table 3.42 identifies burial jewelry items (in the collections plus missing) into (a) common and (b) unusual completed pieces or made of turquoise (or both). Tables 3.38 and 3.39 mark (with an asterisk jewelry that could be considered unusual completed pieces or turquoise or both. Any burial with more than one jewelry artifact would also have been counted as a group. Except for in middens, there are few burials with jewelry artifacts in neighborhoods (and some burials cannot be assigned to a neighborhood). North Midden burials yielded more unusual or turquoise items than South Midden burials. Turquoise appeared only in North Midden burials.

Table 3.42. Number of Jewelry Artifacts from Burials: North versus South.

	No. of Jewelry Artifacts	No. of Common Items	Instances of Unusual/ Turquoise Items
North (14 Burials)	341	17	15
South (6 Burials)	98*	97	5
Total	439	114	20

*The number of bone beads associated with Burial No. 7 was set at two, and they were considered a group.

The data presented on jewelry associated with burials is consistent with Frank Hibben's observation that the burials in the south of the site appeared to be better preserved but had few grave goods, while those in the north of the site were poorly preserved but had more grave goods including ceramics (Hibben 1987c:2).

The burials in Kivas 1 (Burial 52; Table 3.38), 3 (Burial 33; Table B.11), and 6 (Burial 109, Table B.11) included only bone beads.

Some jewelry artifacts were documented as found "near" six burials (Table B.11). These jewelry artifacts may have been associated with the burials originally, but that is not clear from the records. While the Maxwell Museum considers the artifacts to be grave goods for NAGRPA purposes, the artifacts were not included in this analysis.

Chapter 4

OUTSIDE INFLUENCES

Outside connections are evident at Pottery Mound. This village and other settlements along the Rio Puerco can be viewed as being on a frontier between the Eastern and Western Pueblos (Adler 2007a:29). Acoma-Zuni and Hopi sherds dominate the imported pottery at Pottery Mound but usually are rare at other Rio Grande pueblos (Franklin 2014:41). Western Pueblo design influenced Pottery Mound pottery (Eckert 2007:68), kiva architecture (Crotty 2007:86–90) and kiva murals (Crotty 2007:90-103).

Ceramic exchange with a variety of other Pueblo peoples is evidenced by pottery attributed to Hopi, the Acoma-Zuni, and the Mogollon in the Western Pueblo area, as well as from the northern and central Rio Grande regions and the Galisteo Basin (Eckert 2008:45; Franklin 2014:15). Sources of outside influence went beyond trade, however. Eckert (2007:58) argues that both Zuni and Hopi people migrated to Pottery Mound, joining an existing Rio Grande-based population.

Table 4.1 summarizes the Rio Grande versus Western Pueblo elements in kiva architecture and murals (based on Crotty 2007:86 and Tables 6.1 through 6.4). Out of 17 kivas at Pottery Mound, Kiva 10 was the only one with a circular floor plan, even though such plans are the norm in the Rio Grande region. The rest had rectangular floor plans, which can be seen as a Western Pueblo architectural trait (Adler 2007a:42).

In the same vein, south-oriented ventilator shafts can be seen as Western Pueblo style, while east-oriented ventilator shafts can be seen as Rio Grande. The placement of ventilators in Kivas 3, 14, and 17 was extrapolated from other architectural features, as the ventilators were not in place when those kivas were excavated (Crotty 2007, Table 6.1). Two important results arise from this distinction. First, Pottery Mound is the only Rio Grande pueblo with Western-style kiva floor features (Crotty 1995:76). Second, kivas with east-oriented ventilator shafts are clustered in the northeast portion of the site, while kivas with south-oriented ventilator shafts are clustered in the southwest portion of the site (Adler 2007a:43). There are two exceptions: Kiva 3 (in the northeast part of the site) is south-oriented, and Kiva 14 (in the southwest part of the site) is east-oriented (Adler 2007a, Figure 3.3; Daigh 2012:1).

Pottery Mound has been called the richest Pueblo IV kiva mural site in the Southwest (Crotty 2007:85), with murals found in 11 of the 17 excavated kivas. Crotty (2007:90) suggests that murals were not painted at Pottery Mound until after the arrival of Hopi immigrants. Again to simplify matters, murals with Sikyatki or other Western design elements were identified as Western and murals that resembled those at Kuaua or other Rio Grande sites were identified as Rio Grande.

Table 4.1. Design Influences on Kiva Architecture and Murals.

Kiva No.	Overall Plan	Position of Ventilator Shaft	Mural Style
1	Western (square)	Rio Grande (east)	Western
2	Western (square)	Rio Grande (east)	Western/Rio Grande
3	Western (irregular; close to square)	Western (south)*	None
4	Western (square)	Western (south)	None
5	Western (rectangular)	Rio Grande (east)	None
6	Western (square)	Rio Grande (east)	Western
7	Western (rectangular)	Western (south)	Western/Rio Grande
8	Western (irregular; close to square)	Rio Grande (east)	Western/Rio Grande
9	Western (irregular; close to square)	Rio Grande (east)	Western/Rio Grande
10	Rio Grande (circular)	Western (south)	Western/Rio Grande
11	Unknown	Rio Grande (east)	None
12	Western (rectangular)	Western (south)	5 painted layers**
13	Western (square, rounded corners)	Western (south)	None
14	Western (rectangular)	Rio Grande (east)*	None
15	Western (square)	Western (south)	4 painted layers**
16	Western (square)	Western (south)	Western
17	Western (square)	Rio Grande (east)*	Western/Rio Grande

*Although the ventilator was not found, other architectural elements suggested such a placement. **No distinctively Western or Rio Grande designs are mentioned (Crotty 2007, Tables 6.2–6.4).

Pottery Mound kivas were not entirely Western Pueblo or entirely Rio Grande in design. Both sets of architectural and artistic elements were generally employed in a given kiva. Early kivas (such as Kivas 7 and 9) were more Western Pueblo in style. Rio Grande traits were more pronounced in Kivas 2 and 8 (one of the later kivas), indicating a possible shift away from Western design influences later in the site's history (Crotty 1995:303, 291).

Based on the presence of both Rio Grande and Western artistic styles in murals of "even the last-inhabited kivas," regardless of the orientation of the ventilator shaft, Crotty (2007:104) concluded that Pottery Mound people attempted to integrate both traditions into religious rituals.

Sikyatki design elements appeared about 1400, which suggests that the Pottery Mound murals containing Sikyatki designs were created from the very late 1300s to the late 1400s (Crotty 1995:52–54). Sikyatki designs were found in nine of the eleven kivas containing murals (Kivas 1, 2, 6–10, 16, and 17) (Crotty 2007:91). Murals in early Pottery Mound Kivas (Nos. 7, 9, 10, 15 and 16) show resemblances to intermediate Jeddito style Western Pueblo murals and suggest that the styles traveled from west to east (Crotty 1995:359, 198–199).

The number of kivas at Pottery Mound (17 are known) is itself an indication of the influence of Western Pueblo traditions. Rio Grande Pueblos typically have two kivas—

one for the Summer group and one for the Winter group—while the Hopi have one kiva for each clan and the Zuni have one for each katsina group (Vivian 1961:45–46). The room-to-kiva and room-to-plaza ratios indicate that kivas at Pottery Mound may have been used to integrate smaller social units, rather than the whole site (Eckert 2008:93). However, Eckert's analysis of pottery styles led her to suggest that although there was a strong stylistic component linked to migration histories, there was also an effort to maintain a village-wide identity (Eckert 2007:68).

Evidence of Jewelry in Murals

Worn jewelry is evident in many Pottery Mound murals (Table 4.2). More than one-third of the human figures wear elaborate bead necklaces. Most figures "if complete enough to show the neck area, wear jewelry" (Crotty 1995:369). Red and white disc bead necklaces with many choker strands at the neck, figure eight and bivalve pendants, white and red disc bead bracelets, and earbobs are visible in depictions of both males and females (Crotty 1995:175–176). Crotty expands on the idea that fewer disc beads were found in Pueblo IV sites than in earlier times (Merrin 1995, cited in Crotty 1995:275) by suggesting that disc beads had become scarcer after 1325 in the upper Rio Grande area and may have been viewed as more precious.

At Pottery Mound and Awat'ovi, beads were depicted as hanging on the walls in kiva murals. The intent may have been to "dress" the walls. Barbara Mills suggests that in the case of Chaco Canyon kivas, "Strands of beads were ways of ensuring that these structures would be ritually dressed" (Mills 2008:91). At Pottery Mound, beads were depicted on the walls of Kivas 2, 7, and 8, resembling the painted treatment similar at Awat'ovi (Crotty 1995: 369, 395–396, 401–402, 406).

Rio Grande design elements are found on murals of Pottery Mound kivas in the East and Middle areas, and Western Pueblo design elements are found on murals in kivas in the West area. Table 3.22 indicates that kivas in the West area were less likely to contain jewelry artifacts than those in the East and Middle areas. While most if not all of the jewelry found in kivas probably postdates the use of the kiva, it appears that filling the kivas trapped more jewelry in some parts of the site.

If one draws a line running from northwest to southeast just east of Kivas 16, 10 and 13, to separate Rio Grande style kivas to the east and Western style kivas to the west (based primarily on ventilator orientation), Kiva 3 is the only exception (it is east of that line, but has a south-oriented ventilator). Table 4.3 identifies the kivas with murals and of those, the kiva murals that portray jewelry artifacts.

Table 4.2. Jewelry In Pottery Mound Kiva Murals.

Crotty Figure No.	Hibben Figure No.	Kiva No./ Layer	Description of image	Description of jewelry
	8	1/1	4 human-headed insects	Choker with figure 8 necklaces
13a	49	2/1	"Council of Chiefs": dead married woman (?), 6 other people with bows, quivers, shields, etc.	Necklace on a masked figure
13b	17	2/1	"Council of Chiefs": 7 human figures, crane	Chokers with figure 8 necklace on 2 figures, beaded necklace on 1 figure, beads strung as decoration on wall
13c	14	2/1	"Council of Chiefs": 5 human figures	Chokers with figure 8 necklace on 2 figures, possible earring on 4 figures
	39	2/2	4 figures	Choker with figure 8 necklace on 1 figure
	2	2/4	Dancing maiden	Figure 8 necklace
	31	2/4	Figure with "squash" head	Red and white choker necklace
	16	2/4	Dancers	Choker with figure 8 necklace on 1 figure
18	41	2/8	Stylized human	Possible black choker
	18	2/11	Masked dancer	Choker with large shell pendant
	47, 48	6/1	Jaguar and human	Red and white choker and bracelet on human
	63	7/1	2 human figures	Choker with figure 8 necklaces on both figures
66	86	7/10	Winged anthropomorph with mask/proboscis	Possible choker
	46	7/10	3 human figures, parrot	Black choker on 1 figure, red and white choker with shell pendant on a second figure
49a	62	7/30	Corn maiden	Choker with shell pendant, possible beaded bracelets at both wrists
49b	38	7/30	Corn maiden	Choker with shell pendant, possible bracelets at both wrists
	59	8/3	Human figure	2 feather earrings
19b		8/9	Walls with hanging beads, pendant, textiles	Beads, pendant
19a		8/11	Walls with hanging beads and textiles	Beads
51	61	8/13	3 human figures (2 with flat Rio Grande style heads)	Choker with figure 8 on 1 figure

Table 4.2. Jewelry In Pottery Mound Kiva Murals.

Crotty Figure No.	Hibben Figure No.	Kiva No./ Layer	Description of image	Description of jewelry
56		8/15	3 Rio Grande style human figures, 2 with war bonnets	Choker on 1 figure
64		8/16	Human figure with kilt with rattlesnake tails	Possible necklace
79	57	9/2	2 masked human figures, 1 without neck, 1 other with only 1 ear visible	Ear feathers visible (both ears on 1 figure, 1 ear on the other)
58	99	16/1	2 females, corn, basket	Necklaces on both figures

Table 4.3. Kivas with Murals and Jewelry.

Kiva Style	Kiva Nos.	Kivas with Murals	Kivas Portraying Jewelry
Rio Grande	1-3, 5, 6, 8, 9, 11, 14, 17	1, 2, 6, 8, 9, 17	1, 2, 6, 8, 9
Western	4, 7, 10, 12, 13, 15, 16	7, 10, 12, 15, 16	7, 16

A number of murals depict necklaces with multiple choker strands ending in a hanging necklace with a figure 8 at the bottom, or a large, decorated scallop-like shell, or both. Although the collections from the site include a few *Glycymeris* and other shell pendants, none resembles those shown in the murals. It may be that the larger whole shells were especially precious, so that people were careful not to dispose of them and took them with them when they left the village. Or perhaps they only depicted such jewelry items in the kiva murals and did not wear similar necklaces themselves.

The necklace styles portrayed in Pottery Mound murals are echoed in murals at Kuaua (Dutton 1963, Plate 16 and Figures 24 and 110) and at Hopi (Zimmerman 2013:21).

Distant Connections

Several lines of evidence suggest trade connections to the Casas Grandes culture to the south. The years of excavation at Pottery Mound yielded five pieces of Casas Grandes pottery. Given the tens of thousands of sherds recovered during those years, this is a tiny amount—but Pottery Mound is unusual among northern Rio Grande villages in having any Casas Grandes pottery at all (David Phillips, 2014 personal communication).

A group of 317 *Nassarius* shell pendants was found with a burial at Pottery Mound, and a vast quantity of "beads" of this genus was found at Paquimé (Di Peso called them the most popular bead design at the site). Many of the *Nassarius* beads found at Paquimé were dyed a blue to green color (Di Peso 1974 2:488–489, Figures 238-2 and 240-2). They were made with a simple perforation at the aperture lip—the same form that is classified as a type of pendant in this study. None of the *Nassarius* items found at Pottery Mound showed evidence of blue to green dye.

The many *Olivella* shells, both whole and formed into beads, indicate trade routes reaching the Gulf of California (R. J. Bradley, 2012 personal communication), but the shells may have come to Pottery Mound via the Casas Grandes culture (Bradley 1999:224, cited in Eckert 2008:47).[1]

[1] The Gulf of California was identified as the source of most of the seashells found at Pueblo Bonito (Judd 1954:88–89). Pueblo people were thought to make annual trips to the Sonora area up until about 1859, to trade for shells from the Gulf of California (Bandelier 1892:4, cited in

The Casas Grandes culture also raised and traded macaws (Minnis et al 1993, cited in Eckert 2008:47). A military macaw (*Ara militaris*) burial was reportedly found at Pottery Mound during Hibben's "salvage" work (Phillips and Ballagh 2011:24).

A copper bell was found in the northwest quadrant of Level 6 in Linda Cordell's 1979 stratigraphic test (Cordell 2004:4–5).[2] Only 620 such bells have been recovered from 90-plus sites in the U.S. Southwest and northwest Mexico (Swartz and Doelle 2013:16), and all are believed to have originated in Mesoamerica. As the copper bells moved northward to destinations along the Rio Grande, they very likely passed through the Casas Grandes area. Di Peso indicated that Casas Grandes people often wore copper bells on their wrists, at the calf, and in necklaces (Di Peso 1974: 493, Figure 245-2).

Figure 2.7 shows a design similar to Hohokam flying bird motifs on pottery and bird forms in shell pendants (Gladwin et al 1965, Plate 165).

Haliotis pendants imply trade with the West Coast.

Although the material items just cited suggest connections with distant places, this is not the case with the kiva murals. Crotty concluded that the kiva murals at Pottery Mound, like those at other sites in the Southwest, do not use Mesoamerican imagery (Crotty 1995:345). Except for the Sikyatki artistic influence, the Pottery Mound mural iconography is consistent with Eastern Pueblo rock art (P. Schaafsma 2007b:138).

Judd 1954:80–81). People at Isleta tell stories of Kokopelli bringing shells to give to all the women he met (Agnes Dill, 2011 personal communication).

[2] In addition, three ceramic pendants shaped like copper bells were found at Pottery Mound (Figure 2.26).

MAXWELL MUSEUM OF ANTHROPOLOGY

Chapter 5

COMPARISON TO JEWELRY AT TIJERAS PUEBLO

Tijeras Pueblo (LA 581) was a Pueblo IV village, smaller than Pottery Mound. Pottery Mound is 40 km southwest of Albuquerque, west of the Rio Grande Valley, and was occupied from about 1350 to about 1500. Tijeras Pueblo is 24 km east of Albuquerque, in the hills connecting the Sandia and Manzano Mountains, and was occupied from the late 1100s to about 1425 (Figure 5.1). Their proximity, along with the overlap in occupation from about 1350 to 1425 (Damp 2010; Linda Cordell, 2009 personal communication), make it likely that residents of each village were aware of the other village's existence. *The Jewelry of Tijeras Pueblo* (Schuyler 2011) provides an introduction to Tijeras Pueblo, details the excavations, and provides photographs of many jewelry pieces. The prior study also makes it possible to provide a detailed comparison of the jewelry assemblages of the two villages.

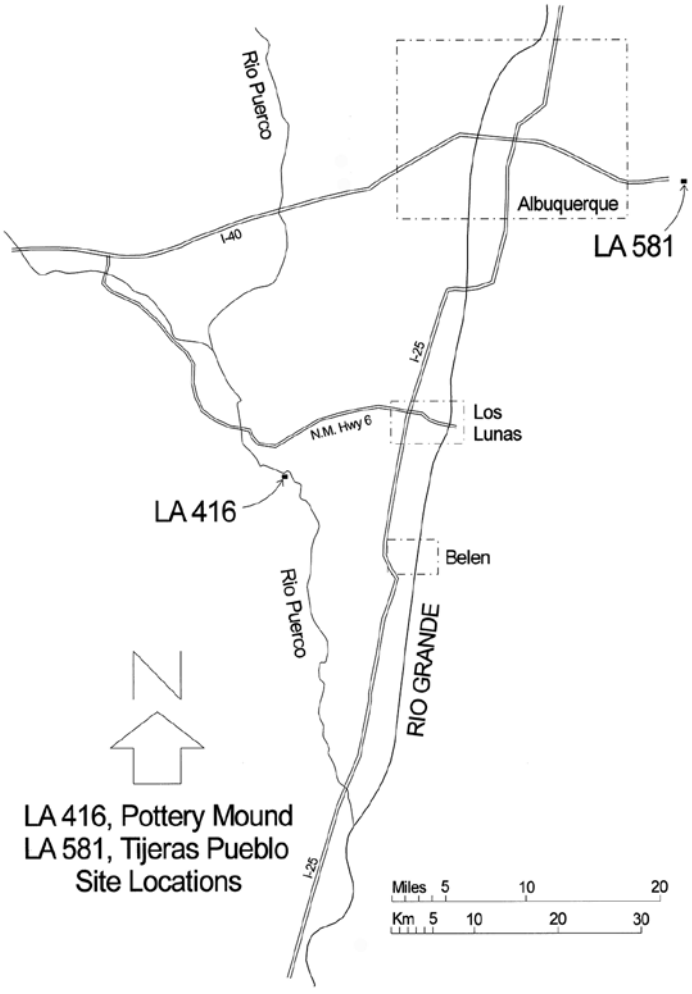

Figure 5.1. Locations of Pottery Mound and Tijeras Pueblo.

The Maxwell Museum's collections from Pottery Mound include more than 15,000 individually catalogued artifacts or bags of artifacts, from about 219 excavated rooms and from other proveniences. The museum's collections from Tijeras Pueblo include more than 17,000 individually catalogued artifacts or bags of artifacts from about 132 excavated rooms and from other proveniences. Thus, both sites provide suitably large collections for a comparative study.

Pottery Mound is a medium-sized village for its times but is unusual, given its many kivas, its kiva murals, and the amount and variety of non-local pottery. In contrast, Tijeras Pueblo is typical of the smaller Pueblo IV villages found along the middle Rio Grande, with one exception: the mosaic found in the floor of one the kivas at Tijeras Pueblo (Schuyler 2011:33–36) appears to be the only such mosaic found in the Southwest. Given the differences in size and material culture between the two villages, one might predict that the jewelry at Pottery Mound would be more elaborate and possibly more exotic than the jewelry at Tijeras Pueblo. If instead the two jewelry assemblages were roughly similar, despite the differences in village size and apparent ceremonial importance, this similarity would bear explanation.

Based on kiva murals alone, one might easily conclude that the residents of Pottery Mound had elaborate jewelry. Figure 5.2 shows a necklace of many strands with a hanging pendant consisting of a large decorated shell. It was disappointing that no such large decorated shells were found in the Pottery Mound collections or mentioned in the field notebooks. If jewelry of this quality was ever worn by residents or by ceremonial leaders at Pottery Mound, it may have been reserved for special occasions, contexts, or individuals and may have been stored and handled more carefully than other jewelry types. In other words, for jewelry the archaeological data may be a less accurate record of social variability than usual. Also, the use of such jewelry may have been guided by ideals that were more easily honored in murals than in reality. Readers should keep these warnings in mind as they examine the rest of the chapter.

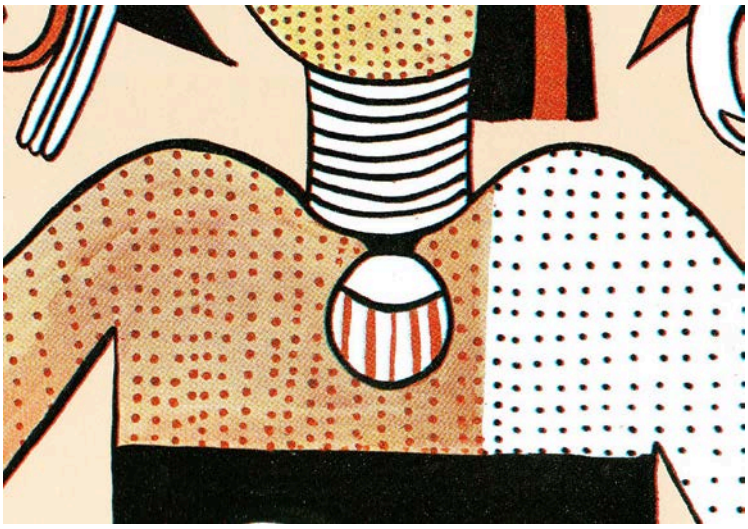

Figure 5.2. A necklace and pendant shown in a kiva mural at Pottery Mound. Excerpted from Hibben 1975, Figure 38.

Methods

While the Pottery Mound collections used in this study are at one institution, the Maxwell Museum, the Tijeras Pueblo collections, are split between the Laboratory of Anthropology in Santa Fe (artifacts from the 1948 and 1968 excavations) and the Maxwell Museum (artifacts from the 1970s and 1986 excavations).

Both jewelry studies were performed in much the same manner. All artifacts in the collections were examined, measured and categorized as to type of jewelry artifact, and raw materials were identified where possible. The original study of jewelry from excavations at Tijeras Pueblo identified three types of excavated proveniences: rooms, kivas and non-structural areas. (One bead was found during associated survey work during the 1970s, and was recorded from an unidentified non-structural provenience.) For Pottery Mound jewelry, the provenience types were expanded to include areas (north versus south; east, middle, and west) and neighborhoods. Because some patterning was discovered for Pottery Mound neighborhoods, the current study has re-examined the Tijeras Pueblo collections in terms of neighborhoods.

Only completed jewelry, blanks, and raw material will be compared in detail. Most tables will provide percentages of artifacts, as the collections from Pottery Mound are larger than those for Tijeras Pueblo. As a possible complicating factor, many Pottery Mound jewelry artifacts are missing, which is not the case for Tijeras Pueblo. Thirteen artifacts in the Pottery Mound collections and 37 in the Tijeras Pueblo collections are damaged to the extent that they cannot be identified as completed jewelry or as raw material. These 50 artifacts are not included in the analyses in this chapter.

Overall Comparison

The Pottery Mound collections of jewelry artifacts are more than three times the size of the Tijeras Pueblo collections. With the addition of the missing Pottery Mound jewelry, Pottery Mound yielded almost 5 times as many jewelry artifacts as Tijeras Pueblo (Table 5.1). While the difference in size of collections may indicate social differences between the villages, it may also reflect factors such as the intensity of excavation at each site. Thus, this comparison emphasizes differences in the relative compositions of the assemblages.

Beads and pendants make up about 99 percent of completed jewelry at both sites (Table 5.2). Tijeras Pueblo had a larger proportion of beads (and especially of tiny beads), and a smaller proportion of pendants, than Pottery Mound. No beads were found at either site that measure less than 3 mm in diameter. Bracelets and hair ornaments were found at both sites (when the missing Pottery Mound jewelry artifacts are included). A button was found at Tijeras Pueblo but not at Pottery Mound. Gorgets, rings, and earrings were found at Pottery Mound but not at Tijeras Pueblo.

Table 5.1. Comparison of Jewelry Artifacts.

	Pottery Mound		Tijeras Pueblo
	In the Collections	Missing	
Completed Jewelry	1278 (90%)	561 (90%)	365 (88%)
Blanks	30 (2%)	5 (1%)	25 (6%)
Raw Material	108 (8%)	57 (9%)	22 (5%)
Mosaic			1 (< 1%)
Total	1416 (100%)	623 (100%)	413 (100%)

Table 5.2. Comparison of Completed Jewelry Artifacts.

Type	Pottery Mound		Tijeras Pueblo
	In the Collections	Missing	
Beads (> 5 mm diam.)	754 (59%)	389 (69%)	240 (66%)
Tiny Beads (≤ 5 mm diam.)	30 (2%)	3 (< 1%)	28 (8%)
Pendants	477 (37%)	165 (29%)	90 (25%)
Pendants with multiple holes	5 (< 1%)	1 (< 1%)	2 (< 1%)
Bracelets	2 (< 1%)		1 (< 1%)
Gorgets	2 (< 1%)	1 (< 1%)	
Earrings	2 (< 1%)	1 (< 1%)	
Rings	2 (< 1%)		
Button			1 (< 1%)
Hair Ornament		1 (< 1%)	1 (< 1%)
Beads or Pendants	4 (< 1%)		2 (< 1%)
Total	1278 (100%)	561 (100%)	365 (100%)

Beads and Pendants

Comparison of Materials

At both sites, larger beads were made from a variety of materials (Table 5.3). The Tijeras villagers appear to have favored shell beads, while Pottery Mound villagers favored bone beads (or at least discarded more beads of these types). Most of the shell found at both sites comes from the Gulf of California. Shell beads at Tijeras Pueblo were made from only two taxa but the beads from Pottery Mound were made from five shell taxa (Table 5.3). Villagers at both sites used mostly *Olivella* for beads made of shell.

Table 5.3. Comparison of Materials in Larger Beads.

	Pottery Mound		Tijeras Pueblo
	In the Collections	Missing	
Bone	626 (83%)	314 (81%)	66 (28%)
From shafts	610 (81%)	237 (61%)	63 (26%)
Fish, operculum	1 (< 1%)		
Fish vertebra	1 (< 1%)		
Unidentified bone	14 (2%)	77 (20%)	3 (1%)
Shell	112 (15%)	45 (12%)	151 (63%)
Olivella	104 (14%)	36 (9%)	144 (60%)
Oliva	3 (< 1%)		
Agaronia testacea	1 (< 1%)		
Columbella	1 (< 1%)		
Nassarius	1 (< 1%)		
Conus			1 (< 1%)
Unidentified shell	2 (< 1%)	9 (2%)	6 (3%)
Stone	16 (2%)	23 (6%)	23 (10%)
Turquoise	11 (1%)	12 (3%)	1 (< 1%)
Gypsum	2 (< 1%)		

Table 5.3. Comparison of Materials in Larger Beads.

	Pottery Mound		Tijeras Pueblo
	In the Collections	Missing	
Argillite	1 (< 1%)		1 (< 1%)
Travertine	1 (< 1%)	1 (< 1%)	
Siltstone		6 (2%)	
Quartz		1 (< 1%)	
Olivine		1 (< 1%)	
Crinoid stem			11 (5%)
Selenite			2 (< 1%)
Calcite			1 (< 1%)
Unidentified stone	1 (< 1%)	2 (< 1%)	7 (3%)
Ceramic		1 (< 1%)	
Unidentified material		6 (2%)	
Total number of beads	754 (100%)	389 (100%)	240 (100%)
Total number of materials	12	8	8

While 82 percent of the larger beads found at Pottery Mound (in the collections plus those missing) were made from bone, only 28 percent of Tijeras's larger beads were bone. Six transverse beads are in the Pottery Mound collections (and three were reported but missing); none was found at Tijeras Pueblo. Pottery Mound had beads made from fish bone but Tijeras Pueblo did not.

About the same number of types of stone beads were found at Pottery Mound and at Tijeras Pueblo. Turquoise was the predominant stone bead at Pottery Mound but only one turquoise bead was found at Tijeras Pueblo; there, the predominant stone bead material was crinoid stems.

No ceramic beads were found at Tijeras Pueblo, but one missing larger ceramic bead was reported for Pottery Mound.

Almost as many tiny beads were found at Tijeras Pueblo as at Pottery Mound, despite the much smaller jewelry assemblage from the former site (Table 5.4). This pattern may be due to the consistent use of screening at Tijeras Pueblo. In contrast, screens were almost never used at Pottery Mound (David Phillips, 2015 personal communication), so smaller artifacts were more likely to escape detection at that site.

Table 5.4. Comparison of Materials in Tiny Beads.

	Pottery Mound		Tijeras Pueblo	
	Number*	**Percent****	**Number**	**Percent**
Stone	17/0	57	16	57
Crinoid stem			8	29
Calcite			2	7
Turquoise	15/0	50		
Argillite	2/0	7		
Unidentified			6	21
Ceramic	7/0	23		
Shell	5/2	17	8	29
Bone	1/1	3	4	14
Total number of tiny beads	30/3	100	28	100
Total number of materials	5/2		4	

*Format: in the collections/missing. **For items in the collections.

As was the case for the larger stone beads, turquoise dominated the Pottery Mound tiny beads and crinoid stems accounted for most of the Tijeras Pueblo tiny beads. Six of the seven tiny ceramic beads in the Pottery Mound collections (Figure 2.10) were found together. No tiny ceramic beads were found at Tijeras Pueblo.

The Pottery Mound collections include five pendants with multiple holes (two *Haliotis*, one *Nassarius*, one selenite, and one gypsum); a missing siltstone pendant was reported to have two holes. Two pendants with multiple holes were found at Tijeras Pueblo (one mica and one Unionidae).

Two large groups of pendants with single holes at Pottery Mound significantly affect the pendant distributions in Table 5.5; these include 317 *Nassarius* pendants in the collections and 85 missing selenite pendants.

For Pottery Mound single hole shell pendants, 13 taxa are represented in the collections and two additional taxa are represented by missing items. The “mother of pearl” pieces may well be *Haliotis*, but it is impossible to be sure as those pieces are missing. Only six taxa are represented in the Tijeras Pueblo collections of single hole shell pendants. Pottery Mound clearly had access to a wider variety of shell pendants than Tijeras Pueblo. In both collections, very few taxa are represented by more than two pendants.

Table 5.5. Comparison of Materials of Single Hole Pendants.

	Pottery Mound		Tijeras Pueblo
	In the Collections	Missing	
Shell	370 (78%)	22 (13%)	36 (40%)
Nassarius	317 (66%)		
Conus	24 (5%)	3 (2%)	9 (10%)
Glycymeris	7 (1%)	1 (< 1%)	7 (8%)
Haliotis	4 (< 1%)		1 (1%)
Turitella	2 (< 1%)		
Unionidae	2 (< 1%)		9 (10%)
Cerithidea	1 (< 1%)		2 (2%)
Bivalve	1 (< 1%)		
cf. *Spondylus*	1 (< 1%)		
cf. *Trivia*	1 (< 1%)		
Laevicardium	1 (< 1%)		
Cardiidae	1 (< 1%)		
Pecten vogdesi	1 (< 1%)		
Terebridae		2 (1%)	
Mother of pearl		4 (2%)	
Gastropod			1 (1%)
Unidentified shell	7 (1%)	12 (7%)	7 (8%)
Stone	88 (18%)	135 (82%)	38 (42%)
Selenite	32 (7%)	98 (59%)	1 (1%)
Gypsum	20 (4%)	2 (1%)	
Turquoise	18 (4%)	9 (5%)	5 (6%)
Argillite	9 (2%)		13 (14%)
Travertine	6 (1%)	1 (< 1%)	1 (1%)
Calcite	1 (< 1%)		4 (4%)
Muscovite	1 (< 1%)		1 (1%)
Limestone	1 (< 1%)		
Siltstone		6 (4%)	1 (1%)
Aragonite		3 (2%)	
Quartz		2 (1%)	
Crystal		1 (< 1%)	
Mica			2 (2%)
Jet			2 (2%)
Shale			2 (2%)
Steatite			2 (2%)
Slate			1 (2%)
Unidentified stone		13 (8%)	3 (3%)
Bone	10 (2%)	4 (2%)	11 (12%)
Fish, operculum	5 (1%)		1 (1%)
Ornate box turtle plastron	1 (< 1%)		

Table 5.5. Comparison of Materials of Single Hole Pendants.

	Pottery Mound		Tijeras Pueblo
	In the Collections	Missing	
Tooth		1 (< 1%)	4 (4%)
Turtle carapace			1 (1%)
Claw			1 (1%)
Unidentified bone	4 (< 1%)	3 (2%)	4 (4%)
Ceramic	9 (2%)	2 (1%)	5 (6%)
Unidentified		2 (1%)	
Total no. of single hole pendants	477 (100%)	165 (100%)	90 (100%)
Total no. of materials	24	14	23

Stone pendants in the Pottery Mound collections were made from eight different materials; an additional four materials were reported for missing pendants. Twelve types of stone were used to make the pendants found at Tijeras Pueblo. The two sites had seven types of stone in common.

Both sites had pendants made from fish bone, teeth, and ceramics.

The counts of different stone, shell, bone, and ceramic materials for beads (larger and tiny) and pendants (single and multiple holes) are shown in Table 5.6. These counts include items in or missing from the Pottery Mound collections. Beads and pendants were made from 38 types of material at Pottery Mound and from 26 types of material at Tijeras Pueblo. Both sites had beads and pendants from the same number of types of bone. Pottery Mound yielded almost three times as many types of shell as Tijeras Pueblo. Tijeras Pueblo had 13 types of stone; Pottery Mound had 12 types. Pottery Mound residents enjoyed beads and pendants made from a wider variety of materials than Tijeras Pueblo residents. The two must have had differential access to certain goods or else chose jewelry raw materials based on stylistic preferences, or both. Crinoid stems are the most common fossil in the Sandias but do not occur along the lower Rio Puerco, so it is understandable that Tijeras Pueblo jewelers would use them, and that they were not found at Pottery Mound.

Table 5.6. Number of Materials Used for Beads and Pendants.

	Stone	Shell	Bone	Ceramic	Total
Used at both sites	7	6	3	1	17
Unique to Pottery Mound	5	14	2		21
Unique to Tijeras Pueblo	6	1	2		9
Pottery Mound Total*	12	20	5	1	38
Tijeras Pueblo Total	13	7	5	1	26

*Artifacts in the collections or missing

Comparison of Shapes

Beads (larger and tiny) were the most common jewelry artifact at both sites, and appear in a variety of shapes (Table 5.7). Only 41 percent of the 392 missing Pottery Mound beads have a recorded shape, so the comparison of beads by shape in Table 5.7 refers only to beads found in the collections. Both sites yielded a number of beads that cannot be identified by shape, mostly due to condition.

Table 5.7. Comparison of Bead Shapes in the Collections.

	Pottery Mound		Tijeras Pueblo	
	Number	**Percent**	**Number**	**Percent**
Bone	613	80	67	26
Tubular	604	79	63	24
Transverse	6	< 1		
Disc	1	< 1	4	2
Cylinder (drum)	1	< 1		
Conical	1	< 1		
Shell	116	15	153	59
Whole Shell	108	14	140	54
Disc	6	< 1	8	3
Tubular	2	< 1	3	1
Triangular			1	< 1
Conical			1	< 1
Stone	32	4	39	15
Disc	27	3	34	13
Tubular	2	< 1	1	< 1
Rectangular	1	< 1		
Rounded top, squared base	1	< 1		
Bird	1	< 1		
Heishi			1	< 1
Square			1	< 1
Subrectangular			1	< 1
Triangular			1	< 1
Ceramic	7	1		
Heishi	4	< 1		
Disc	3	< 1		
Total number of beads	768	100	259	100
Total number of shapes	10		9	

Bone beads show a wider variety of shapes at Pottery Mound (where they were the most popular material for beads) than at Tijeras Pueblo. Shell beads show a wider variety of shapes at Tijeras Pueblo (with 159 shell beads in the collections) than at Pottery Mound (with 157 shell beads in the collections). The number of shapes of stone beads is about the same for the two sites. It may be that the more a particular material was used, the more shapes it was fashioned into.

Similarly, because only 22 percent of the 166 missing Pottery Mound pendants (with single or multiple holes) have a recorded shape, the comparison of pendants by shape in Table 5.8 refers only to the pendants in the collections. Both collections have a number of pendants whose shape is unknown, mostly due to condition. The large number of whole shell pendants at Pottery Mound is due to the 317 *Nassarius* whole shell pendants. Pottery Mound had shell pendants in 15 recognizable shapes compared to the 14 shapes at Tijeras Pueblo. For both sites, many shapes were represented by only one shell pendant.

Table 5.8. Comparison of Pendant Shapes in the Collections.

	Pottery Mound		Tijeras Pueblo	
	Number	**Percent**	**Number**	**Percent**
Shell	364	82	29	48
Whole shell	326	74	1	2
Conical	11	2	4	7
Trapezoid	7	2	3	5
Triangular	4	< 1	3	5
Oval	3	< 1	1	2
Whole valve	3	< 1	5*	8
Rounded top, squared base	2	< 1	1	2
Serrated	1	< 1	3	5
Subrectangular	1	< 1	2	3
Round	1	< 1	1	2
Arc	1	< 1	1	2
Five-sided	1	< 1		
Diamond	1	< 1		
Ovoid, concave	1	< 1		
Disc	1	< 1		
Doughnut			2	3
Rectangular			1	2
Bi-lobe			1	2
Stone	61	14	19	32
Subrectangular	10	2	4	7
Oval	8	2	3	5
Trapezoid	7	2	3	5
Rectangular	7	2		
Rounded top, squared base	6	1	3	5
Irregular	5	1		
Triangular	4	< 1	3	5
Five-sided	4	< 1		
Serrated	3	< 1	2	3
D-shaped	2	< 1		
Cylinder	2	< 1		
Square	1	< 1		
Bell-shaped	1	< 1		
Teardrop	1	< 1		
Doughnut			1	2

Table 5.8. Comparison of Pendant Shapes in the Collections.

	Pottery Mound		Tijeras Pueblo	
	Number	**Percent**	**Number**	**Percent**
Bone	9	2	7	12
Trapezoid	2	< 1	1	2
Triangular	2	< 1		
Serrated	1	< 1		
Irregular	1	< 1		
D-shaped	1	< 1		
Arc	1	< 1		
Subrectangular	1	< 1		
Claw			4	7
Rectangular			1	2
Tooth			1	2
Ceramic	8	2	5	8
Bell-shaped	3	< 1		
Subrectangular	2	< 1		
Triangular	1	< 1	1	2
D-shaped	1	< 1		
Round	1	< 1		
Trapezoid			2	3
Rounded top, squared base			1	2
Disc			1	2
Total number of beads	442	100	60	100
Total number of shapes	23		17	

*These pendants were classified as “whole shell” in Schuyler 2011, Table 2.23, as that jewelry study did not use a “whole valve” category for bivalves.

Pottery Mound had 14 recognizable shapes of stone pendants, twice the number found at Tijeras Pueblo. Most of the bone pendants at Pottery Mound had one-of-a-kind shapes; perhaps those pendants were idiosyncratic products rather than commonly recognized social markers. Tijeras Pueblo villagers favored bone pendants in a claw shape.

Indications of Jewelry Making and Repair

Blanks, reworked pieces, and raw materials can be taken as indications of local jewelry production or repair work (or both). Completed jewelry accounts for 90 percent of Pottery Mound artifacts (both in and missing from the collections) and 88 percent of the Tijeras Pueblo collections (Table 5.1). Tijeras Pueblo had almost as many blanks as Pottery Mound (Table 5.9), which is important given the large difference in the number of completed jewelry pieces. Tijeras Pueblo may have been more involved in jewelry production and repair than Pottery Mound.

Table 5.9. Comparison of Jewelry Blanks.

	Pottery Mound		Tijeras Pueblo
	In the Collections	Missing	
Pendant blanks	15 (50%)	3 (60%)	12 (48%)
Bead blanks	13 (43%)	2 (40%)	7 (28%)
Tiny bead blanks	1 (3%)		6 (24%)
Earring blanks	1 (3%)		
Total	30 (100%)	5 (100%)	25 (100%)

As so many bone beads were found at Pottery Mound, their jewelers may have preferred readily available and easily worked material for local jewelry production. A comparison of bead blank materials found at the two sites (Table 5.10) also suggests that Pottery Mound jewelers preferred to work in bone (while Tijeras Pueblo jewelers preferred to work in stone).

Table 5.10. Comparison of Bead Blank Materials.

	Pottery Mound			Tijeras Pueblo	
	In the Collections		Missing		
	Larger	Tiny	Larger	Larger	Tiny
Bone (from shafts)	10		2		
Argillite	1	1		1	
Ceramic	1				
Unidentified shell	1				
Crinoid stem				2	2
Selenite				2	
Chalcedony				1	
Unidentified stone				1	4
Total number of blanks	14	1	2	7	6
Total number of materials	3	1	1	4	1

One Pottery Mound item was identified as a ceramic earring blank by a “Hopi informant.” No earring blanks were identified at Tijeras Pueblo.

Both sites contained pendant blanks made from a wider variety of materials than bead blanks. Other than argillite and bone, the two sites did not use the same materials in pendant blanks (Table 5.11). Pottery Mound yielded pendant blanks of hematite and schist, but no completed pieces of jewelry from those materials. Tijeras Pueblo yielded an obsidian pendant blank, but no pieces of obsidian jewelry.

Table 5.11. Comparison of Pendant Blank Materials.

	Pottery Mound		Tijeras Pueblo
	In the Collections	Missing	
Shell			
Conus	1		
Spondylus	1		
Unidentified shell	1		
Unionidae			2
Glycymeris			1
Stone			
Argillite	2		2
Selenite	5		
Gypsum	1		
Hematite	1		
Schist	1	1	
Turquoise			2
Jet			1
Obsidian			1
Siltstone			1
Shale			1
Unidentified stone		1	
Bone	1		1
Ceramic	1	1	
Total number of blanks	15	3	12
Total number of materials	9	2	9

A number of jewelry artifacts in each set of collections may have been "reworked." (No reported Pottery Mound "reworked" pieces were missing.) These pieces are another possible indication of local jewelers at work. Either the piece itself or the type of material was considered precious enough to merit repair, or the modification was an easy one (as in the case of converting a broken flute into a bone bead). Each site yielded one reworked *Glycymeris* pendant, probably fashioned from a broken bracelet. At Tijeras Pueblo, the *Glycymeris* pendant blank also appeared to be a reworked bracelet segment. Reworked jewelry (Table 5.12) represents less than 1 percent of the completed jewelry plus blanks for Pottery Mound (0.99 percent) and Tijeras Pueblo (0.77 percent). All reworked pieces from Tijeras Pueblo are shell but at Pottery Mound, stone, shell, bone, and ceramic reworked pieces were found.

Pottery Mound yielded many more pieces of raw material than Tijeras Pueblo (Table 5.1). Raw material can be worked or unworked (Tables 5.13 and 5.14). Both sites had turquoise raw material on hand. Turquoise made up 55 percent of the raw material in the Pottery Mound collections (44 percent if missing raw material pieces are included) but only 23 percent of the raw material from Tijeras Pueblo. Shell represented 73 percent of the raw material in the Tijeras Pueblo collections.

Table 5.12. Comparison of Reworked Jewelry Artifacts in the Collections.

	Pottery Mound	Tijeras Pueblo
Stone		
Gypsum pendant	1	
Argillite pendant	1	
Argillite pendant blank	1	
Shell		
Glycymeris pendant	1	1
Conus pendant	2	
Haliotis pendant, multiple holes	1	
Haliotis pendant		1
Glycymeris pendant blank		1
Bone		
Beads	3	
Box turtle plastron bead/pendant	1	
Pendant	1	
Ceramic		
Pendant	1	
Total	13	3
Completed pieces plus blanks	1308	390

Table 5.13. Comparison of Worked Raw Materials.

	Pottery Mound		Tijeras Pueblo
	In the Collections	Missing	
Stone	25 (58%)	2 (22%)	1 (8%)
Turquoise	23 (53%)	2 (22%)	1 (8%)
Selenite	2 (5%)		
Shell	17 (40%)	7 (78%)	11 (92%)
Unionidae	4 (9%)		1 (8%)
Bivalve	3 (7%)		
Conus	2 (5%)	1 (11%)	3 (25%)
Haliotis	2 (5%)		
Unidentified shell	2 (5%)	6 (67%)	
Glycymeris	1 (2%)		3 (25%)
Glycymeris gigantea			1 (8%)
Gastropod	1 (2%)		2 (17%)
Spondylus	1 (2%)		
Nacreous	1 (2%)		
Cerithidea			1 (8%)
Bone (shaft)	1 (2%)		
Total	43 (100%)	9 (100%)	12 (100%)

Fourteen of the missing pieces of raw material at Pottery Mound were not documented as having been worked in any way. These pieces are included in the comparison of unworked raw materials in Table 5.14.

Table 5.14. Comparison of Unworked Raw Materials.

	Pottery Mound		Tijeras Pueblo
	In the Collections	**Missing**	
Stone	36 (55%)	13 (27%)	5 (50%)
Turquoise	36 (55%)	12 (25%)	4 (40%)
Crinoid stem		1 (2%)	1 (10%)
Shell	29 (45%)	35 (73%)	5 (50%)
Unidentified shell	7 (11%)	22 (46%)	1 (10%)
Olivella	7 (11%)	4 (8%)	
Bivalve	3 (5%)	3 (6%)	
Snail	3 (5%)		
Gastropod	3 (5%)		1 (10%)
Glycymeris	2 (3%)		
Unionidae	1 (2%)		3 (30%)
Cerithium	1 (2%)		
Turitella	1 (2%)		
Haliotis	1 (2%)		
Brachiopod		5 (10%)	
Conus		1 (2%)	
Total	65 (100%)	48 (100%)	10 (100%)

Table 5.15 summarizes the evidence for local jewelers at work at the two sites. The amount of raw material at Pottery Mound indicates between three (in the collections) and more than four (including missing pieces) times as many pieces available for the creation of jewelry as at Tijeras Pueblo.

Table 5.15. Number of Pieces Available for Local Jewelers.

	Pottery Mound		Tijeras Pueblo
	In the Collections	**Missing**	
Blanks	30	5	25
Reworked	13		3
Raw Material	108	57	22
Total	151	62	50

Definition of Areas within Tijeras Pueblo

To allow comparisons with Pottery Mound, I broke the work at Tijeras Pueblo into areas. Figure 5.3 is a map of the excavations at Tijeras Pueblo. Excavations in 1948 included rooms in the main area (Blocks 1–5) as well as east and north of the main area. Excavations in 1968 were in the area marked Mound 4. The most extensive excavations occurred in the 1970s, in Blocks 1–6 and 8 and their surrounding areas. In 1986, avocational archaeologists excavated two blocks on private land, AS-10A and AS-10B. The large kiva in the top middle portion of Figure 5.3 was tested but not excavated. Tijeras Ranger Station is located south and west of Blocks 4 and 5, off the map.

As is the case for Pottery Mound (Table 3.7), with different excavators using different approaches over a number of years, it is not clear exactly how many rooms were excavated at Tijeras Pueblo. The first analysis of Tijeras Pueblo proveniences is based on the room blocks identified during the various excavations.

There are no known site maps from the 1948 Vulture Gulch and Cedro Canyon excavations, but the field notebooks contain sketches of parts of the excavations. The Vulture Gulch excavation materials dated to the Pueblo II and III periods (notebook, Catalogue 91.31.1). Artifact inventory lists from the Laboratory of Anthropology identify seven rooms as containing artifacts at Vulture Gulch, but the field notebooks indicate that excavations took place in 11 rooms—the number of excavated rooms used in this study. Cedro Canyon was the name given to the main portion of Tijeras Canyon (later designated Blocks 1–5). Some of the Mound A rooms excavated at Cedro Canyon probably were re-excavated in the 1970s but we do not know which rooms they might be. During the Cedro Canyon excavations, jewelry artifacts were found in seven Mound A rooms, one Mound C room, and two rooms not identified by mound. We do not know whether the Cedro Canyon Mound A rooms with jewelry artifacts were the same rooms yielding additional jewelry artifacts during the 1970s excavations. This study assumes that 23 rooms were excavated at Cedro Canyon.

A 1968 hand–drawn map (Figure C.1) identifies features but not rooms. The 1968 excavation of Mound 4 documented two of the rooms as kivas but did not identify their location on the map. All structures excavated in 1968 are treated as rooms in this study. The Laboratory of Anthropology inventory lists most artifacts excavated in 1968 as found with a feature that is designated by a letter instead of a number. Judge (1974:9) indicates that in 1968, Stewart Peckham excavated 14 rooms completely and exposed half of a fifteenth room. This study assumes that 14 rooms were excavated in 1968.

Excavations in the 1970s included rooms in Blocks 1–6 and 8. Although rooms were supposedly numbered sequentially, there are gaps in the number sequence on existing maps. This study assumes that 137 rooms and four kivas were identified; 116 rooms and three kivas were excavated.

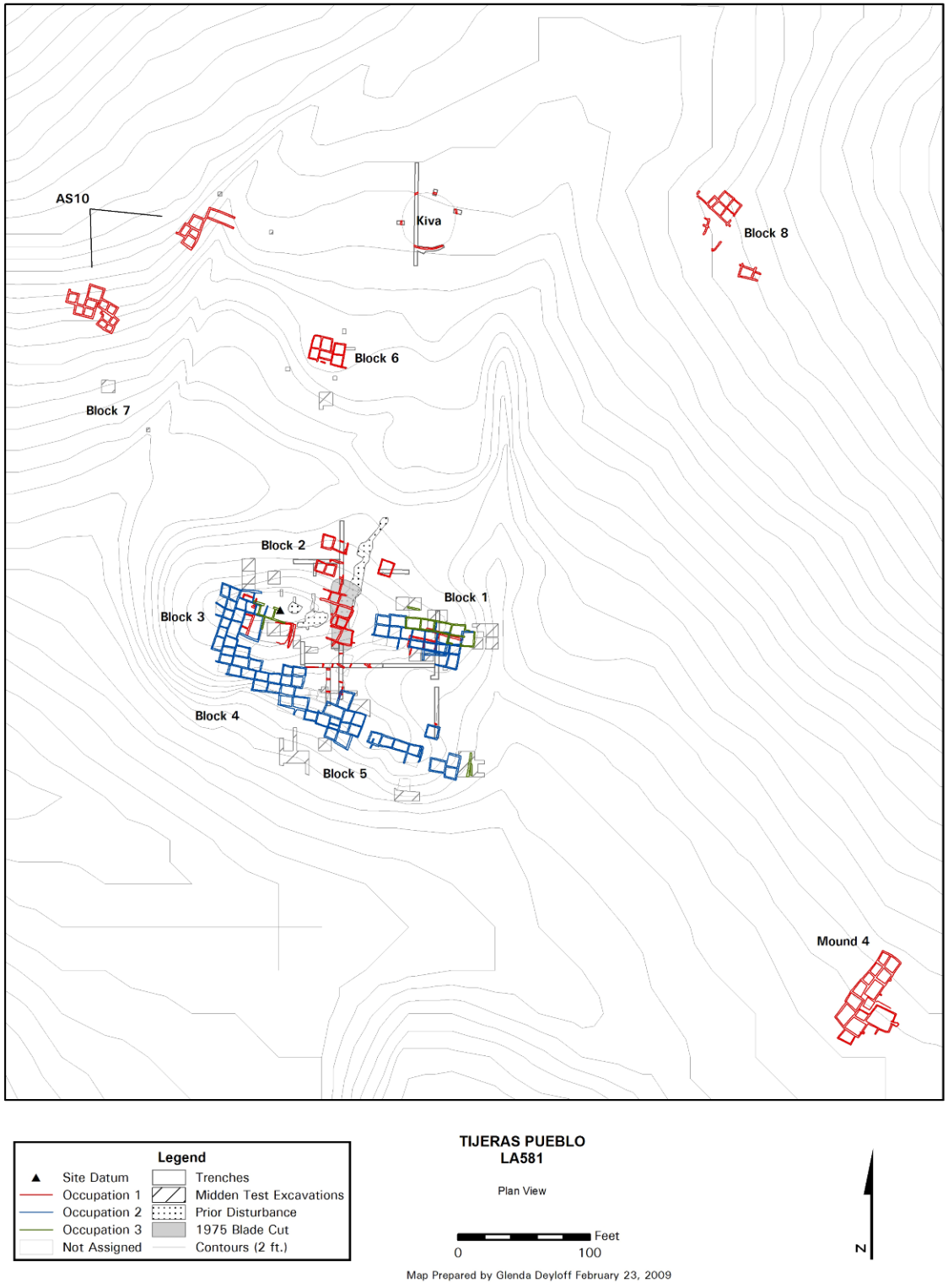

Figure 5.3. Map of Tijeras Pueblo. Reproduced from Schuyler 2011, Figure 1.3.

AS-10A and AS-10B were excavated in 1986 (Schuyler 2011:58, Figures 3.3 and 3.4). King and Bice (1992:6) indicated that they excavated eight rooms in AS-10A and that Room F7 may have been a kiva. Room F7 is counted as a room in this study. This study assumes that eight rooms were excavated in AS-10A and 11 rooms were excavated in AS-10B.

As part of this study, I identified rooms at Tijeras Pueblo that can be used for comparisons to rooms at Pottery Mound. Details of how the rooms were selected can be found in Appendix C and Table C.1. At Tijeras Pueblo, 206 rooms were "identified" because they appear on maps, or yielded artifacts currently in the collections, or were mentioned in student field notebooks (or some combination of these criteria). Using the same process, 270 rooms were "identified" at Pottery Mound. Similarly, 183 Tijeras Pueblo rooms were "excavated" based on artifacts in the collections or on project records such as student field notebooks. Similarly, 233 Pottery Mound rooms were "excavated." At Tijeras Pueblo, 94 of 183 excavated rooms (51.4 percent) yielded jewelry artifacts. At Pottery Mound, 92 of 233 excavated rooms (39.5 percent) yielded jewelry artifacts in the collections. If we add missing jewelry artifacts to the count, 123 of 233 excavated Pottery Mound rooms (52.8 percent) yielded jewelry artifacts. When the missing items are considered, Tijeras Pueblo excavated rooms and Pottery Mound excavated rooms were about equally likely to yield jewelry artifacts.

At Tijeras Pueblo, as at Pottery Mound, jewelry items were found in rooms, in kivas, and in non-structural areas around the room blocks. The 1948 excavations included two room blocks. All rooms and nonstructural areas at Vulture Gulch were considered a single room block. Similarly, all rooms and non-structural areas in and around the mounds at Cedro Canyon were considered a single block.

The 1968 excavations covered a single block consisting of rooms and non-structural areas in and around Mound 4.

For the 1970s excavations, seven blocks (Nos. 1–6 and 8) were identified, and grid positions were identified for the non-structural areas surrounding the rooms (Table 5.16). Most of these positions can be verified from existing maps. Four rooms (Nos. 22, 23, 34, and 97) do not appear on the latest GIS-based maps. A field notebook (Catalogue No. 79.84.80) mentions that the southeast corner of Room 24 is above the southwest corner of Room 29, which places Room 24 in the east portion of Block 1. A second field notebook (Catalogue No. 79.84.81) states that the south wall of Room 34 is the north wall of Room 30, which places Room 34 in the northeast corner of Block 1. A third field notebook (Catalogue No. 93.16.10) identifies Room 97 as being in the same row of rooms as Rooms 98 and 99 in Block 5. Room 22 does not appear on any maps. The collections include bags of ash and a projectile point recorded as coming from Room 22. Based on the room numbering system, it is likely that Room 22 was also in Block 1.

Table 5.16. Tijeras Pueblo Room Blocks by Excavation.

Room Block Number	Rooms	Kivas	Grid Positions
1	19–24, 29, 30, 34–50, 101, 103–106, 123, 131		000N to 045S and 080E to 160E
2	111–122, 124, 126, 132		050N to 045S and 020E to 080E
3	7, 8, 17, 51–63, 65–69, 96, 102, 107, 109, 110	Rooms 64, 108, 128	030N to 030S and West of 020E
4	1, 2, 15, 16, 27, 28, 31–33, 70–83, 85–95, 125, 137–140		South of 030S and 090W to 050E
5	3, 6, 9, 10, 14, 25, 26a, 26b, 97–100, 127		080S to 130S and East of 060E
6	4, 5, 11–13, 18		North of 100N and West of 100E
8	129, 130, 133–136		North of 200N and East of 310E

Some room blocks consist of contiguous rooms, while others include non-contiguous rooms that are nearby. Blocks 3 and 4 were separated arbitrarily along an east-west line just south of Rooms 67–69. Where possible, the non-structural areas are defined by grid locations, and are listed from north to south and then east to west in Table 5.16.

A "great" kiva was identified in the 1970s but was not excavated. It is visible in Figure C.4, between Blocks 6 and 8, and is marked "masonry kiva."

The 1986 excavations include two room blocks: one for all AS-10A rooms and the non-structural areas around them, and another for all AS-10B rooms and the non-structural areas around them.

1948 Excavations

Two areas were excavated in 1948 (Table 5.17). The Vulture Gulch work resulted in two jewelry artifacts. A mica pendant was found in the fill of Room 2 of Mound B, and an *Olivella* bead was found on the surface of Mound A.

The Cedro Canyon work is thought to have taken place in the "central section of the north tier of rooms" (Judge 1974:7–8), possibly in Blocks 1–3 of the 1970s excavations. The Cedro Canyon work yielded 14 pieces of completed jewelry and one blank (Table 5.17). Two jewelry artifacts were found in non-structural areas; a banded travertine pendant was found "at the Tijeras Ranger Station" (which is closer to Cedro Canyon than to Vulture Gulch) and an *Olivella* bead was found on Mound C. Six beads, one tiny bead, and two pendants were found in Mound A rooms that may have been re-excavated in the 1970s. Mound A's Room 4 yielded the longest (78 mm) tubular bone bead in the Tijeras Pueblo collections. Details of 1948 artifacts found by room are listed in Table C.2.

Table 5.17. Jewelry Artifacts from 1948, by Provenience Category.

	From Rooms	From Non-Structural Areas	No. of Artifacts
Vulture Gulch			
Beads		1	1
Pendants	1		1
Total	1	1	2
Cedro Canyon			
Beads	8	1	9
Tiny Beads	2		2
Pendants	2	1*	3
Pendant Blank	1		1
Total	13	2	15

*Travertine pendant found at the ranger station.

1968 Excavation

The 1968 excavation at Mound 4, yielding five pieces of completed jewelry (Table 5.18), examined a single room block and its surrounding non-structural area. One *Olivella* bead was documented as found in the fill of Feature A. Since there is no Feature A on the map, this bead is listed as found in a non-structural area. The two rooms thought to be kivas were not identified, so all structures are treated as "rooms". One of the pendants found during this work is the mica pendant with four holes. Details of the 1968 artifacts found by room are provided in Table C.3.

Table 5.18. Jewelry Artifacts from 1968 (Mound 4), by Provenience Category.

	Rooms	Non-Structural	Total
Beads	2	1	3
Pendants	1		1
Pendant, multiple holes	1		1
Total	4	1	5

1970s Excavations

The 1970s excavations were much more extensive than the previous efforts, and produced most of the jewelry artifacts. Table 5.19 summarizes the jewelry artifacts found in rooms in seven room blocks. Table C.4 lists the jewelry artifacts found in each room block.

Table 5.19. Jewelry Artifacts from 1970s Rooms, by Block.

	Block							Total
	1	2	3	4	5	6	8	
Beads	15	2	41	33	14	2	2	109
Tiny beads	3		2	2	1	1		9
Pendants	12	2	10	13	9			46
Pendants, multiple holes		1						1
Bead or pendant			1		1			2
Bracelets		1						1
Button			1					1
Bead blanks			1				1	2
Pendant blanks	2		4	1				7
Raw material			3	1	2		1	7
Total	32	6	63	50	27	3	4	185

All three kivas located in Block 3 yielded jewelry artifacts. These kivas were built on three levels with the kiva labeled Room 128 at the lowest level, the kiva labeled Room 108 in the middle, and the kiva labeled Room 64 on top (and therefore the most recent kiva). Room 128 (the lowest kiva) yielded one *Olivella* bead. Room 108 (the middle kiva) yielded the most jewelry artifacts of any structure at Tijeras Pueblo: four bone beads, eight *Olivella* beads, a *Glycymeris* pendant, and a worked piece of *Conus*. Room 64 (the most recent kiva) yielded an *Olivella* bead, a turquoise bead, an argillite pendant, a turquoise pendant blank, and the mosaic. The mosaic incorporated several turquoise pendants and pieces of shell, so is counted as a single jewelry artifact. Table 5.20 summarizes the jewelry artifacts found in the three kivas. Table C.5 provides details of the jewelry artifacts, by kiva.

Table 5.20. Jewelry Artifacts From Kivas in Block 3.

Jewelry Type	Count
Beads	15
Pendants	2
Pendant Blanks	1
Worked Raw Material	1
Mosaic	1
Total	20

Table 5.21 summarizes the jewelry artifacts found in non-structural areas (surrounding room blocks, as defined in Table 5.16) in the 1970s. A detailed list of these artifacts can be found in Table C.6. One *Olivella* shell bead was found during the Tijeras Canyon Survey in a non-structural area but could not be assigned to a specific non-structural area.

Table 5.21. Jewelry Artifacts from 1970s Non-Structural Areas, by Block.

	Block								Total
	1	2	3	4	5	6	8	Unid.	
Beads	26	14	42	12	2	2	4	1	103
Tiny Beads			4	3		1			8
Pendants	8	5	14	4	4	1	1		37
Bead Blanks	2	1	1			1			5
Pendant Blanks	2	1							3
Raw Material	3		3	1	1	2			10
Total	41	21	64	20	7	7	5	1	166

Several grid positions were documented as being trash areas and yielded a number of jewelry artifacts (Table 5.22). However, unlike the large midden areas identified at Pottery Mound, the trash areas at Tijeras Pueblo were not large and are not broken out as a separate provenience category. The jewelry artifacts summarized in Table 5.22 are included in the non-structural area counts in Table 5.21.

Table 5.22. Jewelry Artifacts from 1970s Trash Areas.

	Grid Position	No. of Artifacts
Block 1	000N/100E	7
	000N/120E	6
	000N/130E	6
Block 3	010N/020W	4
	020N/000W	12
	030N/020W	7
Block 4	100S/030E	10
Block 6	170N/130W	4
Block 8	200N/370E	1
Total		57

Table 5.23 summaries the jewelry artifacts from the 1970s excavations by provenience category.

1986 Excavations

Areas designated AS-10A and AS-10B were excavated in 1986 by the Albuquerque Archaeological Society. The overall work area is sometimes designated as Room Block 7 (Sundt and Bice 1989:1), but the two areas are treated as separate room blocks in this study. Table 5.24 summarizes the jewelry artifacts found in each block by provenience category. Table C.7 lists the jewelry artifacts found in rooms. All jewelry artifacts from AS-10A were found in rooms.

Table 5.23. Jewelry Artifacts from the 1970s Excavations, by Provenience Category.

	Rooms	Kivas	Non-Structural Areas	No. of Artifacts
Beads	109	15	103	227
Tiny Beads	9		8	17
Pendants	46	2	37	85
Pendants, multiple holes	1			1
Bead or Pendant	2			2
Bracelet	1			1
Button	1			1
Bead Blanks	2		5	7
Pendant Blanks	7	1	3	11
Raw Material	7	1	10	18
Mosaic		1		1
Total	185	20	166	371

Table 5.24. Jewelry Artifacts from 1986. by Provenience Category.

	Rooms	Non-Structural Areas	No. of Artifacts
AS-10A			
Tiny Beads	2		2
Hairpin	1		1
Raw Material	1		1
Total	4		4
AS-10B			
Tiny Beads	7		7
Tiny Bead Blanks	2	4	6
Raw Material	3		3
Total	12	4	16

Table 5.25 summarizes jewelry artifacts from Tijeras Pueblo by provenience category. More than half of the jewelry artifacts found at Tijeras Pueblo came from rooms. All of the unusual completed jewelry was found in rooms. About half of the blanks and raw material came from rooms.

"Neighborhoods" at Tijeras Pueblo?

My attempts to identify behaviorally meaningful "neighborhoods" at Tijeras Pueblo were unsuccessful. In hindsight, such internal variation seems less likely in a small village.

Table 5.25. Tijeras Pueblo Jewelry Artifacts by Provenience Category.

	Rooms	Kivas	Non-Structural Areas	Total
Beads	119 (50%)	15 (6%)	106 (44%)	240 (100%)
Tiny beads	20 (71%)		8 (29%)	28 (100%)
Pendants	50 (56%)	2 (2%)	38 (42%)	90 (100%)
Pendants, multiple holes	2 (100%)			2 (100%)
Beads or pendants	2 (100%)			2 (100%)
Bracelet	1 (100%)			1 (100%)
Button	1 (100%)			1 (100%)
Hairpin	1 (100%)			1 (100%)
Bead blanks	2 (29%)		5 (71%)	7 (100%)
Tiny bead blanks	2 (33%)		4 (67%)	6 (100%)
Pendant blanks	8 (67%)	1 (8%)	3 (25%)	12 (100%)
Raw material	11 (50%)	1 (5%)	10 (45%)	22 (100%)
Mosaic		1 (100%)		1 (100%)
Total	219 (53%)	20 (5%)	174 (42%)	413 (100%)

The attempts included identifying "neighborhoods" by excavation project, by room block, by consolidating Blocks 1, 2, and 3 into one neighborhood versus Blocks 4 and 5 as a second neighborhood, and by consolidating Blocks 1, 2, and 5 into one neighborhood versus Blocks 3 and 4 as a second neighborhood. In each case, no obvious spatial pattern emerged, unlike for the neighborhoods defined for Pottery Mound. Table 5.26 summarizes various distributions at the room block level (including both rooms and the non-structural area surrounding the block) at Tijeras Pueblo. The table does provide a few things to consider, but many of the differences could be due to different excavation techniques.

Less than one-third of the rooms in Vulture Gulch, Mound 4 (excavated in 1968), Block 2 from the 1970s, and AS-10A yielded lower jewelry artifacts, while more than 90 percent of the rooms in Block 5 and AS-10B yielded jewelry artifacts.

The 1968 excavation stands out as being different; less jewelry was found during that work. Judge may have been correct in identifying this area as a "distinct social unit" (Judge 1974:54). However, that excavation is similar to the one at AS-10A in terms of quantities of jewelry recovered.

AS-10B had a higher proportion of tiny beads than other room blocks.

Block 3 is of the most interest because it yielded higher proportions of jewelry artifacts, completed jewelry, blanks or raw material, turquoise, and less common jewelry types than other parts Tijeras Pueblo. Block 3 also contained the three kivas.

Table 5.26. Summary of Distributions for Tijeras Pueblo Blocks.

	Number of Jewelry Artifacts	Structures w/ Jewelry Artifacts, out of Excavated	Number of Completed Jewelry Items*	Number of Blanks/ Raw Material	Instances of Turquoise/ Unusual Completed Jewelry	Number of Burials with Jewelry Artifacts
Vulture Gulch	2	1 of 11	2			
Cedro Canyon	15	10 of 23	14	1	1	2 of 8
1968 Mound 4	5	4 of 14	5		1	0 of 3
Block 1	73	15 of 28	64	9	5	2 of 17
Block 2	27	4 of 12	25	2	5	2 of 7
Block 3*	147	20 of 26	133*	14	16	1 of 12
Block 4	70	17 of 28	67	3	6	1 of 9
Block 5	34	12 of 13	31	3	5	0 of 2
Block 6	10	3 of 6	7	3		0 of 2
Block 8	9	3 of 6	7	2		1 of 6
1970s unidentified	1		1			
AS-10A	4	2 of 8	3	1	1	
AS-10B	16	6 of 11	7	9	2	
Total	413	97 of 186	366	47	42	9 of 66

*Including the mosaic

If the higher concentration of jewelry in Block 3 was due to the proximity to the three kivas, one might guess that the rooms closest to the kivas should contain either large numbers of jewelry artifacts or at least a concentration of special pieces. This was not the case, however. The jewelry artifacts found in the six rooms adjacent to the kivas are summarized in Table 5.27. Half of the rooms did not contain any jewelry artifacts. Room 7 did yield the only siltstone pendant identified at Tijeras Pueblo. Table 5.27 also identifies the jewelry artifacts in the seven rooms making up the second ring of rooms around the kivas. Again, almost half (3 of 7 rooms) did not contain any jewelry artifacts. Room 59 contained one group of 3 *Olivella* shell beads, and Room 60 contained an unworked piece of turquoise. In summary, the first two rings of rooms around the three kivas in Block 3 do not appear to contain unusual numbers or types of jewelry artifacts.

Table 5.27. Jewelry Artifacts from Rooms Adjacent to the Block 3 Kivas.

Room No.	Jewelry Artifacts
Innermost ring of six rooms	
7	Siltstone pendant; Unionidae bead or pendant
8	*Olivella* bead
17	*Olivella* bead
107	None
109	None
65	None
Next ring of seven rooms	
110	None
102	3 *Olivella* beads; bone bead, Unionidae pendant
59	5 *Olivella* beads, 3 found together; 3 bone beads
60	Tiny calcite bead, pendant of unidentified shell, *Glycymeris* pendant blank; unworked piece of turquoise.
61	None
62	2 beads of unidentified stone; crinoid stem bead; *Olivella* bead, argillite pendant; argillite pendant blank; bone pendant blank
66	None

All of the room blocks excavated in the 1970s contained wood that resulted in tree ring dates (Figure 5.4). Similarly, all of the room blocks show dates from the two main construction periods at the site.

Vulture Gulch was estimated to date from the Pueblo II and III periods (field notebook No. 91.31.1), making it at least partly contemporaneous with the main section of the site.

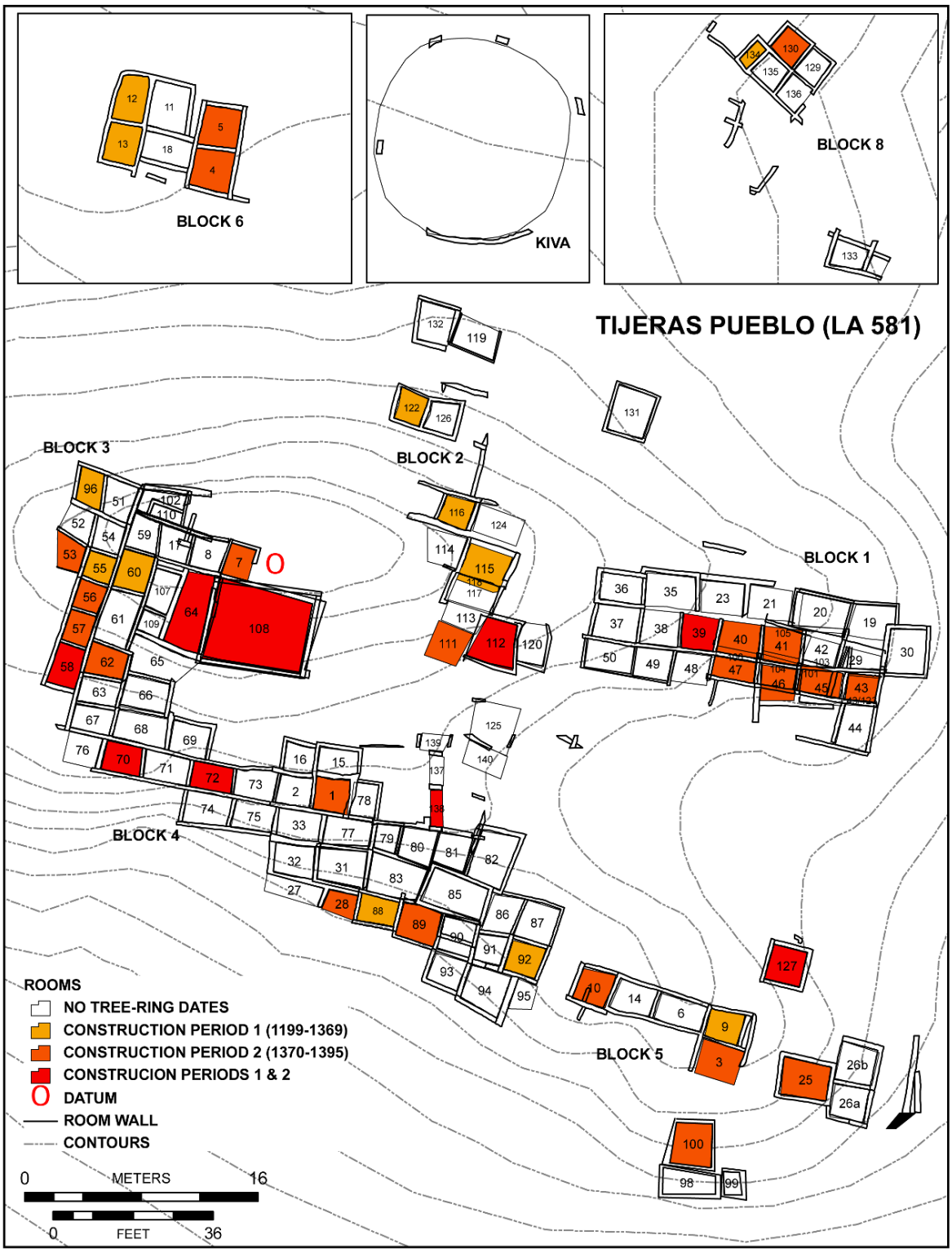

Figure 5.4. Main portion of Tijeras Pueblo, showing construction periods. Prepared by Nicholas E. Damp. Reproduced from Schuyler 2011, Figure 1.4.

Any comparison of jewelry artifacts found in kivas at the two sites is complicated by the fact that some items found at Pottery Mound were identified as coming from a "room or kiva," and others can only be identified as coming from "Kiva 2 or Kiva 3."

Table 5.28 compares jewelry artifacts from Pottery Mound kivas (listed in Table 3.20) with those found in the three kivas (Rooms 64, 108, and 128) at Tijeras Pueblo. The ratio of completed jewelry plus blanks or raw material from kivas at Pottery Mound versus Tijeras Pueblo is 3.3 to 1 (4.5 to 1 when the missing Pottery Mound jewelry is included). However, Pottery Mound had 17 excavated kivas versus the three excavated kivas at Tijeras Pueblo, a ratio of 5.6 to 1. Instead, as Table 5.28 suggests, there was not a major difference in the number of jewelry artifacts per kiva between the two villages.

Table 5.28. Comparison of Jewelry Artifacts Found in Kivas.

	Pottery Mound		Tijeras Pueblo
	In the Collections	In the Collections plus Missing	
Kivas Excavated	17	17	3
Kivas with jewelry artifacts	11	11	3
Completed Jewelry	59	79	17
Blanks or raw material	4	7	2
Turquoise	1	3	2
Groups of completed jewelry artifacts	3	5	1
Single finds of completed jewelry artifacts	1	1	1
"Less common" jewelry types			1
Average per excavated kiva	5.7	7.8	6.3

All three kivas excavated at Tijeras Pueblo yielded jewelry artifacts, but only 11 of the 17 kivas at Pottery Mound yielded jewelry artifacts. The 11 Pottery Mound kivas that yielded jewelry are not the same 11 kivas that contained murals. One of the Tijeras Pueblo kivas (Room 64) contained the mosaic, a "less common" piece incorporating a number of pieces of completed jewelry as well as a blank and raw material. Room 64 also yielded two beads, a pendant, and a pendant blank. The kiva labeled Room 108 contained 14 jewelry artifacts (12 beads, one pendant, and one worked shell), more than any other structure at Tijeras Pueblo. The kiva labeled Room 128 contained only one bead. Unlike at Pottery Mound, it was not possible to consider differences in jewelry artifacts from kivas by neighborhood, since all three of the Tijeras Pueblo excavated kivas were built in the same block of rooms.

The distribution of jewelry artifacts by provenience category at Pottery Mound (Table 3.4) differs from that at Tijeras Pueblo (Table 5.25). At Pottery Mound, about 11 percent of the jewelry artifacts in the collections (8 percent, when the missing jewelry is included) had no documented provenience, a small amount (less than 1 percent) came from either rooms or kivas, and middens could be identified as such. At Tijeras Pueblo, a number of possible kivas with

inexact locations were counted as rooms, and the sampled trash areas were small enough that they were not broken out separately (Table 5.22).

Structures versus Non-Structural Areas

Table 5.29 combines rooms and kivas into "structures," includes Pottery Mound's midden artifacts under "non-structural" areas, and includes only jewelry artifacts from known proveniences at Pottery Mound. Table 3.4 identifies counts of Pottery Mound jewelry in and missing from the collections by jewelry type. Table 5.29 suggests that beads, tiny beads, and pendants with single holes were lost or discarded differently at the two sites (whether or not the missing Pottery Mound jewelry is included). At Pottery Mound, such items were more likely to be found in non-structural areas, while at Tijeras Pueblo they were more likely to be found in structures. At Tijeras Pueblo, pendants with multiple holes and uncommon jewelry types were found in structures only, but at Pottery Mound they were found both in structures and in non-structural areas.

The Pottery Mound data are distorted by two groups (items found together): one of 317 *Nassarius* pendants and the other of 85 missing selenite pendants. If each group were to be counted as a single jewelry artifact (that is, whatever item the group represented prehistorically), the distributions would be as presented in Table 5.30. With this change, pendants were more likely to be found in structures at Pottery Mound than in non-structural areas (whether or not missing pendants are included). However, the overall distributions of both completed jewelry and all jewelry artifacts continues to suggest that jewelry was more likely to be lost or discarded in non-structural areas at Pottery Mound (whether or not missing jewelry is included). This seems to confirm the initial observation that jewelry artifacts were more likely to be lost or discarded in non-structural areas at Pottery Mound, while at Tijeras Pueblo they were more likely to be lost or discarded in structures or the fill of structures. However, it is not clear how representative any of the counts are, given differences in excavation techniques.

On average, 2.3 jewelry artifacts were found per room with jewelry at Tijeras Pueblo. At Pottery Mound, 3.0 such artifacts were found per room with jewelry (for artifacts in the collection; 4.5 on average including missing jewelry). At Pottery Mound, 8 percent of the rooms with jewelry yielded 10 or more jewelry artifacts (11 percent including missing jewelry) (Table 3.14). No rooms at Tijeras Pueblo yielded 10 or more jewelry artifacts. Table 5.31 shows the number of Tijeras Pueblo rooms with a given number of jewelry artifacts. Table C.8 provides the same distribution by excavation.

Table 5.29. Comparison of Distributions of Jewelry Artifacts by Provenience Types.

	Pottery Mound				Tijeras Pueblo		Number of Artifacts	
	In the Collections		In the Collections, plus Missing					
	Structures (Rooms plus Kivas)	Non-Structural Areas	Structures (Rooms plus Kivas)	Non-Structural Areas	Structures (Rooms plus Kivas)	Non-Structural Areas	Pottery Mound: In the Collections Plus Missing	Tijeras Pueblo
Beads	36%	64%	48%	52%	56%	44%	655 / 1039	240
Tiny Beads	26%	74%	30%	70%	71%	29%	27 / 30	28
Pendants	16%	84%	19%	81%	58%	42%	453 / 617	90
Pendants, multiple Holes	60%	40%	50%	50%	100%		5 / 6	2
Beads or pendants	67%	33%	67%	33%	100%		3 / 3	2
Gorgets	50%	50%	33%	67%			2 / 3	
Earrings		100%	33%	67%			2 / 3	
Rings	50%	50%	50%	50%			2 / 2	
Bracelets	50%	50%	50%	50%	100%		2 / 2	1
Button					100%			1
Hair ornaments			100%		100%		0 / 1	1
Completed jewelry	28%	72%	37%	63%	58%	42%	1151 / 1706	365
Blanks/raw material	34%	66%	38%	62%	53%	47%	114 / 175	47
Mosaic					100%			1
Total	29%	71%	37%	63%	58%	42%		
Number of Artifacts	364	901	700	1181	239	174	1265 /1881	413

Table 5.30. Comparison of Distributions, Excluding Two Groups of Artifacts.
(Excluded groups: 317 *Nassarius* and 85 selenite pendants; see text.)

	Pottery Mound		Tijeras Pueblo	No. of Artifacts	
	In the Collections	In the Collections plus Missing		Pottery Mound*	Tijeras Pueblo
Pendants				137 / 217	90
Structures	53%	55%	58%		
Non-structural areas	47%	45%	42%		
Completed jewelry				835 / 1306	365
Structures	39%	49%	58%		
Non-structural areas	61%	51%	42%		
Total jewelry artifacts				949 / 1481	413
Structures	38%	47%	58%		
Non-structural areas	62%	53%	42%		

*In the Collections/In the Collections Plus Missing.

Table 5.31. Distribution of Jewelry Artifacts per Room at Tijeras Pueblo.

No. of Jewelry Artifacts in the Room	Number of Rooms
0	89
1	39
2	29
3	12
4	4
5	3
6	1
7	1
8	3
9	2
Total number of artifacts	219
Number of rooms with jewelry artifacts	94
Average per room with jewelry artifacts	2.3

Turquoise and Unusual Completed Jewelry

The original analysis of jewelry at Tijeras Pueblo did not highlight turquoise and unusual completed jewelry, but they are identified here to allow comparisons with the Pottery Mound assemblage. The less common completed jewelry at Tijeras Pueblo included two pendants with multiple holes (a mica pendant with four holes and a Unionidae pendant with two holes), a *Glycymeris* bracelet fragment, a turquoise button, a bone hairpin, and the mosaic found in the kiva floor in Room 64. There was no mention in the Tijeras Pueblo field and lab notes of completed jewelry pieces being found in groups. The groups of jewelry artifacts at Tijeras Pueblo indicated in this section were identified because they have identical proveniences or were packaged together by the excavator, or both.

Turquoise (both completed jewelry and raw material) and unusual jewelry artifacts from Tijeras Pueblo are summarized in Table 5.32. In counting "instances," turquoise may be double-counted when it is also a group or less common jewelry type. A complete list of unusual completed jewelry and turquoise from Tijeras Pueblo can be found in Table C.9.

Whether or not missing Pottery Mound items are considered, Table 5.32 suggests that at Pottery Mound, more pieces of turquoise and unusual completed jewelry were lost or discarded in non-structural areas, while at Tijeras Pueblo they were lost or discarded in structures. For Pottery Mound, the differences between Tables 3.35 and 5.32 are due to items that could not be identified by neighborhood in Table 3.35.

Jewelry Artifacts Associated with Burials

Sixty-six burials were reported from Tijeras Pueblo; eight during excavations in 1948 in Cedro Canyon, three in 1968, and 55 in the 1970s (Schuyler 2011:60–62). Table 5.33 lists the jewelry artifacts associated with nine Tijeras Pueblo burials (in other words, 57 of 66 burials at the village had no associated jewelry). Burials with jewelry artifacts were found in most areas at Tijeras Pueblo; the exceptions are Mound 4 (excavated in 1968) and Blocks 5 and 6 (excavated in the 1970s). No burials were found in the Vulture Gulch, AS-10A, or AS-10B areas.

Table 5.34 compares occurrences of jewelry artifacts associated with burials at Pottery Mound and Tijeras Pueblo, including the number of jewelry artifacts per burial. All jewelry associated with Pottery Mound burials (whether in the collections or missing) are included. Jewelry artifacts found "near" Pottery Mound burials were not included.[1] Table C.10 lists Tijeras Pueblo burials excavated in the 1970s.

[1] When complying with NAGPRA, the Maxwell Museum treats such items differently: any artifacts possibly associated with burials, including ones ambiguously described as having been found "near" burials, are considered funerary objects.

Table 5.32. Comparison of Instances of Unusual Completed Jewelry and Turquoise.

	Pottery Mound*		Tijeras Pueblo
	In the Collections	In the Collections plus Missing	
Turquoise			
Structures	14	25	9
Non-structural areas	58	69	5
Total	72	94	14
Less Common Items			
Structures	6	8	6
Non-structural areas	5	7	
Total	11	15	6
Single Items			
Structures	8	12	11
Non-structural areas	9	9	5
Total	17	21	16
Groups of items			
Structures	9	33	4
Non-structural areas	5	20	2
Total	14	53	6
Totals			
Structures	37	78	30
Non-structural areas	77	105	12
Combines	114	183	42

*Includes items found in unidentified structures and non-structural areas.

Table 5.33. Jewelry Artifacts Associated with Tijeras Pueblo Burials.

Provenience	Burial No.	Jewelry Artifacts	Distribution
Cedro Canyon	7	*Olivella* tubular bead	8.3%
	8	*Olivella* whole shell bead	8.3%
Block 1 (1970s)	47	Bone bead*	8.3%
	52	Tubular bone bead	8.3%
Block 2 (1970s)	31	Unidentified stone bead blank 2 unworked *Olivella* shells	25.0%
	37	*Olivella* whole shell bead	8.3%
Block 3 (1970s)	27	Tubular bone bead	8.3%
Block 4 (1970s)	2	Fossilized gastropod pendant Tiny unidentified stone bead	16.7%
Block 8 (1970s)	51	Unidentified shell bead*	8.3%
		Total	100.0%

*Beads were not found for examination and are not included in the analyses.

Table 5.34. Comparison of Jewelry Artifacts Associated with Burials.

	Pottery Mound	Tijeras Pueblo
Total number of burials	158	66
Number of burials with jewelry	21	9
Percentage of burials with jewelry	13.3%	13.6%
Number of burials with 1 piece of jewelry	9	7
With 2 pieces	4	1
With 3 pieces	3*	1
With 5 pieces	2	
With more than 5 pieces	2	
Percentage of burials with turquoise or unusual pieces	67%	11%

*One interment included two burials and three jewelry artifacts.

Burials at Tijeras Pueblo and Pottery Mound were about equally likely to contain one or more jewelry artifacts. However, Tijeras Pueblo burials contained fewer jewelry artifacts on average than those at Pottery Mound, with no more than three pieces in any one Tijeras Pueblo burial. At Tijeras Pueblo, seven of the nine burials with jewelry artifacts yielded only one such artifact.

Pottery Mound burials were more likely to contain turquoise and other unusual pieces of completed jewelry (Table 5.35) than those at Tijeras Pueblo. There were 14 such burials at Pottery Mound; 11 contained groups of completed jewelry (including the 317 *Nassarius* shell pendants and 85 missing selenite pendants). Four Pottery Mound burials contained turquoise.

Only one Tijeras Pueblo burial meets the criterion of having contained "turquoise and unusual completed jewelry," with a group including a pendant and a bead. No turquoise was found in Tijeras Pueblo burials.

Table B.10 lists the provenience of each Pottery Mound burial; Table C.10 lists the same for Tijeras Pueblo burials. Table 5.36 lists the excavation years and proveniences for burials that yielded jewelry artifacts at either site.

Table 5.35. Comparison of Unusual Completed Jewelry and Turquoise Associated with Burials.

Burial	Turquoise and Unusual Completed Jewelry
Pottery Mound	
No. D-23, female	2 turquoise earrings
Nos. D-9 and D-10, female and small child	Worked piece of turquoise found with 2 tubular bone beads
Child*	Rectangular turquoise pendant
Adult*	Missing turquoise pendant
No. 9.2, cremation	317 *Nassarius* pendants found with a tubular bone bead
No. 45, child	85 selenite pendants (missing)
No. 24, female (age 35–39)	Selenite gorget, found under the chin
No. 94, child	3 bone beads found near the right hand, shell pendant found near the skull, and a quartz disc bead (all missing)
No. D-21, male	Tubular bone bead found with tiny bone disc bead, and missing bone gorget
No. D-38, adult	Tubular bone bead found with *Olivella* whole shell bead, and fish operculum pendant
No. 52, male (age 30–35)	Transverse bone bead found with tubular bone bead, near head
No. 6, male (age 35–39)	5 tubular bone beads found above the right elbow
No. 82, adolescent (age 13–16)	2 bone beads
Tijeras Pueblo	
No. 2	Fossilized gastropod pendant found with a tiny bead of unidentified stone

Table 5.36. Proveniences of Burials Yielding Jewelry Artifacts.

Burial No.	Excavation Year	Provenience
Pottery Mound Jewelry Artifacts in the Collections		
6	1954	South Midden, SE Trench
17	1954	South Midden, SE Trench
24	2954	South Midden, 1st Lateral to SW Trench
52	1955	Kiva 1
9.2	1979	North Midden, Cordell stratigraphic test, NW quad
“child”	1979	North Midden, Big Man Area
D-9 & D-10	1981	North Midden-Duck Unit
D-21	1982	North Midden-Duck Unit
“partial”	1982	Cliff Burial Site
D-23	1983	North Midden-Duck Unit
D-29	1984	North Midden-Duck Unit
D-37	1986	North Midden-Duck Unit
D-38	1986	North Midden-Big Man Area
Missing Pottery Mound Jewelry Artifacts		
7	1954	South Midden, SE Trench
45	1955	South Midden, 2nd or 3rd Parallel to SW Trench

Table 5.36. Proveniences of Burials Yielding Jewelry Artifacts.

Burial No.	Excavation Year	Provenience
82	1961	Room F-36
94	1961	Room SF-65
9.1	1979	North Midden, Cordell stratigraphic test, NW quad
"adult"	1979	North Midden-Big Man Area
Tijeras Pueblo		
7	1948	Cedro Canyon, Mound C
8	1948	Cedro Canyon, Mound A, Room 21
2	1972	110S/000E
27	1975	020N/000W
31	1975	030N/080E
37	1975	050N/040E
47	1976*	000N/120E
51	1976	Room 134
52	1976	000N/120 E

*Excavations in this grid took place in both 1974 and 1976 but given the numbering sequence, I believe that the burial was found in 1976.

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Chapter 6

SUMMARY AND CONCLUSIONS

Caveats

In most archaeological excavations, only part of the site is excavated. This was the case at Pottery Mound. However, researchers must also contend with the fact that many excavated artifacts are missing and that data about the artifacts and their contexts were not recorded consistently.

The existence of the missing Pottery Mound artifacts is documented on specimen cards (with some level of knowledgeable oversight) and in field notebooks (with less oversight). This study located 1,429 Pottery Mound jewelry artifacts in the Maxwell Museum collections (completed jewelry, blanks, raw material, and unknown), while 623 artifacts (completed jewelry, blanks, and raw material) could not be found. Thus, about 30 percent of the documented jewelry collections from Pottery Mound is missing. Some information on the missing artifacts was culled from specimen cards and field notebooks, but I was not able to verify that information by direct examination of the objects. For this final chapter, all counts reflect both the jewelry artifacts that found their way into the collections and those that remain missing.

The study was further complicated by the fact that the proveniences of many artifacts (about 8 percent) could not be determined. Also, in some parts of the analyses the counts of artifacts are small enough that excavation approaches may have had a major effect on the counts. Given these problems, any conclusions based on the jewelry artifact assemblage must be cautious.

Jewelry in the Collections

Bone was the most common material used in jewelry, followed by shell, then stone, and ceramic (this last material was confined to few items). Most of the shells are from the Gulf of California and indicate Pottery Mound's connection to active long-distance trade routes. Beads and pendants account for 99 percent of the completed pieces of jewelry in the collections; 50 percent of them were bone.

Beads

Beads were made from 13 materials and were found in nine shapes. Bone accounted for 80 percent of the beads; most were tubular. Although most of the bone beads were made from the shafts of long bones, some were made from fish bone (operculum and vertebra).

Whole *Olivella* shells made up 93 percent of all shell beads.

More than three-quarters of all stone beads and almost 90 percent of tiny stone beads were made of turquoise. Most (84 percent) of the stone beads were disc-shaped.

Seven of the eight ceramic beads were tiny; six were found together. The most unusual bead in the collection is a stone bead that resembles a Hohokam flying bird design (Figure 2.7).

Pendants

Pendants were the next largest category of jewelry in the collections. Five of the 482 pendants had multiple holes. Three of the pendants with multiple holes were made from shell (two *Haliotis* and one *Nassarius*) and two from stone (gypsum and selenite). Pendants were made from 25 identifiable types of materials and fashioned in 22 different shapes, about twice as many materials and shapes as for beads.

Unlike for beads, shell was the predominant material for pendants (77 percent), followed by stone (19 percent). The 317 *Nassarius* pendants—almost two-thirds of the pendants found at the site—were associated with Burial 9.2 in the North Midden. Twelve additional taxa were identified but of them, only *Conus* pendants were found in any numbers.

Sixty percent of the stone pendants were made of selenite and gypsum. Similar gypsum is available locally.

Ten bone and nine ceramic pendants were found but each made up only about 2 percent of the pendants in the collections. The bone pendants include examples made from fish bone (operculum) and ornate box turtle plastron.

Other Items

In addition to pendants with multiple holes, the collections include examples of other less common jewelry types: two gorgets, two earrings, two rings, and two bracelet fragments. The selenite gorget is an elegant piece fashioned like a standing bird (Figure 2.28). A pair of turquoise earrings was found in situ with Burial D-23 (Figure 2.29).

Fourteen bead blanks and 15 pendant blanks are present in the collections. One argillite bead blank was tiny and one argillite pendant blank may have been for a pendant with multiple holes. Ten of the bead blanks were bone and two-thirds of the pendant blanks were stone. The single ceramic earring blank was identified as such by a Hopi informant.

Jewelry raw materials (n = 108) included stone (57 percent), shell (43 percent), and bone (n =1). Two of the stone raw material items were selenite, the others were turquoise.

Thirteen pieces of shell were classified as being of an unknown type, due to their poor condition or because they were unavailable for examination.

Jewelry Artifacts by Provenience

Completed jewelry, blanks, and raw material account for 2,039 artifacts (including those missing from the collections) that were analyzed by provenience (Table 3.1): 1,176 beads, 648 pendants, four items that are either beads or pendants, three gorgets, three earrings, two rings, two bracelets, and a hair ornament (1,839 pieces of completed jewelry; 200 blanks or pieces of raw material). A Chi-square test (Table 3.3) suggests that there it is no basic difference in the distribution of completed jewelry, blanks, and raw material between artifacts in the collections (n = 1,416) and those that are missing (n = 623).

During my study of jewelry at Pottery Mound, I found multiple issues with proveniences recorded during the original excavations. I developed standardized proveniences for the site (Schuyler et al 2013), and those proveniences serve as a foundation for the current report.

For close to 12 percent of the jewelry in Table 3.2 (n = 240), the year of excavation remains unknown. Because of disparities from one excavation season to the next (in the number of artifacts excavated, the number of artifacts that appear to be missing, and the potential for re-excavation of previously dug areas), no conclusions were drawn based on the excavation year. Clearly, differences in excavation procedures and priorities had the biggest impact on what artifacts of all types found their way into the collections.

In all, 1,881 jewelry artifacts could be assigned to provenience types (Table 3.4) including rooms, kivas, non-structural areas around room blocks, and middens (however, almost 8 percent of the jewelry artifacts [n = 158] cannot be identified by provenience type). An analysis of completed jewelry, blanks, and raw material by provenience category indicates that less jewelry was found in structures (rooms or kivas) than in non-structural areas. Rooms yielded 606 jewelry artifacts, 86 came from kivas, and eight came from either rooms or kivas; thus, 700 came from structures. Middens yielded 929 jewelry artifacts and 252 came from other non-structural areas; thus, 1,181 came from non-structural areas.

Another provenience analysis involved identifying neighborhoods (Figure 3.2) and reviewing the jewelry found in each neighborhood. I estimate that 233 rooms were excavated at Pottery Mound (Table 3.8), based on rooms that yielded any kind of artifact in the collections plus additional rooms mentioned in field notebooks. The neighborhoods of 14 of those rooms are unknown; one room with jewelry was not included in the neighborhood analysis, as its neighborhood is also unknown.

The analysis failed to show clear differences among the various defined parts of the site, in terms of the proportion of rooms that yielded jewelry artifacts. When all documented items are considered, the differences between North and South are not statistically significant (Table 3.11). Similarly, such differences among the East, Middle, and West areas do not appear to be significant. In conclusion, the chance of finding jewelry artifacts in rooms was not significantly greater for any part of the site.

At the level of individual rooms as opposed to neighborhoods, the number of jewelry artifacts found at Pottery Mound varies widely. Many rooms yielded little or no jewelry while a few

yielded quite a lot. More than one-third of the rooms with jewelry yielded only one piece, while 14 (11 percent) contained 10 or more pieces. The average number of jewelry artifacts found per room in the North is higher than that in the South, and rooms in the West tended to have fewer pieces of jewelry, on average, than rooms in the Middle or East (Table 6.1).

Table 6.1. Jewelry Artifacts Found in Rooms, by Neighborhood.

	North	South	West	Middle	East	Total
No. of rooms excavated	124	95	72	73	74	219
No. of rooms with jewelry	73	49	41	40	41	122
Percentage of rooms with jewelry	58.9%	51.6%	56.9%	54.8%	55.4%	55.7%
Percentage of rooms with turquoise or unusual jewelry	22.6%	14.7%	15.3%	21.9%	20.3%	19.2%
Average no. of pieces of jewelry per room	3.4	2.4	3.0	5.0	3.8	4.5
No. of pieces of turquoise or unusual jewelry	46	21	12	31	24	67
Average no. of pieces of turquoise or unusual jewelry	0.63	0.43	0.29	0.78	0.58	0.55
No. of blanks or pieces of raw material	25	12	12	12	13	37
Average no. of blanks or pieces of raw material	0.34	0.24	0.29	0.30	0.32	0.30

Another indication of differences by neighborhood is occurrences of unusual completed jewelry and turquoise. Although the percentages of rooms in the North and South that contained some kind of jewelry are fairly close (58.9 versus 51.6 percent), the percentage of North rooms that contained turquoise or unusual jewelry (22.6 percent) is higher than for South rooms (14.7 percent). Rooms in the North were more likely to contain blanks and raw materials than rooms in the South, and least likely to contain them in the West (Table 3.18), suggesting that more jewelry making or repair was taking place in the North neighborhoods compared to those in the South.

In summary, Table 6.1 suggests a pattern in which each major area had similar proportions of rooms with jewelry, but rooms in the North generally had more jewelry artifacts, on average, whether that jewelry was of a common or unusual type. Also, turquoise and other materials for jewelry work were more common in North rooms than in South rooms. The West area rooms had the least jewelry and jewelry materials.

For kivas, far more jewelry artifacts were found in the North than in the South (Table 3.21). More than 70 percent of the jewelry artifacts and 78 percent of the turquoise and unusual jewelry artifacts in kivas were found in kivas in the Northeast neighborhood (Kivas 1–3).

More than half of the jewelry artifacts found in non-structural areas are bone beads (n = 138). Analysis of non-structural areas by neighborhood is difficult because 39 percent of documented jewelry from non-structural proveniences cannot be assigned to a neighborhood. More jewelry artifacts whose provenience can be identified were found in non-structural areas in the North than in the South (Table 3.25).

Similarly, for turquoise and unusual completed jewelry in non-structural areas, more pieces were found in North neighborhoods than South neighborhoods. However, about 47 percent of the turquoise and unusual completed jewelry were found in non-structural areas whose neighborhoods could not be determined (Table 3.27).

The North Midden covered more of the site than the South Midden, and the collections from the North Midden include the artifacts from Linda Cordell's large stratigraphic test. The North Midden yielded almost seven times as many jewelry artifacts as the South Midden. The North Midden also yielded more instances of turquoise and unusual completed jewelry than the South Midden. However, the South Midden did yield the elegant selenite gorget shown in Figure 2.28.

Of the 158 sets of human remains found in 153 burials at Pottery Mound, slightly more than half contained some type of grave goods. Six burials cannot be assigned to a neighborhood, 75 burials were found in the North area, and 77 were found in the South area.

Roughly equal numbers of burials were recovered from the two excavated middens: 46 burials from the North Midden and 43 burials from the South Midden. Twenty-one burials (13 percent) included jewelry artifacts; 17 of those burials were found in middens and the remaining four were found in Kiva 1, the Cliff Burial Site, Room F-36, and Room SF-65 (Table 5.36). Two burials contained large numbers of artifacts; a cremation (Burial 9.2) in the North Midden yielded 317 *Nassarius* pendants and a tubular bone bead, and the burial of a child in the South Midden (Burial 45) is reported to have included the missing 85 selenite pendants and a bone bead blank.

Fourteen burials in the North area and six burials in the South area included jewelry artifacts (one burial's provenience could not be assigned to a neighborhood). A Chi-square test suggests a significant difference in the North-South distribution of burials with jewelry (Table 3.40). No burials with jewelry artifacts were found in West neighborhoods (Table 3.41). Similarly, there were 13 occurrences of unusual completed jewelry and turquoise in burials in the North, only five such occurrences for burials in the South, and no turquoise found in any burial in the South. One burial's provenience could not be identified by neighborhood.

While it is difficult to extract firm conclusions from the available data, it appears that people at the North part of the site had more jewelry, including more turquoise and unusual pieces, than people living in the South part of the site. Similarly, people in the West part of the site may have had the least jewelry. It is also interesting to note the higher concentration of Hopi and Acoma-Zuni sherds in the South Midden and the West Midden than in other parts of Pottery Mound (Franklin 2014:33 and Table 7).

External Influences

Many types of artifacts found at Pottery Mound have designs characteristic of both the Rio Grande and Western Pueblos. Many people portrayed in kiva murals wear some sort of jewelry, primarily elaborate beaded necklaces that appear as chokers, often with an elaborate shell pendant. It was disappointing not to find examples of such elaborate necklaces or pendants reminiscent in the collections or mentioned in field notebooks. Of course, people may have taken their best jewelry with them as they left Pottery Mound, or perhaps such jewelry was reserved for figures in kiva murals and not actually worn by the villagers. Similarly, although large numbers of beads were depicted as hanging on kiva walls as a form of adornment, no such large groups were found in any kiva.

Elements of Rio Grande design are found in the East and Middle areas, and elements of Western Pueblo kiva designs were found in West areas (Adler 2007a:43 and Figure 3.3). Kivas in the West were less likely to contain jewelry artifacts than those in the East and Middle areas (Table 3.22). Five of the six Rio Grande style kivas with murals depicted jewelry, while only two of the five Western Pueblo style kivas with murals showed jewelry.

The orientation of kivas depicted by Adler (2007a, Figure 3.3) and the assignment of each to a Rio Grande or Western architectural tradition is interesting in that the Western style kivas fall into what I term the West area, for both the North and the South.

Olivella beads and other shell beads and pendants found their way to Pottery Mound from the Gulf of California. Many of these shells may have come via the Casas Grandes area; the *Nassarius* shells found with a cremation are an echo of the millions of *Nassarius* shells found at Paquimé. The reported macaw burial, the copper bell fragment, and three ceramic pendants shaped like copper bells found at Pottery Mound also suggest a southward connection.

Pottery and designs were imported from the Hopi and Acoma-Zuni areas to the west. Some Pottery Mound potters may have immigrated from the west (Eckert 2007:66). A stone bead has a shape reminiscent of Hohokam flying birds. *Haliotis* pendants are a reminder that the trade networks of the time continued past the Western Pueblo and Hohokam, to the west coast of the continent.

Comparison to Jewelry At Tijeras Pueblo

Tijeras Pueblo yielded more than 400 jewelry-related artifacts, but the jewelry assemblage from Pottery Mound is about five times as large (n = 2,039). It is not possible to say that people had greater access to jewelry at Pottery Mound, without first considering factors such as differences in village size and intensity of excavation. Even so, I noted both similarities and differences in the jewelry from the two sites.

At both sites, about 99 percent of the completed jewelry consisted of beads and pendants. Each site had a few pieces of less common jewelry types: the mosaic and a button at Tijeras Pueblo;

gorgets, rings, and earrings at Pottery Mound; and bracelets, pendants with multiple holes, and hair ornaments at both sites.

Even though Pottery Mound yielded more than four times as many beads as Tijeras Pueblo, at Tijeras Pueblo a higher proportion of those beads were made from *Olivella* shell (Table 5.3). Also, almost two-thirds of the beads at Tijeras Pueblo were shell, most of which came from the Gulf of California. Eighty percent of the beads at Pottery Mound were made of bone, including a few of fish bone. The dominant material for stone beads was turquoise at Pottery Mound and crinoid stems at Tijeras Pueblo. Ceramic beads were found at Pottery Mound but not at Tijeras Pueblo. Twenty-eight tiny beads were found at Tijeras Pueblo, 32 at Pottery Mound.

Six pendants with multiple holes were found at Pottery Mound; two such pendants were found at Tijeras Pueblo. Two large groups of pendants (317 *Nassarius*, 85 missing selenite) were reported at Pottery Mound, but no large group of any kind of jewelry was reported at Tijeras Pueblo.

Many materials were used to make the beads (large and tiny) and pendants (single and multiple holes) at the two sites (Table 6.2). Although both sites had jewelry made from about the same number of types of bone and stone, and both had ceramic jewelry pieces, the shell from Pottery Mound includes more than twice the number of taxa as were found at Tijeras Pueblo. Possible factors behind the greater diversity of shell at Pottery Mound include greater aggregate village wealth, preference for a wider variety of shell, differential access to traders, and the effects of sample size on assemblage diversity. Times of occupation may also be a factor: Pottery Mound appears to have been occupied for 65 to 100 years after Tijeras Pueblo was abandoned.

Table 6.2. Comparison of Bead and Pendant Materials.

Material	Pottery Mound	Tijeras Pueblo
Bone		
Fish operculum	x	x
Bone shaft	x	x
Tooth	x	x
Fish vertebra	x	
Ornate box turtle plastron	x	
Turtle carapace		x
Claw		x
Shell		
Olivella	x	x
Unionidae	x	x
Cerithidea	x	x
Conus	x	x
Glycymeris	x	x
Haliotis	x	x
Aragonia testacea	x	

Table 6.2. Comparison of Bead and Pendant Materials.		
Material	**Pottery Mound**	**Tijeras Pueblo**
Terebridae	x	
Bivalve	x	
Cardiidae	x	
Columbella	x	
Laevicardium	x	
Mother of pearl	x	
Nassarius	x	
Oliva	x	
Pecten vogdesi	x	
cf. *Spondylus*	x	
cf. *Trivia*	x	
Turitella	x	
Gastropod		x
Stone		
Argillite	x	x
Calcite	x	x
Muscovite	x	x
Selenite	x	x
Siltstone	x	x
Turquoise	x	x
Travertine	x	x
Aragonite	x	
Crystal	x	
Gypsum	x	
Limestone	x	
Olivine	x	
Quartz	x	
Crinoid Stem		x
Jet		x
Mica		x
Shale		x
Slate		x
Steatite		x
Ceramic		
Fired clay or worked sherd	x	x
Number of materials	38	26

Both sites yielded evidence of jewelry making or repair or both. Bead blanks (large and tiny) and pendant blanks were found at both sites, and a ceramic earring blank was identified in the Pottery Mound collections by a Hopi informant. Tijeras Pueblo yielded 25 bead and pendant blanks, surprisingly close to Pottery Mound's 35 blanks. This suggests that proportionally more jewelry making and repair work was done at Tijeras Pueblo, but that Pottery Mound jewelers put a great deal of effort into producing bone beads. More than three-quarters of the Pottery Mound bead blanks were bone, while all of the Tijeras Pueblo bead blanks were stone.

The breakdowns of pendant blanks (Table 5.11) were not substantially different for the two sites. Both sites yielded pendant blanks of bone and of two taxa of shell. Pottery Mound had five types of stone; Tijeras Pueblo had six. Only Pottery Mound had a ceramic pendant blank.

Pottery Mound yielded more than four times as many re-worked pieces as Tijeras Pueblo, in line with the total numbers of jewelry pieces at each site. The re-worked pieces at Pottery Mound included stone, shell, bone and ceramic jewelry. Only re-worked shell pieces were found at Tijeras Pueblo.

Pottery Mound had more than four times as many pieces of raw material as Tijeras Pueblo, again in line with the total numbers of jewelry pieces. Pottery Mound yielded more taxa of shell raw material than Tijeras Pueblo, just as it had more taxa of finished shell jewelry.

Tijeras Pueblo rooms were about as likely to contain jewelry as Pottery Mound rooms. About half (51 percent) of Tijeras Pueblo rooms from all excavations contained jewelry; the same was true at Pottery Mound (53 percent). However, Pottery Mound rooms had a larger number of jewelry artifacts per room, on average (4.5, versus 2.3 for Tijeras Pueblo). Rooms at Pottery Mound contained up to 38 jewelry artifacts, but no room at Tijeras Pueblo had more than nine jewelry artifacts. The distribution of jewelry across rooms at Tijeras Pueblo may have been more equitable than at Pottery Mound; there, 35 percent of rooms with jewelry had only one jewelry artifact, and a few had quite a lot.

Eleven of Pottery Mound's 17 kivas contained jewelry. All three of the kivas excavated at Tijeras Pueblo contained jewelry artifacts. The mosaic found at Tijeras Pueblo is the most extraordinary piece found at either site, including as it did a number of turquoise pendants, a turquoise pendant blank, and several pieces of shell (worked raw material). The mosaic is also an indication of the re-use or re-working of jewelry artifacts in a possible attempt to adorn a kiva.

All of Tijeras Pueblo's unusual pieces (bracelet, button, hairpin, mosaic) were found in structures. The distribution of jewelry artifacts between structures (rooms and kivas) and those found in middens and non-structural areas is different for the two sites (Table 6.3). More Pottery Mound jewelry artifacts were discarded or lost in non-structural spaces. The reverse pattern is found at Tijeras Pueblo: more jewelry artifacts were discarded or lost in structures.

Jewelry artifacts were found in 13 percent of the excavated burials at the two sites—remarkably similar figures. Two burials at Pottery Mound yielded large numbers of jewelry items (317 *Nassarius* pendants in one, 85 selenite pendants in the other). Fourteen of the 21 burials with jewelry at Pottery Mound contained unusual completed jewelry and turquoise, compared to only one of nine burials with jewelry at Tijeras Pueblo. No turquoise was found with Tijeras Pueblo burials.

Although there appears to have been some variation in the distribution of jewelry within Pottery Mound, no such neighborhood pattern could be identified at Tijeras Pueblo.

In general, it appears that at least some Pottery Mound residents enjoyed wearing a wider variety of jewelry styles and more jewelry than at Tijeras Pueblo.

Table 6.3. Comparison of Jewelry by Provenience Category.
(Based on Tables 3.4 and 5.26)

	Pottery Mound	Tijeras Pueblo
Completed jewelry		
Structures	37.2%	58.4%
Non-structural areas	62.8%	41.6%
Count	1706	365
Blanks/raw material		
Structures	37.7%	53.2%
Non-structural areas	62.3%	46.8%
Count	175	47
Mosaic		
Structure		100%
Count		1
Combined		
Structures	37.2%	57.9%
Non-structural areas	62.8%	42.1%
Count	1881	413

REFERENCES CITED

Adler, Michael A.

2007a The Architecture of Pottery Mound Pueblo. In *New Perspectives on Pottery Mound Pueblo,* edited by Polly Schaafsma, pp. 29–53. University of New Mexico Press, Albuquerque.

2007b Room Data, Pottery Mound Pueblo. In *New Perspectives on Pottery Mound Pueblo,* edited by Polly Schaafsma, pp. 259–266. University of New Mexico Press, Albuquerque.

2007c Profile of the 1961 Bulldozer Trench. In *New Perspectives on Pottery Mound Pueblo,* edited by Polly Schaafsma, pp. 267–276. University of New Mexico Press, Albuquerque.

Ballagh, Jean H.

2011 *Pottery Mound: The 1957 Field Season*. Maxwell Museum Technical Series No. 10. Maxwell Museum of Anthropology, University of New Mexico. Albuquerque.

Ballagh, Jean H., and David A. Phillips, Jr.

2006 *Pottery Mound: The 1954 Field Season*. Maxwell Museum Technical Series No. 2, Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.

2008 *Pottery Mound: The 1955 Field Season*. Maxwell Museum Technical Series No. 8. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.

2015 "Ceremonial Rooms" at Pottery Mound, New Mexico. *Kiva* 79:405–427.

Bandelier, Adolf F.

1892 An Outline of the Documentary History of the Zuni Tribe. *Journal of American Ethnology and Archaeology* 3:1–115.

Bradley, Ronna Jane

1999 Shell Exchange within the Southwest: The Casas Grandes Interaction Sphere. In *The Casas Grandes World*, edited by Curtis F. Schaafsma and Carroll L. Riley, pp. 213–228. University of Utah Press, Salt Lake City.

Cordell, Linda S.

1980 University of New Mexico Field School Excavations at Pottery Mound, New Mexico 1979, Preliminary Report. Ms. Maxwell Museum of Anthropology archives, University of New Mexico, Albuquerque.

2004 Draft of Advanced Seminar on Pottery Mound, School of American Research, May 11–12, 2004. Ms. Maxwell Museum of Anthropology archives, University of New Mexico, Albuquerque.

Cordell, Linda S., Suzanne L. Eckert, and Hayward H. Franklin
2008 Profiles at Pottery Mound: The 1979 UNM Test Units. In *Chasing Chaco and the Southwest: Papers in Honor of Frances Joan Mathien*, edited by Regge N. Wiseman, Thomas C. O'Laughlin, Cordelia T. Snow, and Cathy Travis, pp. 67–82. Papers of the Archaeological Society of New Mexico No. 34, Albuquerque.

Crotty, Helen K.
1995 *Anasazi Mural Art of the Pueblo IV Period, A.D. 1300–1600: Influences, Selective Adaptation, and Cultural Diversity in the Prehistoric Southwest.* Maxwell Museum of Anthropology archives, Catalogue No. 95.26.1. University of New Mexico, Albuquerque.

2007 Western Pueblo Influences and Integration in the Pottery Mound Painted Kivas. In *New Perspectives on Pottery Mound Pueblo*, edited by Polly Schaafsma, pp. 85–107. University of New Mexico Press, Albuquerque.

Daigh, Janice R.
2012 *The Murals of Kiva 1 at Pottery Mound: A Visual Guide*. Ms. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.

Damp, Nicholas E.
2010 Rethinking Tijeras Pueblo, New Mexico. Paper presented to the 75th annual meeting of the Society for American Archaeology, St. Louis. Maxwell Museum of Anthropology Archives, Catalogue No. 2010.1.109. University of New Mexico, Albuquerque.

Di Peso, Charles C.
1974 *Casas Grandes: A Fallen Trading Center of the Gran Chichimeca,* Vol. 2. Amerind Foundation Series No. 9. Northland Press, Flagstaff.

Dutton, Bertha P.
1963 *Sun Father's Way: The Kiva Murals of Kuaua*. University of New Mexico Press, Albuquerque and Museum of New Mexico Press, Santa Fe.

Eckert, Suzanne L.
2007 Understanding the Dynamics of Segregation and Incorporation at Pottery Mound through Analysis of Glaze-Decorated Bowls. In *New Perspectives on Pottery Mound Pueblo*, edited by Polly Schaafsma, pp. 55–73. University of New Mexico Press, Albuquerque.

2008 *Pottery and Practice, The Expression of Identity at Pottery Mound and Hummingbird Pueblo*. University of New Mexico Press, Albuquerque.

Emslie, Steven D.
1981 Prehistoric Agricultural Ecosystems: Avifauna from Pottery Mound, New Mexico. *American Antiquity* 46:853–861.

Franklin, Hayward H.
2007 *The Pottery of Pottery Mound, A Study of the 1979 UNM Field School Collection, Part 1: Typology and Chronology.* Maxwell Museum Technical Series No. 5. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.

2008 *New Dates from Pottery Mound.* Maxwell Museum Technical Series No. 7. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.

2014 *The Pottery of Pottery Mound: Ceramic Surface Sampling, External Trade, and Internal Diversity.* Maxwell Museum Technical Series No. 22. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.

Frisbie, Theodore R.
2007 The Kiva Crew at Pottery Mound: 1960–1961. In *Texas and Points West: Papers in Honor of John A. Hedrick and Carrol P. Hedrick,* edited by Regge N. Wiseman, Thomas C. O'Laughlin, and Cordelia T. Snow, pp. 39–55. Papers of the Archaeological Society of New Mexico No. 33, Albuquerque.

Gladwin, Harold S., Emil W. Haury, E.B. Sayles, and Nora Gladwin
1965 *Excavations at Snaketown, Material Culture*. University of Arizona Press, Tucson.

Haury, Emil W.
1931 Minute Beads from Prehistoric Pueblos. *American Anthropologist* 33:80–87.

Hibben, Frank C.
1975 *Kiva Art of the Anasazi at Pottery Mound.* KC Publications, Las Vegas, Nevada.

1987a *Report on the Salvage Operations at the Site of Pottery Mound, New Mexico During the Excavation Seasons of 1977–1986, Part 1*. Maxwell Museum of Anthropology archives, University of New Mexico, Albuquerque.

1987b *Pottery Mound Salvage Operations Report 1977–1985, Part 2*. Maxwell Museum of Anthropology archives, University of New Mexico, Albuquerque.

1987c *Pottery Mound, New Mexico Duck Unit Burial Locations 1979–1986.* Maxwell Museum of Anthropology archives Catalogue No. 93.28.8. University of New Mexico, Albuquerque.

Judd, Neil M.
1954 The Material Culture of Pueblo Bonito. *Smithsonian Miscellaneous Collections Volume 124.* Lord Baltimore Press, Washington, D.C.

Judge, W. James
1974 *The Excavation of Tijeras Pueblo 1971–1973: Preliminary Report, Cibola National Forest, NM.* Report No. 3. USDA Forest Service, Southwest Region, Albuquerque.

Kidder, Alfred Vincent
1932 *The Artifacts of Pecos*. Papers of the Southwestern Expedition No. 6. Yale University Press, New Haven.

King, Dudley W., and Richard A. Bice
1992 *Subfloor Channels in Prehistoric Ruins: Anasazi Region of the Southwest.* Technical Notes, Albuquerque Archaeological Society, Albuquerque.

Merrin, Hope
1995 *Small White Disk Beads of the Northern Rio Grande Region, N.M.* Laboratory of Anthropology Notes No. 20. Office of Archaeological Studies, Museum of New Mexico, Santa Fe.

Mills, Barbara J.
2008 Remembering while Forgetting: Depositional Practice and Social Memory at Chaco. In *Memory Work: Archaeologies of Material Practices,* edited by Barbara J. Mills and William H. Walker, pp. 81–108. SAR Press, Santa Fe.

Minnis, Paul E., Michael E. Whalen, Jane H. Kelley, and Joe D. Stewart
1993 Prehistoric Macaw Breeding in the North American Southwest. *American Antiquity* 58:270–276.

Phillips, David A., Jr., and Jean H. Ballagh
2010 *The Pottery Mound Monitoring Program, 2009.* Maxwell Museum Technical Series No. 13. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.

2011 Guide to the Excavations at LA 416 (Pottery Mound). Ms. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.

Rapier, Marilyn
1985 A Shaman's Room at Pottery Mound. Maxwell Museum of Anthropology archives, Catalogue No. 2003.30.19. University of New Mexico, Albuquerque.

Schaafsma, Curtis F.
2007 Compilation of Excavated and Previously Reported Ceramics from Pottery Mound. In *New Perspectives on Pottery Mound Pueblo,* edited by Polly Schaafsma, pp. 277–294. University of New Mexico Press, Albuquerque.

Schaafsma, Polly
2007a Revisiting Pottery Mound. In *New Perspectives on Pottery Mound Pueblo,* edited by Polly Schaafsma, pp. 1–14. University of New Mexico Press, Albuquerque.

2007b The Pottery Mound Murals and Rock Art, Implications for Regional Interaction. In *New Perspectives on Pottery Mound Pueblo,* edited by Polly Schaafsma, pp. 137–166. University of New Mexico Press, Albuquerque.

Schorsch, Russell Lowell Gordon
1962 The Physical Anthropology of Pottery Mound: A Pueblo IV Site in West Central New Mexico. M.A. thesis, University of New Mexico. Maxwell Museum of Anthropology archives, Catalogue No. 2003.31.4. University of New Mexico, Albuquerque.

Schuyler, Lucy C.
2011 *The Jewelry of Tijeras Pueblo* (revised). Maxwell Museum Technical Series No. 15. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.

Schuyler, Lucy C., David A. Phillips, Jr., and Jean H. Ballagh
2013 *A Guide to Collections and Proveniences for Pottery Mound.* Maxwell Museum Technical Series No. 20. Maxwell Museum of Anthropology, University of New Mexico, Albuquerque.

Skinner, S. Alan
1966 A Ceremonial Room at Pottery Mound. *Southwestern Lore* 32(1):19–23.

Sundt, William M., and Richard A. Bice
1989 *Preliminary Report, Tijeras Canyon Pueblo Sites AS-10A and AS-10B.* Albuquerque Archaeological Society, Albuquerque.

Swartz, Deborah L., William H. Doelle
2013 What Do Romero Ruin and Other Sites Nearby Tell Us about Life in the Distant Past? *Archaeology Southwest* 27(1): 14–16.

Vivian, Patricia Bryan
1961 Kachina, The Study of Pueblo Animism and Anthropomorphism within the Ceremonial Wall Paintings of Pottery Mound and the Jeddito. M.F.A. thesis, University of Iowa. Maxwell Museum of Anthropology archives, University of New Mexico, Albuquerque.

Vivian, R. Gwinn
2007 Frank C. Hibben and Pottery Mound. In *New Perspectives on Pottery Mound Pueblo*, edited by Polly Schaafsma, pp. 15–27. University of New Mexico Press, Albuquerque.

Vivian, R. Gwinn, and Patricia Bryan Vivian
2004 Archaeological Investigations at Pottery Mound. The UNM Field School 1954–1961 and The Summer of 1960 Mural Project. Ms. Maxwell Museum of Anthropology archives, University of New Mexico, Albuquerque.

Wade, A. Nicole
2004 Social Complexity at Pottery Mound (LA416): An Intrasite Analysis of Mortuary Data. Student paper. Maxwell Museum of Anthropology archives, Catalogue Number 2006.1.59. University of New Mexico, Albuquerque.

Warner, Thor
1928 Rio Puerco Ruins. *American Anthropologist* 30:85–93.

Zimmerman, Nancy
2013 Puebloan Polychrome. *American Archaeology* 17(1):20–25.

Appendix A

THE DATA SET

The methodological aspects of this appendix address only specific resolutions of data discrepancies found while studying Pottery Mound's jewelry artifacts. General recommendations for discrepancies likely to be encountered with Pottery Mound artifacts and data may be found in *A Guide to Collections and Proveniences for Pottery Mound* (Schuyler et al. 2013). Most of the documentation about Pottery Mound artifacts can be found in three places.

The primary source of information for artifacts in the Maxwell Museum collections is the information written by excavators on slips of paper or paper bags, as they collected the artifacts. This written information was used to create the Pottery Mound Catalogue (an Excel spreadsheet), which covers all artifacts from Pottery Mound in the Maxwell Museum collections. As part of the reorganization of the collections, the information on paper bags was cut out and included in the archival plastic bag containing the associated artifacts. When the information was instead included on a loose slip of paper, that slip was similarly retained.

The second most important information source is specimen cards, albeit such cards were not prepared (or have not survived) for every recovered artifact. When they exist, the specimen cards may contain information such as a sketch, a description of artifact color and condition, measurements, the excavator's name, the excavation date, and a more detailed provenience than was provided on the associated bag or slip.

The third key source of information is the field notebooks. These sometimes contain sketches, measurements, and information about the context in which the artifact was found. Most of the notebooks were prepared by field school students, and the quality varies greatly. As is common with student notebooks,, it is always possible that an initial artifact description proved to be incorrect once the artifact reached the lab, but the notebook was not updated.

Attempts to match these disparate sources resulted in additional data, clarification of data for jewelry artifacts in the collections, and the identification of artifacts that, to date, have not been identified in the collections.

In the museum catalogue system set up by Frank Hibben, Pottery Mound is listed as "BPM" (the "B" stands for New Mexico). "BPM" numbers often appear on specimen cards. Some artifacts in the collection are marked with (or at least associated with) BPM numbers but have no corresponding specimen card. Some specimen cards do not include a BPM number and cannot be matched to an artifact in the collections. Some artifacts in the collections cannot be matched to either a specimen card or to a field notebook. Although tracking all of these artifacts may lead to duplication, I believe that the process allowed me to form a better picture of everything that has been documented about Pottery Mound jewelry.

As I matched sources of information for jewelry artifacts, I updated both the Pottery Mound Catalogue and the documentation stored with individual artifacts.

The Pottery Mound Jewelry Catalogue was created from data in the general catalogue produced as the Pottery Mound collections were reorganized. Table A.1 describes the data fields for the Pottery Mound Jewelry Catalogue. Table A.2 provides codes used to facilitate the classification and sorting of jewelry artifacts. The codes were first developed for Tijeras Pueblo jewelry; not all of those codes were used in the Pottery Mound jewelry study, leading to gaps in the sequence in Table A.2. Also, additional codes were defined for Pottery Mound jewelry for which there were no counterparts in the Tijeras Pueblo collections.

Table A.1. Pottery Mound Jewelry Catalogue Data Fields.

Column Heading	Definition
Accn Year	Year the accession was recorded by the Maxwell Museum.
Accn No	Nth accession that year.
Obj No	Nth artifact within the accession.
Dup	Alphabetic character to identify multiple objects with the same accession number.
BPM	Codes from specimen cards, used to identify artifacts prior to the current Maxwell Museum system. Codes appear as a fraction, with the numerator indicating the type of artifact ("10" for pottery, "20" for stone items in general, "22" for chipped stone, etc.) and the denominator indicating the nth artifact of the type. Not provided for every artifact.
Count	Number of objects. If a single object is broken into pieces, the count is 1. Not always included.
Description	Type of artifact (pendant, bead, etc.).
Description Code	See Table A.2 for details.
Material	What the artifact is made of.
Material Code	See Table A.2 for details.
Shape	Shape of artifact in its original state.
Shape Code	See Table A.2 for details.
Condition	Current appearance of the artifact.
Condition Code	See Table A.2 for details.
Length - Pendants - Tubular beads - Disc beads - *Conus*	Rounded to nearest millimeter. Generally the longest dimension except: - measured from the edge nearest the hole to the opposite edge. - measured from hole to hole. - greatest outer diameter. - from top (end with small opening) to bottom of shell.
Width	Rounded to nearest millimeter. Generally the maximum extent measured at a 90 degree angle from the length; the second greatest extent for rounded objects.
Depth	Rounded to nearest millimeter. Maximum thickness. Measured at 90 degree angles from the length and width.
Hole diameter	Rounded to nearest millimeter. Smallest diameter of the hole.
Neighborhood	See Table A.2 for details.
N/S	N for North, S for South, "unid" for unknown.
Standardized Provenience	Horizontal provenience corrected to provide a unique identity based on all available information. See Appendix B for details.

Table A.1. Pottery Mound Jewelry Catalogue Data Fields.

Column Heading	Definition
Horizontal Provenience	Where the artifact was found (room, kiva, midden etc.), including all known details.
Vertical Provenience	Level or depth where artifact was found.
Burial	Number of the burial associated with the artifact.
Date Excavated	As reported by the excavator. A date of 1/1/xx indicates that the year is known but not the exact day.
Assumed Date Excavated	Based on the notebooks, burial data, original horizontal provenience, or other reported information. Not always included.
Date Used for Sorting	The year, or "cor" for Cordell's 1979 work or "sur" for Phillips' surface collections
Field Notebook	Catalogue number for the field notebook, if available at the Maxwell Museum.
Photo	Photo is available in the Maxwell Museum archives.
Drawing	Sketch included on specimen card.
Comments	
Discrepancies	Other catalogue numbers, conflicting recorded information, etc.
Archival Status	See Table A.2 for details.
New Box No	Number of the Maxwell Museum storage bin containing the artifact bag.
Storage Location	Usually a shelf or drawer at the Maxwell Museum.

Table A.2. Codes for Data Sorting.

Code	Category	Comments
	Description	
D1	Bead	Hole is in the center.
D2	Bead, tiny	Diameter of 5 mm or less
D3	Bead blank	Probably would have been made into a bead.
D4	Bead blank, tiny	Probably would have been made into a tiny bead.
D6	Bracelet	
D7	Hair ornament	
D8	Pendant	Hole is near one edge (off-center).
D9	Pendant blank	Probably would have been made into a pendant.
D11	Unidentified jewelry	Either a bead or a pendant, but cannot determine which.
D12	Raw material—worked	Shell, turquoise, or other materials, modified but not enough to indicate a specific form.
D13	Raw material—unworked	Shell, turquoise, or other materials without visible modifications
D14	Unknown	Item could not be identified as either jewelry or raw material due to its condition.
D16	Pendant, multiple holes	Artifact appears to be a pendant but has more than one drilled hole.

Table A.2. Codes for Data Sorting.

Code	Category	Comments
D17	Gorget	Neck/throat piece
D18	Ring	Finger ring
D19	Earring	Function based on context of discovery
D20	Earring blank	
Material: Shell		
M2	*Cerithidea*	
M3	*Conus*	
M5	Gastropod	
M6	*Glycymeris*	
M8	*Haliotis*	Abalone (from the Pacific Coast)
M9	*Olivella*	
M10	Unionidae	
M11	Unidentified shell	
M30	Snail shell	
M37	Nacreous	Mother-of-pearl
M40	*Oliva*	
M41	*Turitella*	
M42	*Columbella*	
M43	Bivalve	
M44	*Spondylus*	
M52	Trivia	
M53	Nassarius	
M54	*Agaronia testacea*	
M55	*Cerithium*	
M56	*Laevicardium*	
M57	*Cardiidae*	
M58	*Pecten vogdesi*	
Material: Stone		
M13	Argillite	Also known as baked shale.
M14	Calcite	
M16	Muscovite	
M18	Selenite	
M22	Turquoise	
M23	Unidentified stone	
M32	Travertine	
M46	Gypsum	
M47	Hematite	
M49	Schist	
M50	Sandstone	
M51	Limestone	
Material: Bone		
M24	Bone	Not identified by taxon or element.
M34	Operculum	Fish
M45	Fish vertebra	

Table A.2. Codes for Data Sorting.

Code	Category	Comments
M48	Ornate Box Turtle	Plastron (turtle shell bottom)
	Material: Other	
M26	Ceramic	
	Shape	
S1	Disc	Flat
S3	Tubular	Includes "barrel" shaped *Olivella.*
S5	Heishi	Very thin, very small disc
S6	Arc	
S8	Round	
S9	Conical	
S11	Triangular	
S12	Trapezoid	
S13	Diamond	
S15	Whole shell	
S16	Unknown	
S17	Ovoid	
S18	Cylinder	
S20	Rectangular	
S21	Subrectangular	Rectangular with rounded corners
S22	Square	
S23	Rounded top, squared bottom	A shape found in pendants
S24	Sawtooth	Serrated edge
S25	5 sided	
S28	Irregular	Does not fit any recognizable shape.
S29	Oval—concave	Appears to be curved.
S32	Semi oval	D-shaped
S33	Transverse	Tubular bead that has holes through the long sides.
S34	Bird	
S35	Sphere	
S37	Bell	
S38	Whole valve	Bivalve
S39	Teardrop	
	Condition	
C1	Broken	In a countable number of pieces
C2	Burned	If present along with other conditions, "burned" was recorded.
C3	Identifiable	As jewelry or raw material
C6	Good	
C8	Shattered	Too many fragments to count
C9	Unknown	
C10	Reworked	Appears to be in its 2nd intended form.
	Neighborhood	
EN		Northeast
MN		Middle North

Table A.2. Codes for Data Sorting.

Code	Category	Comments
WN		Northwest
ES		Southeast
MS		Middle South
WS		Southwest.
K-x		Kiva; "x" indicates the kiva number.
K-E		Kiva in the East area; number not known
K-unid		Kiva; number not known.
NM		North Midden
SM		South Midden
non		Non-structural area
r/k		Room or kiva, neighborhood unknown
Rm		Room, neighborhood unknown
unid		Unknown
Status		
A1		Found at the Maxwell Museum.
A2		Listed in records but not found for examination.

I used information from the specimen cards for all jewelry artifacts with a BPM number to supplement data already in the Pottery Mound Catalogue. Many specimen cards contain a current catalogue number, and in some cases multiple catalogue numbers. The Maxwell Museum standard is to retain the earliest assigned catalogue number in its current system. Various paper documents and electronic files at the museum use these catalogue numbers, so Tables A.3 and A.4 track all of the catalogue numbers that might refer to a given jewelry artifact and identify the "approved" catalogue number in bold (as it appears in the Pottery Mound Jewelry Catalogue). At the same time, I checked the instances of multiple catalogue numbers against the entire Pottery Mound Catalogue to ensure that a duplicate "approved" catalogue number was not being introduced. If duplication had occurred, I appended an alphabetic character to the end of the catalogue number to ensure uniqueness. Most of the multiple catalogue numbers were resolved by consulting the specimen cards when a BPM number was available, and by selecting the earliest catalogue number assigned. The specimen cards were also checked for matching proveniences, excavation dates, excavator names, measurements, and sketches.

Table A.3 identifies the "approved" catalogue number in bold print along with other catalogue numbers that may be found in various records. All of the catalogue numbers are listed in order in the left-hand columns to make it easier to locate a specific catalogue number.

Table A.3. Items with Multiple Catalogue Numbers.
(The "approved" number is in boldface.)

Accn. Year	Accn. No.	Object No.	Dup. Code	Accn. Year	Accn. No.	Object No.	Dup. Code
57	**6**	**114**		78	1	163	
57	**6**	**114**		78	74	319	
57	**6**	**115**		58	1	85	
57	**6**	**115**		78	1	160	
57	**6**	**115**		78	74	316	
57	**6**	**116**		78	1	159	
57	**6**	**116**		78	74	315	
57	**6**	**117**		78	1	146	
57	**6**	**118**		78	1	154	
57	**6**	**118**		78	74	310	
57	**6**	**119**		78	1	14	
57	**6**	**119**		78	74	306	
57	**6**	**121**		78	1	136	
57	**6**	**122**		78	1	143	
57	**6**	**122**		78	74	305	
57	**6**	**123**		78	1	155	
57	**6**	**123**		78	74	311	
57	**6**	**124**		78	1	142	
57	**6**	**124**		78	74	304	
57	**6**	**125**		58	1	86	
57	**6**	**125**		78	1	161	
57	**6**	**125**		78	74	317	
57	**6**	**127**		78	1	57	
57	**6**	**127**		78	1	135	
57	**6**	**127**		78	74	300	
57	**6**	**128**		78	1	136	
57	**6**	**128**		78	74	301	
57	**6**	**129**		78	1	145	
57	**6**	**129**		78	74	307	
57	**6**	**145**	**AB**	68	2	15	
57	**6**	**145**	**AC**	68	2	16	
57	**6**	**145**	**AD**	68	2	5	
57	**6**	**145**	**AE**	68	2	10	
57	**6**	**145**	**AG**	68	2	12	
57	**6**	**145**	**AJ**	68	2	17	
57	**6**	**145**	**AK**	68	2	3	
57	**6**	**145**	**AL**	68	2	14	
57	**6**	**145**	**AO**	68	2	9	
57	**6**	**145**	**AQ**	78	1	560	
57	**6**	**145**	**AX**	68	2	18	
57	**6**	**145**	**AY**	68	2	6	
57	**6**	**145**	**AZ**	68	2	7	
57	**6**	**145**	**B**	68	2	4	
57	**6**	**145**	**BF**	68	2	71	

Table A.3. Items with Multiple Catalogue Numbers.
(The "approved" number is in boldface.)

Accn. Year	Accn. No.	Object No.	Dup. Code	Accn. Year	Accn. No.	Object No.	Dup. Code
57	**6**	**145**	**BG**	68	2	59	
57	**6**	**145**	**BK**	68	2	4x	
57	**6**	**145**	**BN**	68	2	20	
57	**6**	**145**	**BQ**	68	2	71	
57	**6**	**145**	**BS**	68	2	49	
57	**6**	**145**	**BT**	68	2	43	
57	**6**	**145**	**BU**	68	2	61	
57	**6**	**145**	**BV**	68	2	xx	
57	**6**	**145**	**BW**	68	2	76	
57	**6**	**145**	**BY**	68	2	19	
57	**6**	**145**	**CA**	68	2	1x	
57	**6**	**145**	**S**	68	2	2	
57	**6**	**145**	**X**	68	2	1	
57	**6**	**350**		98	53	447	
57	**6**	**364**		98	53	458	
57	**6**	**365**		98	53	458	
57	**6**	**366**		98	53	458	
57	**6**	**369**		98	53	458	
57	**6**	**393**		98	6	393	
58	1	48	A	**58**	**1**	**418**	
58	**1**	**60**	**A**	78	1	138	
58	**1**	**60**	**A**	78	74	297	
58	**1**	**68**	**A**	78	1	141	
58	**1**	**68**	**A**	78	74	294	
58	**1**	**69**	**A**	78	1	148	
58	**1**	**69**	**A**	78	74	298	
58	**1**	**70**	**A**	78	1	149	
58	**1**	**70**	**A**	78	74	295	
58	**1**	**71**	**A**	78	1	150	
58	**1**	**71**	**A**	78	74	292	
58	**1**	**72**	**A**	78	1	151	
58	**1**	**72**	**A**	78	74	293	
58	**1**	**73**	**A**	78	1	152	
58	**1**	**73**	**A**	78	74	309	
58	**1**	**74**	**A**	78	1	153	
58	**1**	**74**	**A**	78	74	296	
58	1	85		**57**	**6**	**115**	
58	1	86		**57**	**6**	**125**	
58	**1**	**94**	**A**	78	74	238	
58	**1**	**418**		58	1	48	A
68	2	1		**57**	**6**	**145**	**X**
68	2	2		**57**	**6**	**145**	**S**
68	2	3		**57**	**6**	**145**	**AK**
68	2	4		**57**	**6**	**145**	**B**

Table A.3. Items with Multiple Catalogue Numbers.
(The "approved" number is in boldface.)

Accn. Year	Accn. No.	Object No.	Dup. Code	Accn. Year	Accn. No.	Object No.	Dup. Code
68	2	5		**57**	**6**	**145**	**AD**
68	2	6		**57**	**6**	**145**	**AY**
68	2	7		**57**	**6**	**145**	**AZ**
68	2	9		**57**	**6**	**145**	**AO**
68	2	10		**57**	**6**	**145**	**AE**
68	2	12		**57**	**6**	**145**	**AG**
68	2	14		**57**	**6**	**145**	**AL**
68	2	15		**57**	**6**	**145**	**AB**
68	2	16		**57**	**6**	**145**	**AC**
68	2	17		**57**	**6**	**145**	**AJ**
68	2	18		**57**	**6**	**145**	**AX**
68	2	19		**57**	**6**	**145**	**BY**
68	2	20		**57**	**6**	**145**	**BN**
68	2	43		**57**	**6**	**145**	**BT**
68	2	49		**57**	**6**	**145**	**BS**
68	2	59		**57**	**6**	**145**	**BG**
68	2	61		**57**	**6**	**145**	**BU**
68	2	71		**57**	**6**	**145**	**BF**
68	2	71		**57**	**6**	**145**	**BQ**
68	2	76		**57**	**6**	**145**	**BW**
68	2	1x		**57**	**6**	**145**	**CA**
68	2	4x		**57**	**6**	**145**	**BK**
68	2	xx		**57**	**6**	**145**	**BV**
78	1	14		**57**	**6**	**119**	
78	1	57		**57**	**6**	**127**	
78	1	135		**57**	**6**	**127**	
78	1	136		**57**	**6**	**121**	
78	1	136		**57**	**6**	**128**	
78	1	138		**58**	**1**	**60**	**A**
78	1	141		**58**	**1**	**68**	**A**
78	1	142		**57**	**6**	**124**	
78	1	143		**57**	**6**	**122**	
78	1	145		**57**	**6**	**129**	
78	1	146		**57**	**6**	**117**	
78	1	148		**58**	**1**	**69**	**A**
78	1	149		**58**	**1**	**70**	**A**
78	1	150		**58**	**1**	**71**	**A**
78	1	151		**58**	**1**	**72**	**A**
78	1	152		**58**	**1**	**73**	**A**
78	1	153		**58**	**1**	**74**	**A**
78	1	154		**57**	**6**	**118**	
78	1	155		**57**	**6**	**123**	
78	1	159		**57**	**6**	**116**	
78	1	160		**57**	**6**	**115**	

Table A.3. Items with Multiple Catalogue Numbers.
(The "approved" number is in boldface.)

Accn. Year	Accn. No.	Object No.	Dup. Code	Accn. Year	Accn. No.	Object No.	Dup. Code
78	1	161		**57**	**6**	**125**	
78	1	163		**57**	**6**	**114**	
78	1	287		**78**	**74**	**250**	
78	1	291		**78**	**74**	**249**	
78	1	293		**78**	**74**	**235**	
78	1	317		**78**	**74**	**272**	
78	1	325		**78**	**74**	**271**	
78	1	334		**78**	**74**	**266**	
78	1	335		**78**	**74**	**267**	
78	1	336		**78**	**74**	**268**	
78	1	337		**78**	**74**	**269**	
78	1	338		**78**	**74**	**271**	
78	1	339		**78**	**74**	**271**	
78	1	340		**78**	**74**	**271**	
78	1	458		**78**	**74**	**116**	
78	1	463		**78**	**74**	**223**	
78	1	479		**78**	**74**	**155**	
78	1	560		**57**	**6**	**145**	**AQ**
78	1	569		**78**	**74**	**143**	
78	1	572		**78**	**74**	**140**	
78	1	574		**78**	**74**	**138**	
78	1	584		**78**	**74**	**74**	
78	1	586		**78**	**74**	**100**	
78	1	621		**78**	**74**	**45**	
78	53	411		**98**	**53**	**411**	
78	**74**	**45**		78	1	621	
78	**74**	**74**		78	1	584	
78	**74**	**100**		78	1	586	
78	**74**	**116**		78	1	458	
78	**74**	**138**		78	1	574	
78	**74**	**140**		78	1	572	
78	**74**	**143**		78	1	569	
78	**74**	**155**		78	1	479	
78	**74**	**223**		78	1	463	
78	**74**	**235**		78	1	293	
78	74	238		**58**	**1**	**94**	**A**
78	**74**	**249**		78	1	291	
78	**74**	**250**		78	1	287	
78	**74**	**266**		78	1	334	
78	**74**	**267**		78	1	335	
78	**74**	**268**		78	1	336	
78	**74**	**269**		78	1	337	
78	74	270		**78**	**74**	**271**	
78	**74**	**271**		78	1	325	

Table A.3. Items with Multiple Catalogue Numbers.
(The "approved" number is in boldface.)

Accn. Year	Accn. No.	Object No.	Dup. Code	Accn. Year	Accn. No.	Object No.	Dup. Code
78	**74**	**271**		78	1	338	
78	**74**	**271**		78	1	339	
78	**74**	**271**		78	1	340	
78	**74**	**271**		78	74	270	
78	**74**	**272**		78	1	317	
78	74	292		**58**	**1**	**71**	**A**
78	74	293		**58**	**1**	**72**	**A**
78	74	294		**58**	**1**	**68**	**A**
78	74	295		**58**	**1**	**70**	**A**
78	74	296		**58**	**1**	**74**	**A**
78	74	297		**58**	**1**	**60**	**A**
78	74	298		**58**	**1**	**69**	**A**
78	74	300		**57**	**6**	**127**	
78	74	301		**57**	**6**	**128**	
78	74	304		**57**	**6**	**124**	
78	74	305		**57**	**6**	**122**	
78	74	306		**57**	**6**	**119**	
78	74	307		**57**	**6**	**129**	
78	74	308		**57**	**6**	**117**	
78	74	309		**58**	**1**	**73**	**A**
78	74	310		**57**	**6**	**118**	
78	74	311		**57**	**6**	**123**	
78	74	315		**57**	**6**	**116**	
78	74	316		**57**	**6**	**115**	
78	74	317		**57**	**6**	**125**	
78	74	319		**57**	**6**	**114**	
98	6	393		**57**	**6**	**393**	
98	**53**	**411**		78	53	411	
98	53	447		**57**	**6**	**350**	
98	53	458		**57**	**6**	**364**	
98	53	458		**57**	**6**	**365**	
98	53	458		**57**	**6**	**366**	
98	53	458		**57**	**6**	**369**	

Table A.4 identifies the "approved" catalogue numbers of jewelry artifacts that are also documented with a catalogue number that is valid for a different artifact (not necessarily jewelry) in the collections.

Table A.4. Catalogue Numbers Assigned to Multiple Artifacts.

"Approved" Catalogue No.				Also Documented As		
Accn. Year	Accn. No.	Object No.	Alpha. Suffix	Accn. Year	Accn. No.	Object No.
57	6	46		57	6	78
57	6	47		57	6	79
57	6	114		58	1	88
57	6	116		58	1	84
57	6	117		58	1	67
57	6	117		78	74	308
57	6	118		58	1	75
57	6	119		58	1	64
57	6	121		58	1	77
57	6	121		78	74	312
57	6	122		58	1	63
57	6	123		58	1	76
57	6	128		58	1	58
57	6	129		58	1	65
57	6	140		78	74	238
57	6	359		57	6	360
58	1	60	A	58	1	60
58	1	68	A	58	1	68
58	1	69	A	58	1	69
58	1	70	A	58	1	70
58	1	71	A	58	1	71
58	1	72	A	58	1	72
58	1	73	A	58	1	73
58	1	74	A	58	1	74
58	1	94	A	58	1	94
58	1	416		2007	46	5759
58	1	416		2007	46	5765

For jewelry artifacts, the incorrect catalogue numbers remain in the Pottery Mound Catalogue, but with no information for the entry other than a note of the correct catalogue number in the Comments column. All of the data accumulated for the jewelry artifact is recorded with the "approved" catalogue number.

Recorded Artifact Data

The Pottery Mound Jewelry Catalogue (Excel spreadsheet) has four tabs. The "Collections" tab addresses each single artifact (or group of artifacts packaged together in an archival bag) and stored at the Maxwell Museum. Each row in that worksheet includes all of the currently available information about the object or objects, as defined in Tables A.1 and A.2.

There are two tabs for the Missing artifacts. “Missing-Prev Cat” details what is known about the 167 jewelry artifacts documented from earlier catalogued data. “Missing-Notebooks” details what is known about the 456 jewelry artifacts mentioned in notebooks and inventories. These pieces may indeed be in the collections, but the available information could not be matched to that for any artifact in the collections. Although the missing artifacts were excavated and documented in some fashion, it appears that they did not find their way into the collections, or may not yet have been identified within the general collections of the Maxwell Museum. The data parallel the definitions in Table A.1 where available. Measurements that were reported are shown in one of two columns, in inches or millimeters depending on how the measurements were reported. The “Source” column identifies the documents that describe the artifact.

Artifacts listed under the “Missing-Prev Cat” tab were given a “BPM” code, or were assigned a Maxwell Museum catalogue number, or were documented on specimen cards. In such cases, no artifact in the collections has that “BPM” code or museum catalogue number, and I was unable to make a match based on other available information. Given that so many artifacts were assigned multiple catalogue numbers over time, it is possible that these artifacts are in the collections and simply not identifiable.

The fourth tab in the Pottery Mound Jewelry Catalogue lists artifacts from Dan Adams, which is summarized below in Table A.6. The data follow the definitions in Table A.1 where available.

The excavations by UNM’s Anthropology Club in 1962, in an unidentified room in the “Northwest” portion of the site, yielded a stone pendant and half of a turquoise bead (Skinner 1966:19). There is no other record of these pieces of jewelry, so they were not included in this study.

Discrepancies

Some of the information in the Comments column of the Pottery Mound Jewelry Catalogue identifies and explains discrepancies found in the documentation for artifacts.

Standardized Proveniences

During the many excavation seasons, it was common to number each year’s rooms beginning with the number “1.” If the name of the excavator or the year of the excavation was not provided, it is difficult to identify the actual provenience of an artifact (e.g., an artifact from “Room 2” could have been from the second room found in 1954, or the second room found in 1955, and so on). In order to analyze jewelry by provenience and distinguish structures versus non-structural areas, I developed Standardized Proveniences that provide unique proveniences (where possible) for each artifact. The details of this process can be found in *A Guide to Collections and Proveniences for Pottery Mound* (Schuyler et al. 2013).

"Unknown" Artifacts

Thirteen artifacts in the collections could not be classified as either jewelry artifacts or raw material, either due to their condition or because they were unavailable for examination. All of the Unknown artifacts are shell (Table A.5).

Table A.5. "Unknown" Artifacts by Provenience.

Description	Provenience	Comments
Unidentified shell	Unknown	Fragment
Unidentified shell	North Midden	Unavailable for examination
Unidentified shell	Surface (Cordell 1979)	Unavailable for examination
Snail shell	North Midden	Unavailable for examination
Gastropod	Cordell 1979 test, SE quadrant	Fragment
Snail shell	Unknown	Shattered
Unionidae	North Midden	Fragment
Olivella	Duck unit, Room 10	Fragment
Olivella	Room C-18	Fragment
2 unidentified shells	North Midden	Shattered
Unidentified shell	Duck Unit, Room 2	Shattered
Unidentified shell	Cordell 1979 test, SW quadrant	Fragment

The Dan Adams Artifacts

Dan Adams was a private individual who dug at Pottery Mound in the 1970s, with the permission of the Huning family. He donated his collection from the site to the Maxwell Museum of Anthropology. There is no provenience information for the artifacts. Besides the items listed in Table A.6, the collection includes a modern plastic disc bead. The collection is listed in the Pottery Mound Jewelry Catalogue under the "Dan Adams Collection" tab. The Dan Adams artifacts were not included in this study.

Table A.6. Dan Adams Collection: Prehistoric Jewelry Artifacts.

Jewelry Type	Count
Beads	
Tubular bone	38
Olivella whole shell	23
Tiny disc of unidentified shell	20
Tiny heishi of unidentified shell	6
Disc of unidentified shell	3
Turquoise disc	2
Tiny heishi of argillite	2
Tiny disc of unidentified stone	2
Pendants	
Turquoise	4
Ceramic	3
Argillite	2
Gastropod	2
Glycymeris	2
Conus	1
Turitella	1
Spondylus	1
cf. *Haliotis*, fish shape	1
Gypsum	1
Unidentified fossilized shell	1
Pendant or Bead	
cf. *Haliotis*, ram's head shape	1
Blanks	
Tiny bead blank of argillite	1
Pendant blank of unidentified material	1
Raw Material	
Turquoise, unworked	11
Turquoise, worked	9
Olivella, unworked	2
Glycymeris, worked	1
Unknown (Could not determine whether item is jewelry or raw material, due to condition.)	
Olivella	11
Unidentified shell	5
Total	157

MAXWELL MUSEUM OF ANTHROPOLOGY

Appendix B

POTTERY MOUND JEWELRY UNRESOLVED ISSUES

Artifacts Documented but Not Found

In addition to the 1,429 artifacts I found in the Maxwell Museum collections, I documented 623 jewelry artifacts and pieces of raw material that could not be matched to items in the collections. Some of the 1,429 catalogued artifacts are described as being "unavailable for examination," meaning that the corresponding artifact bags were either empty or misfiled. Of the 623 missing pieces, 167 were assigned catalogue numbers at various times in the past or were documented on specimen cards at the Maxwell Museum, or both. My assumption is that someone other than the excavators had seen the artifacts and agreed with their description. These pieces are summarized in Table B.1.

Table B.1. Missing Items with Catalogue Numbers or Specimen Cards or Both.

	Bone	Shell	Stone	Unknown	Total
Beads	110	9		1	120
Pendants		8	11	1	20
Unworked		17	6		23
Worked		4			4
Total	110	38	17	2	167

For most of the 110 bone beads listed in Table B.1, the shape is unknown; 27 of the bone beads were described as tubular, one as transverse, and one as square. Three of the nine shell beads were described as *Olivella;* for the remaining six, the taxon was not provided. One unidentified shell bead would have been classified as tiny. One bead was listed as shell or bone.

Three of the 11 listed stone pendants were described as being made from turquoise, three from aragonite, and one from selenite. For the remaining stone pendants, the materials were not documented. For five of the eight shell pendants, the taxon was not listed. One shell pendant was described as abalone (*Haliotis*), and the remaining two were described as *Conus*. No pendants were described as having multiple holes.

Thirteen of the 17 pieces of unworked shell were not described by taxon, but one was described as "fresh water." Three were described as brachiopod, one as *Olivella*.

The six unworked pieces of stone were all described as turquoise.

None of the four pieces of worked shell was documented by taxon.

Aragonite is the only material mentioned in this group of items that is not found among the 1,429 jewelry-related artifacts in the Maxwell Museum collections.

The student notebooks and other summaries of fieldwork at Pottery Mound reported 456 items (Table B.2) that could not be matched to any of the artifacts either in the collections or listed in Table B.1.

Table B.2. Missing Items Mentioned in Notebooks and Other Field Summaries.

	Bone	Shell	Stone	Ceramic	Unknown	Total
Beads	205	39	22	1	5	272
Bead Blanks	2					2
Pendants	4	14	125	2	1	146
Pendant Blanks			2	1		3
Earring	1					1
Gorget	1					1
Hair Ornament	1					1
Unworked		8	3			11
Worked		3	2			5
Raw Material		10	4			14
Total	214	74	158	4	6	456

The validity of the description of these 456 items is less reliable than for the items in Table B.1. About 45 percent of the Table B.2 items were bone beads.

One bone bead was documented as measuring 3/16 by 1/4 inch (4.8 by 6.35 mm) and would have been classified as tiny. The shapes of 92 of the bone beads were not documented. Of the remaining bone beads, 110 are described as tubular, one as transverse, and one as oval. Thirty-three of the shell beads are described as *Olivella.* One shell bead documented as being 1/8 inch (3.18 mm) in diameter would have been classified as tiny. The remaining shell beads were not described by taxon. Twelve of the 22 stone beads were described as turquoise (nine were reported as found together), six as siltstone (all reported as found together), one as travertine, and one as quartz. For two stone beads, the raw material was not identified. None of the jewelry artifacts actually in the collections is made of either quartz or siltstone.

Of the 125 stone pendants listed in Table B.2, 97 are described as being made from selenite. Eighty-five of those selenite pendants were reported as associated with Burial No. 45 in the South Midden (which was reported to have 96 selenite “pendants and tablets”). The collections include 11 tablets (pieces without holes) of selenite associated with Burial No. 45; it may be that the “tablets” found their way into the collections while the “pendants” did not.

Six stone pendants were described as being made from siltstone, six from turquoise, two from quartz, two from gypsum, and one each from travertine and crystal. No quartz, siltstone, or crystal pendants are present in the collections. For nine stone pendants, the raw material was undocumented. The one missing stone pendant with multiple holes was recorded as made of siltstone.

Three of the 14 shell pendants were described as mother-of-pearl, two as *Conus*, two as auger (Terebridae), and one as *Glycymeris*. The remaining six shell pendants were not documented by taxon. There are no auger shell items in the surviving collections.

One of the four bone pendants was described as being made from a bear canine. There are no pendants made from teeth in the collections.

Five of the raw material pieces were described as being worked, 11 as unworked; for 14 pieces there is no mention of any work and they have been listed as raw material in Table B.2. Two of the unworked pieces of stone were described as turquoise and one as a crinoid stem. None of the jewelry artifacts in the collections was made from crinoid stems.

Taken together (Tables B.1 and B.2), these 623 missing jewelry artifacts include 392 beads, 315 of them made from bone. For both beads in the collections and missing beads, 80 percent of the Pottery Mound beads are bone.

Shells Associated with a Cremation

During Cordell's work at Pottery Mound in 1979, a cremation (Burial No. 9.2) was found in the North Midden stratigraphic test. The cremation was reported to include 35 burned *Olivella* shell beads (Cordell 1980:5–6). There is some confusion about these beads.

The documentation for Catalogue No. 79.17.2 describes shell, sherds, and bone "material believed to be in association with burial #2 (cremation), painted & plainware sherds, approximately 200 small shells and animal bones," submitted by Cordell (Material Culture records 1998, 3 of 3; Catalogue No. 2013.79.3).

The documentation for Catalogue No. 81.25.28 describes a box of whole *white* shell beads and miscellaneous animal bone from a cremation. The documentation for Catalogue No. 2013.79.5 states that this box of beads was missing from the Maxwell Museum's Osteology Laboratory. Other documentation in the same folder mentions a cremation found in the Macaw Arroyo, and lists artifacts found with the cremation (Catalogue No. 87.18.16); no shells are mentioned. Although the folder appears to be dated April 16, 1983, the Macaw area was excavated in 1977 (per a field notebook, Catalogue No. 2003.36.25). The Osteology Laboratory records indicate that a Macaw [Arroyo] cremation (Catalogue No. 87.18.16) was found without any jewelry, and explains that April 16, 1983 is either the excavation date or the date the cremation was reported to the lab. An "Informal Inventory" made in 1995 (Catalogue No. 2013.79.6) lists a number of "questionable burials" in April 1983, including a cremation from Macaw Arroyo with associated sherds, corn, adobe, chipped stone, turquoise pendant, and shell and bone beads.

I suspect that 35 burned *Olivella* shell beads were found with the cremation excavated in 1979 (Burial No. 9.2) and that additional shell beads may or may not have been found with a cremation excavated in Macaw Arroyo in 1977 or sometime thereafter. The Macaw cremation was in the northern portion of the site, but not in the North Midden (see Phillips and Ballagh 2010, Figure 5).

The collections include three types of artifacts that share Catalogue No. 79.17.2. The bag marked 79.17.2a contains sherds. The bag marked 79.17.2b contains one sherd and multiple bone fragments. The bag marked 79.17.2c contains more than 200 *Nassarius* shell pendants. The last are very small and easily thought of as beads, but they are not white and obviously not *Olivella*. There is no mention of a cremation on the bags that contain these artifacts. the Osteology Lab records indicate that Burial No. 9.2, Catalogue No. 79.17.2, was found with 35 burned *Olivella* beads, but the burial was instead associated with a box of beads marked 81.25.28.

Maxwell Museum records indicate that artifacts given Catalogue Nos. 81.25.1 through 81.25.32 were turned over to the Maxwell Museum on June 1, 1981, when Linda Cordell moved out of her office. Catalogue No. 81.25.28 was described as "PM box of whole shell beads & misc animal bone from cremation. Human bones stored in Osteology." When I showed the *Nassarius* pendants to Linda Cordell in 2012, she indicated that they didn't look right and that those found with the cremation in 1979 were *Olivella* beads.

The collections do not include a group of 35 *Olivella* shell beads, either associated with Burial No. 9.2 or otherwise. The set of *Nassarius* pendants is listed in the collections under Catalogue No. 79.17.2c, but the packaging does not identify them as associated with a burial.

It may be that the 200+ *Nassarius* pendants were associated with the Macaw Arroyo cremation and were handed over to Linda Cordell, who then turned them over to the Maxwell Museum where they were recorded under Catalogue No. 79.17.2 (and mistakenly associated with Burial No. 9.2, found in her 1979 North Midden test). However, this study associates the 317 *Nassarius* pendants n the collections with Burial 9.2 and does not include the 35 missing *Olivella* beads in the counts of missing items.

Room Counts

In order to analyze the distribution of jewelry artifacts across Pottery Mound, I estimated the number of excavated rooms based on field and rendered maps, rooms identified in the Pottery Mound Catalogue Excel spreadsheet, rooms identified on paper documents (such as specimen cards) for jewelry artifacts (Table B.1), rooms described in student notebooks (Table B.2) and rooms in the published reports on the 1954, 1955, and 1957 field schools (Ballagh 2011; Ballagh and Phillips 2006, 2008). Table B.3 provides a list of the identified rooms and the relevant sources.

Detailed Listings of Pottery Mound Jewelry

Table B.4 provides the distribution of numbers of rooms by number of jewelry artifacts found per room, by neighborhood. Rooms containing jewelry artifacts in the collections and those containing jewelry missing from the collections are both included. Missing jewelry artifacts were reported from rooms that yielded jewelry artifacts in the collections, as well as from rooms that did not. Additional neighborhood-oriented data are summarized in Tables B.4 through B.9.

Table B.3. Documented Rooms by Source.

Room No.	Maps	Pottery Mound Catalogue	Catalogue/ Specimen Records	Field Notebooks	1954, 1955, 1957 Reports	Neighbor-hood*
Rooms Documented in 1954 (28 Total)						
A-1	x	x		x	x	NE
A-2	x	x		x	x	NE
A-3	x	x		x	x	NE
A-4	x	x			x	NE
A-5	x	x			x	NE
A-6	x	x	x	x	x	NE
A-7	x	x			x	NE
A-8	x	x			x	NE
A-9	x	x		x	x	NE
A-10	x	x			x	NE
A-11	x	x			x	NE
A-12	x	x			x	NE
A-13		x			x	MN
A-14	x	x			x	MN
A-15	x	x		x	x	MN
A-17	x	x		x	x	MN
A-18	x	x		x	x	MN
A-19	x	x			x	MN
A-21	x	x			x	MN
A-22	x	x			x	MN
A-23	x	x			x	MN
H-9	x	x		x	x	MN
H-10	x			x	x	MN
I-9	x			x	x	MN
I-10	x			x	x	MN
S. Midden, Room 2		x				SW
S. Midden, Room 3		x				SW
S. Midden, Room 7		x		x		SW
No. of Rooms	24	25	1	13	25	
Rooms Documented in 1955 (25 Total)						
A-24	x	x		x	x	MN
B-2	x	x			x	NW
B-3	x	x		x	x	NW
B-4	x	x		x	x	NW

Table B.3. Documented Rooms by Source.

Room No.	Maps	Pottery Mound Catalogue	Catalogue/ Specimen Records	Field Notebooks	1954, 1955, 1957 Reports	Neighbor-hood*
B-5	x	x			x	NW
B-6	x	x			x	NW
B-7	x	x			x	NW
B-8	x	x			x	NW
B-9		x			x	NW
B-9/14	x				x	
B-10	x	x			x	NW
B-11	x	x			x	NW
B-12	x	x	x		x	NW
B-13	x	x			x	NW
B-14		x			x	NW
B-15	x	x	x	x	x	NW
B-16	x	x	x	x	x	NW
B-17	x	x	x	x	x	NW
B-18	x	x	x	x	x	NW
B-19	x	x			x	NW
B-20	x	x			x	NW
B-21	x	x			x	NW
B-22	x	x		x	x	NW
Room in SE Trench**					x	
S. Midden, Room 4		x				SW
S. Midden, Room 5		x				SW
No. of rooms	21	24	5	8	24	
Rooms Documented in 1957(30 Total)						
N of Kiva 3	x	x			x	NE
E of Room N of Kiva 3	x	x		x	x	NE
C-1	x	x			x	SE
C-2	x	x			x	SE
C-3	x	x			x	SE
C-4	x	x			x	SE
C-5	x	x			x	SE
C-6	x	x			x	SE
C-7	x	x		x	x	SE
C-8	x	x			x	SE

Table B.3. Documented Rooms by Source.

Room No.	Maps	Pottery Mound Catalogue	Catalogue/ Specimen Records	Field Notebooks	1954, 1955, 1957 Reports	Neighbor-hood*
C-9	x			x	x	SE
C-10	x	x		x	x	SE
C-11/12	x	x	x	x	x	SE
C-13	x	x			x	SE
C-14	x	x			x	SE
C-15	x	x			x	SE
C-16	x	x			x	SE
C-17	x	x			x	SE
C-18	x	x	x	x	x	SE
C-19	x	x			x	SE
C-20	x	x			x	SE
C-21	x	x			x	SE
C-22	x	x	x	x	x	SE
C-23	x	x			x	SE
C-24	x			x	x	SE
C-25	x			x	x	SE
C-26	x	x			x	SE
C-27	x	x			x	SE
C-28	x	x	x		x	SE
N of Kiva 7		x				NW
No. of rooms	29	27	4	9	29	
Rooms Documented in 1958 (28 Total)						
D-1	x	x	x			MN
D-2	x	x	x			MN
D-3	x	x				MN
D-4	x	x				MN
D-5	x	x				MN
D-6	x	x		x		MN
D-7	x	x				SW
D-8	x	x				SW
D-9	x	x		x		SW
D-10	x	x	x	x		SW
D-11			x	x		SW
D-12	x	x		x		SW
D-13	x	x				SW
D-14	x	x				SW
D-15	x	x				SW

Table B.3. Documented Rooms by Source.

Room No.	Maps	Pottery Mound Catalogue	Catalogue/ Specimen Records	Field Notebooks	1954, 1955, 1957 Reports	Neighbor-hood*
D-16	x	x		x		SW
D-17	x	x				SW
D-18	x	x		x		SW
D-19	x			x		SW
D-20	x	x		x		SW
D-22	x	x	x	x		SW
D-23	x					SW
D-24	x	x				SW
D-25	x	x				SW
D-26	x	x				MN
D-27	x	x				MN
Below D-27		x				MN
D-28	x					MN
No. of rooms	26	24	5	10		
Rooms Documented in 1960–1961 (126 Total)						
F-1	x	x				NW
F-2	x	x		x		NW
F-3	x	x		x		NW
F-4	x	x	x	x		NW
F-5		x				NW
F-6		x		x		NW
F-6a	x					NW
F-7	x	x		x		NW
F-8	x	x		x		NW
F-9	x	x				NW
F-10	x	x				NW
F-11	x	x				NW
F-12	x	x		x		NW
F-14	x	x		x		MN
F-15	x	x				MN
F-16	x	x	x	x		MN
F-17	x	x		x		MN
F-18	x	x		x		MN
F-19	x	x		x		MN
F-20	x	x				MN
F-21		x				MN
F-22	x	x		x		MN

Table B.3. Documented Rooms by Source.

Room No.	Maps	Pottery Mound Catalogue	Catalogue/ Specimen Records	Field Notebooks	1954, 1955, 1957 Reports	Neighbor-hood*
F-23	x	x		x		MS
N of F-23		x				MS
F-24	x	x		x		MS
F-25	x	x		x		MS
F-26	x	x		x		MS
F-27	x	x				MS
F-28	x	x	x			MS
F-29	x	x				MS
F-30	x	x		x		MS
F-31	x	x				MS
F-32	x	x		x		MS
F-33	x	x				MS
F-34	x	x				MS
F-35	x	x		x		MS
F-36	x	x		x		MS
F-37	x	x				MS
F-40	x	x		x		SW
F-41	x	x				SW
F-45	x	x		x		MN
N of F-45		x				MN
F-46	x	x		x		MN
F-47		x				SW
F-52	x	x				NW
F-53	x	x				SW
F-54	x	x		x		SW
F-55		x				Unident.
F-56		x				Unident.
F-62		x				Unident.
F-63	x	x		x		NW
F-65		x				Unident.
F-68	x	x				Unident.
F-69	x					MS
F-70** *	x	x		x		MS
F-71	x					MS
F-72	x					MS
F-73	x					MS
F-74	x					MS

Table B.3. Documented Rooms by Source.

Room No.	Maps	Pottery Mound Catalogue	Catalogue/ Specimen Records	Field Notebooks	1954, 1955, 1957 Reports	Neighbor-hood*
F-75	x					MS
F-76	x					MS
F-77	x					MS
F-78	x					MS
F-79	x					MS
F-80	x					MS
F-81	x					SW
F-82	x	x				MS
F-83	x					MS
F-84	x					MS
F-85	x					SE
F-88		x				Unident.
SF-1	x	x				MS
SF-2	x					MS
SF-3	x			x		MS
SF-4	x					MS
SF-5	x					MS
SF-6	x					MS
SF-7	x					SW
SF-8	x					SW
SF-9	x	x				SW
SF-10	x	x				SW
SF-11	x	x				SW
SF-12	x					SW
SF-13	x	x				SW
SF-14	x					SW
SF-19	x	x				Unident.
W of SF-19		x				Unident.
SF-20		x				Unident.
SF-21	x	x				Unident.
SF-23	x	x		x		MN
SF-24	x	x				Unident.
SF-33		x				MN
SF-35	x	x				MN
SF-36	x	x		x		MN
SF-40	x	x				NW
SF-40B		x				Unident.

Table B.3. Documented Rooms by Source.

Room No.	Maps	Pottery Mound Catalogue	Catalogue/ Specimen Records	Field Notebooks	1954, 1955, 1957 Reports	Neighbor-hood*
SF-41	x			x		NW
SF-50	x	x				MS
SF-51	x	x				MS
SF-52	x	x				MS
SF-53	x	x		x		MS
SF-54	x	x				MS
SF-55		x		x		MS
SF-56	x			x		MS
SF-57	x	x				MS
SF-58	x	x				MS
SF-60	x	x		x		MS
SF-61	x	x		x		MS
SF-62	x	x				MS
SF-63	x	x				MS
SF-64	x	x				MS
SF-65	x	x		x		Unident.
SF-70	x	x				SW
SF-71	x	x		x		SW
SF-75	x	x				SW
SF-76	x					SW
SF-77	x	x				Unident.
SF-78	x					Unident.
SSF-1	x					SW
SSF-2	x					SW
SSF-3	x					SW
SSF-4	x					SW
SSF-6	x					SW
SSF-7	x					Unident.
SSF-8	x					Unident.
1st Room S of K8	x					MS
No. of rooms	110	89	3	38		
Rooms Documented during the "Salvage" Years (33 Total)						
Duck Room 1	x	x				NE
Duck Room 2	x	x		x		NE
Duck Room 3	x	x				NE
Duck Room 4	x	x				NE

Table B.3. Documented Rooms by Source.

Room No.	Maps	Pottery Mound Catalogue	Catalogue/ Specimen Records	Field Notebooks	1954, 1955, 1957 Reports	Neighbor-hood*
Duck Room 5	x	x				NE
Duck Room 6	x	x				NE
Duck Room 7	x	x				NE
Duck Room 8	x	x				NE
Duck Room 9	x	x		x		NE
Duck Room 10	x	x		x		NE
Duck Room 11	x	x				NE
Duck Room 12	x	x				NE
Duck Room 13	x	x		x		NE
Duck Room 14	x	x		x		NE
Duck Room 15	x	x				NE
Duck Room 16	x	x				NE
Duck Room 17	x	x				NE
Duck Room 18		x				NE
Duck Room 19	x	x		x		NE
Duck Room 20	x			x		NE
Duck Room 21	x	x				NE
Duck Room 22	x	x				NE
Duck Room 23	x	x				NE
Duck Room 24	x	x				NE
Duck Room 25	x	x				NE
Duck Room 26	x	x				NE
Duck Room 27	x	x				NE
Duck Room 28	x	x				NE

Table B.3. Documented Rooms by Source.

Room No.	Maps	Pottery Mound Catalogue	Catalogue/ Specimen Records	Field Notebooks	1954, 1955, 1957 Reports	Neighbor-hood*
Duck Room 29	x			x		NE
Duck Room 30	x	x				NE
Swan Room 99	x			x		NE
Swan Room 100	x	x				NE
Swan Room 101	x	x				NE
No. of rooms	32	30	0	9		
Total No. of Documented Rooms	**242**	**219**	**18**	**87**	**78**	

*MN = middle north; NE = northeast, SE = southeast, MS = middle south, SW = southwest, NW = northwest.

**The published report does not specify which South Midden room was included. I assume it is either Room 4 or Room 5.

*** Room F-70 was also documented as the second room south of Kiva 8.

Table B.4. Number of Rooms by Number of Jewelry Artifacts per Room, by Neighborhood.

No. of Artifacts per Room	North-east	Middle North	North-west	Southeast	Middle South	South-west
In the Collections						
1	13	8	12	8	4	6
2	1	4	6	1	1	1
3	2	2	1	4	1	
4				1		
5	2		1			1
6				2		
7						
8			2			
9		1				
11	1	2	1			
13				1		
19		1				
32	1					
Total	20	18	23	17	6	8

Table B.4. Number of Rooms by Number of Jewelry Artifacts per Room, by Neighborhood.

No. of Artifacts per Room	North-east	Middle North	North-west	Southeast	Middle South	South-west
In the Collections Plus Missing						
1	9	7	8	9	5	5
2	4	6	8	2	6	3
3	1	1	2	3	3	2
4	2	2	2		1	1
5	2	2	3	1		
6	1	1		1		
7						2
8				1		1
9	1					
11	1	1				
12		1	2			
13			1			
14			1			
17				1		
18				1		
24		1				
28		1				
33		1				
37					1	
38	1					
Total	22*	24	27	19	16	14

*The unidentified Duck Unit room in Table 3.16 was omitted from this count.

Table B.5. Unusual Completed Jewelry and Turquoise Found in Rooms, by Neighborhood.

Room	In the Collections	Missing
Northeast Neighborhood (8 rooms)		
A-1		2 bone beads, reported together
A-2	Worked piece of turquoise	2 bone beads, reported together
A-6		Bone hair ornament
A-10	9 turquoise disc beads, found together	
A-12	*Cerithidea* whole shell pendant	
Duck, 10	6 tiny turquoise disc beads, found together *Haliotis* pendant with 2 holes Worked piece of turquoise	2 *Olivella* beads, reported together
Duck, 12	Unworked piece of turquoise	
Duck, 24	Gypsum pendant with 2 holes	
Middle North Neighborhood (11 rooms)		

Table B.5. Unusual Completed Jewelry and Turquoise Found in Rooms, by Neighborhood.

Room	In the Collections	Missing
A-15		2 stone beads, reported together
A-17		15 bone beads, reported together
A-18	Tiny rectangular turquoise bead 10 selenite pendants, found together 4 turquoise pendants, found together	9 turquoise beads, reported together
A-24		3 groups of bone beads (of 17, 2, and 2)
F-14		3 bone beads, reported together 2 shell pendants, reported together
F-16		2 bone beads, reported together Crystal pendant
F-17		Piece of turquoise
F-18		Turquoise bead Worked turquoise
F-19		Turquoise bead Unworked turquoise
F-45	Five-sided *Spondylus* pendant	
F-46		Turquoise pendant
Northwest Neighborhood (9 rooms)		
F-7		Bear canine pendant
F-10	Gypsum pendant with 2 holes	
B-2	Turquoise bead or pendant	
B-3	Calcite pendant	
B-8	Bone gorget	
B-9	*Glycymeris* bracelet fragment	
B-17	2 unworked pieces of turquoise	
B-21	Turquoise disc bead	
B-22	Unworked piece of turquoise	
Southeast Neighborhood (7 rooms)		
C-1	*Nassarius* bead	
C-6	3 tubular bone beads, found together	
C-10	Worked piece of turquoise	
C-11/12		2 groups of bone beads (of 6 and 5)
C-18	4 *Olivella* whole shell beads, found together *Columbella* whole shell bead	2 *Olivella* beads, reported together
C-22		Unworked turquoise
C-27	*Agaronia testacea* whole shell bead	
Middle South Neighborhood (5 rooms)		
F-23		Turquoise bead
F-24		2 bone beads, reported together
F-32		Ceramic bead*
F-36		4 Groups of bone beads (13, 10, 6, 2)
F-70	Bone ring	Bone earring
Southwest Neighborhood (2 rooms)		
D-18		6 bone beads, reported together

Table B.5. Unusual Completed Jewelry and Turquoise Found in Rooms, by Neighborhood.

Room	In the Collections	Missing
S. Midden, 7	Bivalve pendant	
Neighborhood Not Identified		
SF-65		3 bone beads, reported together Quartz bead
Unident.		7 bone beads, reported together 10 *Olivella* beads, reported together

*The documentation for this bead does not include a measurement, so it cannot be further classified as Tiny or Larger. Tiny ceramic beads are present in the collections.

Table B.6. Completed Jewelry Found in Rooms, by Neighborhood.
(Format: In the Collections/In the Collections plus Missing)

	North	South	East	Middle	West	Total*	Entire Site
Beads	113/225	56/148	85/118	33/146	51/109	169/373	754/1143
Pendants	57/84	6/17	15/30	40/57	8/14	63/101	477/642
Tiny Beads	7/9		6/6	1/2	0/1	7/9	30/33
Bead/Pendant	1/1	1/1	1/1		1/1	2/2	4/4
Pendant, multiple holes	3/3		2/2		1/1	3/3	5/6
Gorgets	1/1				1/1	1/1	2/3
Earrings		0/1		0/1		0/1	2/3
Rings		1/1		1/1		1/1	2/2
Bracelets	1/1				1/1	1/1	2/2
Hair Ornament	0/1		0/1			0/1	0/1
Total	183/325	64/168	109/158	75/207	63/128	247/493	1278/1839

*Because the areas overlap, the individual column counts to not add up to the total.

Table B.7. Kivas by Neighborhood and Year or Years Excavated.

Kiva No.	Neighborhood	Year(s) Excavated
1	Northeast	1954, 1955, 1957
2	Northeast	1955, 1957, 1958, 1960, 1961
3	Northeast	1954, 1955, 1957
4	South Midden	1954, 1957, 1961
5	Northeast	1957, 1958
6	Southeast	1957, 1958, 1960
7	Southwest	1960, 1961
8	Southeast	1960, 1961
9	Southeast	1960, 1961
10	Southwest	1961

Table B.7. Kivas by Neighborhood and Year or Years Excavated.

Kiva No.	Neighborhood	Year(s) Excavated
11	Middle South	1961
12	Southwest	1961
13	Middle South	1961
14	Middle North	1961
15	Northwest	1961
16	Northwest	1961
17	Northeast	1961, 1975, 1977, 1978

Table B.8. Unusual Completed Jewelry and Turquoise from Non-Structural Areas, by Neighborhood.

In the Collections	Missing
Northeast	
Argillite bead	3 groups of bone beads (of 4, 2, and 2)
Operculum bead	Worked turquoise
6 tiny ceramic beads, found together	
Tiny turquoise disc bead	
Turquoise pendant	
D-shaped operculum pendant	
3 worked pieces of turquoise	
Unworked piece of turquoise	
Middle North	
Glycymeris bracelet fragment	5 bone beads, reported together
	Unworked turquoise
Northwest	
	2 bone beads, reported together
Southeast	
Pecten vogdesi pendant	
3 unworked pieces of turquoise	
Southwest	
5 Bone beads, found together (3 tubular, 2 transverse)	
Sandstone ring	
Neighborhood Not Identified	
Stylized bird stone bead	3 groups of bone beads (of 2 each)
3 tiny turquoise disc beads	Siltstone pendant with 2 holes
3 turquoise pendants	3 pieces of turquoise, reported together
Oval muscovite pendant	
Turquoise bead or pendant	
Worked piece of turquoise	
5 unworked pieces of turquoise	

Table B.9. Completed Jewelry Found in Middens.

	In the Collections			In the Collections plus Missing		
	North	**South**	**Total**	**North**	**South**	**Total**
Beads	287	21	308	357	22	379
Tiny beads	5	1	6	5	1	6
Pendants	355	5	360	381	90	471
Pendant, multiple holes	2		2	2		2
Earrings	2		2	2		2
Gorgets		1	1	1	1	2
Total	651	28	679	748	114	862

Burials by Neighborhood

The burial records for Pottery Mound include discrepancies. The most complete source of burial information is Russell Schorsch's (1962) thesis. I obtained additional information on burial locations from field notebooks (including Burial No. 31 in Room A-14 (also referred to as Room H-5), Burial No. 33 in Room B-19, and Burial No. 38 in Room B-14). Table B.10 identifies the burials by neighborhood.

The jewelry artifact listed in Table B.11 as "near" Burial No. 4x came with a slip of paper indicating that the artifact was found in the South Midden in 1955, in a trench between the 1st and 2nd Laterals, near Burial No. 41. However, Schorsch (1962:82) indicates that Burial No. 41 was found in Room B-21 in 1955. Burials 39 through 50 were all found in the South Midden. I have assumed that a mistake was made filling out the slip included with the artifact. The field notebook describing Room B-21 (Catalogue No. 2003.24.18) was prepared by a different student than the one who excavated the jewelry artifact. The field notebook discusses Burial No. 41 but does not report any jewelry artifacts found with or near the burial.

Table B.10. Pottery Mound Burial Numbers by Neighborhood.

	West	**Middle**	**East**	**Middens**	**Not Identified**
North	34–38, 41, 51, 65, 70–72, 84, 104	1, 14, 16, 67–69, 103	20, 30, 31, 33, 52, 53, 107	9.1, 9.2, D-1 through D-41, and 3 without numbers	2 without numbers
South	60, 63, 74–77, 80, 86, 90, 95, 102, 105	73, 79, 81–83, 89, 91–93, 96, 98	55, 56, 97, 99–101, 106, 108, 109	2–13, 15, 17–19, 21–29, 32, 39, 40, 42–50, 54, 57–59, 61, 62	87, 88
Not Identified					64, 66, 78, 85, 94, 110

For the purposes of this study, the jewelry artifact found "near" Burial 4x was treated as found in the South Midden, and the associated burial is treated as different than the Burial No. 41 found in Room B-21.

A tubular bone bead in the collections and shown in Table B.11 was documented as associated with Burial No. 18, but was found 0.9 m (3 feet) above the burial. The provenience is listed as "Ext Trench 1 NE Strat," which suggests that the bead was found in 1957. The bead listed in Table B.9 was excavated in 1954, as was Burial No. 18.

Table B.11. Jewelry Artifacts in the Collections Found near Burials.

Burial, Where Found	Jewelry Artifacts
Northeast Neighborhood	
No. 33, "fill above"	1 tubular bone bead
North Midden	
No. 9.1, male age 17–19, level below burial	4 charred tubular bone beads
Southwest Neighborhood	
No. 95, male age 40-47, 0.9 m (3 feet) east of burial	1 unworked piece of turquoise
Southeast Neighborhood	
No. 109, female age 27–35, "near"	1 tubular bone bead
South Midden	
No. 18, female age 22–28, 0.9 m (3 feet) above burial	1 tubular bone bead
No. 28, female age 40–50, "near"	1 bone bead blank
No. 4x, female age 45+, "near"	1 tiny turquoise disc bead

Missing Jewelry

Artifacts classified as "missing" came from a variety of sources. Many (n = 167) were catalogued at one time or documented on specimen cards. My assumption is that someone more experienced than the excavators had taken the time to review the description of these artifacts. Other artifacts (n = 456) were mentioned in student notebooks or in handwritten "inventories." The descriptions of these items may not have been reviewed, and some items may not have been jewelry at all. However, as I describe in Chapter 3, I did my best to include only valid jewelry artifacts and exclude duplicate entries for items in the collections. Tables B.12 through B.16 list the jewelry artifacts that I used in the analyses of jewelry found in rooms, kivas, non-structural areas, and middens, and finally items that did not have a provenience specific enough to allow me to assign the artifact to a neighborhood. These tables list the 167 items whose descriptions are more reliable (being "previously catalogued") and the 456 items whose descriptions remain somewhat questionable (being "reported" but never catalogued).

Table B.12. Missing Jewelry Artifacts Reported In Rooms, by Neighborhood.

Previously Catalogued		Reported
Northeast (13 rooms)		
Room A-1		2 bone beads, together Pendant of unidentified stone
Room A-2		2 bone beads, together *Conus* pendant
Room A-3		Pendant of unidentified stone
Room A-6	*Conus* pendant	Bone hair ornament Gypsum pendant *Conus* shell
Room A-9		Bone bead
Room E of Room N of Kiva 3		Bone bead
Duck, Room 2		Siltstone pendant Pink quartz pink pendant
Duck, Room 9		Pendant of unidentified shell 2 selenite pendants Siltstone pendant
Duck, Room 10		2 bone beads 2 *Olivella* beads, together Siltstone pendant “Mother of pearl” pendant
Duck, Room 13		*Olivella* bead
Duck, Room 14		Bead of unidentified shell
Duck, Room 19		Bone bead
Duck, Room		Bone bead
Middle-North (16 rooms)		
Room A-15		2 beads of unidentified stone, together
Room A-17		15 bone beads, together
Room A-18		9 turquoise beads, together
Room A-24		22 bone beads, (3 groups: 17, 2 [1 transverse], 2)
Room D-1	Pendant of unidentified shell	
Room D-2	*Olivella* bead	
Room F-14		3 bone beads, together 2 pendants of unidentified shell, together Selenite pendant
Room F-16	Bone bead	6 bone beads, 2 together Tiny bone bead Crystal pendant Bone bead blank
Room F-17		Bone bead Piece of turquoise
Room F-18		Turquoise bead Pendant of unidentified stone Bone pendant, serrated edge Worked turquoise

Table B.12. Missing Jewelry Artifacts Reported In Rooms, by Neighborhood.

Previously Catalogued		Reported
Room F-19		Turquoise bead 2 *Olivella* beads Pendant of unidentified stone Unworked turquoise
Room F-22		Unworked shell
Room F-45		Bone bead
Room F-46		Turquoise pendant
Room SF-23		Pendant of unidentified material
Room SF-36		Bone bead
Northwest (16 rooms)		
Room F-2	Pendant of unidentified shell	
Room F-3		2 bone beads
Room F-4	11 bone beads	2 bone beads
Room F-6		Bone bead
Room F-7		Bear canine pendant Worked *conus*
Room F-8		Bone bead
Room F-12		Bone bead Bone pendant
Room F-63		Bone bead
Room B-3		Unworked *Olivella* 2 brachiopod shells
Room B-4		2 bone beads *Olivella* bead Chlorite schist pendant blank
Room B-12	Unworked shell	
Room B-15	2 bone beads Pendant of unidentified shell	
Room B-16	3 bone beads	Ceramic pendant blank
Room B-17	Bone bead *Olivella* bead	*Olivella* bead Shell
Room B-18	Bone bead Tiny disc bead of unidentified shell	
Room B-22	Bone bead	
Southeast (7 rooms)		
Room C-7		Selenite pendant
Room C-10		Shell
Room C-11/12	Bone bead	12 bone beads, (2 groups: 6 and 5) Siltstone pendant
Room C-18	Bone bead	2 *Olivella* beads, together 2 unworked shells, together
Room C-22	Bone bead	Unworked turquoise
Room C-25		Bone bead
Room C-28	Bone bead	

Table B.12. Missing Jewelry Artifacts Reported In Rooms, by Neighborhood.

Previously Catalogued		Reported
Middle South (14 rooms)		
Room F-23		Turquoise bead Pendant of unidentified stone
Room F-24		2 bone beads, together
Room F-25		Bead of unidentified shell Bone bead Unworked shell
Room F-26		Bone bead Bead of unidentified material Pendant of unidentified stone
Room F-28	Bone bead "Mother of pearl" pendant	
Room F-30		2 bone beads
Room F-32		Ceramic bead
Room F-35		Selenite pendant
Room F-36		33 bone beads, (4 groups: 13, 10, 6, 2) Pendant of unidentified shell *Glycymeris* pendant Shell
Room F-70		Bone earring
Room SF-53		Unworked *Olivella*
Room SF-55		Travertine bead Pendant of unidentified stone
Room SF-60		Bead of unidentified material
Room SF-61		Bone bead
Southwest (11 rooms)		
Room D-9		3 bone beads, together
Room D-10	2 bone beads	
Room D-11	Bone bead	
Room D-16		6 bone beads
Room D-18		8 bone beads, 6 together
Room D-20		Bone pendant
Room D-22	Bone bead	Bone bead Selenite pendant
Room F-40		Bone bead
Room F-54		Shell
Room SF-71		3 bone beads
So Midden, Room 7	Unworked brachiopod	
Unidentified Neighborhood		
Room SF-65		3 bone beads, together Quartz bead Pendant of unidentified pendant

Table B.12. Missing Jewelry Artifacts Reported In Rooms, by Neighborhood.

Previously Catalogued		Reported
Unidentified rooms	10 bone beads Selenite pendant Pendant of unidentified shell	20 bone beads, 7 together 12 *Olivella* beads, 10 together 3 selenite pendants Ceramic pendant Unworked shell

Table B.13. Missing Jewelry Artifacts Reported in Kivas, by Neighborhood.

Previously Catalogued		Reported
Northeast		
Kiva 1		Bone bead
Kiva 2	*Olivella* bead Turquoise pendant	4 bone beads, 2 together
Kiva 3		7 bone beads, 6 together Bead of unidentified shell
Middle North		
Kiva 14		3 shells, 2 together
Southeast		
Kiva 6	Bone bead	Bone bead
Southwest		
Kiva 7	2 bone beads Turquoise pendant	

Table B.14. Missing Jewelry Artifacts Reported in Non-Structural Areas, by Neighborhood.

Previously Catalogued	Reported
Northeast	
	11 bone beads, (3 groups: 4, 2, 2)
	2 *Olivella* beads
	Bead of unidentified shell
	Worked turquoise
Middle North	
Bone bead	6 bone beads, 5 together
Unworked brachiopod	Gypsum pendant
Unworked turquoise	Quartzite pendant
Northwest	
	5 bone beads, 2 together
	2 *Olivella* beads
	Bead of unidentified shell
	Unworked crinoid stem
Southeast	
Bone bead	3 bone beads
	Olivella bead
Middle South	
	Bone bead
	Pendant of unidentified shell
	Pendant blank of unidentified stone
Southwest	
Bone bead	Bone bead
Unworked *Olivella*	Ceramic pendant
	Pendant of unidentified stone
	2 worked shells, together
Unidentified Neighborhood	
14 bone beads, (2 groups of 2)	4 bone beads, (1 group of 2)
Tiny bead of unidentified shell	Siltstone pendant with 2 holes
Unworked shell	“Mother of pearl” pendant
	Unworked *Olivella*
	3 pieces of turquoise, together

Table B.15. Missing Jewelry Artifacts Reported in Middens.

Previously Catalogued	Reported
North Midden	
49 bone beads, (4 groups: 5, 3, 3, 2)	2 bone beads
5 beads of unidentified shell	7 *Olivella* beads, (2 groups: 3, 2)
Bead of unidentified material	6 siltstone beads, together
3 aragonite pendants	"Mother of pearl" pendant
Conus pendant	2 auger (Terebridae) pendants
2 pendants of unidentified shell	5 turquoise pendants, 2 together
4 pendants of unidentified stone	Travertine pendant
Turquoise pendant	3 selenite pendants
4 worked shells	2 siltstone pendants
11 unworked shells (2 groups of 2)	Pendant of unidentified stone
5 pieces of unworked turquoise, 3 together	Bone gorget
South Midden	
Bone bead	
	85 selenite pendants, together
	Bone bead blank

Table B.16. Missing Jewelry Artifacts Reported Without Identified Neighborhoods.

Previously Catalogued	Reported
2 bone beads	3 beads of unidentified material, together
Pendant of unidentified material	
Unworked brachiopod shell	

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Appendix C

NOTES ON TIJERAS PUEBLO

In a previous technical report I described the jewelry of Tijeras Pueblo (Schuyler 2011). The following notes were prepared to assist in the comparative study of jewelry from that site and Pottery Mound.

Room Identifications

Table C.1 summarizes what is known about rooms at Tijeras Pueblo, based on maps, the Tijeras Pueblo master catalogue of artifacts maintained at the Maxwell Museum, inventory records from the Laboratory of Anthropology (LOA), and field notebooks. Artifacts from the 1948 and 1968 excavations are stored at the Laboratory of Anthropology and are not included in the Tijeras Pueblo master catalogue (which only is for the collections at the Maxwell Museum). The Tijeras Pueblo Jewelry Catalogue does contain jewelry artifacts from all excavations (1948, 1968, the 1970s, and 1986) and is available from the Curator of Archaeology at the Maxwell Museum.

Excavations in 1948

No maps were found for the excavations in 1948. VG stands for Vulture Gulch (PH stands for Pit House No. 2 at Vulture Gulch), and C stands for Cedro Canyon (the main portion of Tijeras Pueblo). The twenty-two 1948 rooms at Cedro Canyon are shown on a map (prepared by Judith Habicht-Mauche; Figure C.3, below) that indicates the number of rooms excavated by room block in given years without identifying room numbers. The Laboratory of Anthropology artifact inventory was used to identify rooms that resulted in artifacts in the collection. The "map" in Figure C.3, below, and the Laboratory of Anthropology list were combined to identify rooms shown in maps used to compile Table C.1. I have assumed that the 1948 excavations in Cedro Canyon Mound A were rooms that may have been re-excavated in the 1970s, but that rooms excavated in other mounds were not re-excavated later. I have also assumed that the rooms designated VG-1 through VG-6 in the Laboratory of Anthropology documents correspond to rooms 1–6 either in Mound A or Mound B at Vulture Gulch. Eleven rooms were identified and excavated at that location. At Cedro Canyon, 24 rooms were identified and there is evidence that 23 of them were excavated.

Excavations in 1968

The only existing (hand-drawn) map for the 1968 excavations (Figure C.1) identifies features rather than rooms. However, indications of masonry and adobe walls suggest 14 to 16 rooms, with F-2 and F-18 being questionable rooms. Judge indicates that Peckham dug 14 rooms and half of a fifteenth, including two rectangular "room kivas" at ground level in Block H (Judge 1974:9). The artifact inventory at the Laboratory of Anthropology identifies features designated by a letter instead of a number. The number of features yielding artifacts of any kind was not documented, so this study assumes that 14 rooms were identified and excavated in 1968.

Table C.1. Tijeras Pueblo Room Identifications by Excavation Year and Source.

Room Number	Maps	Tijeras Pueblo Catalogue	Lab. of Anthro. Inventory	Student Notebooks
1948, Vulture Gulch (11 rooms)				
VG-1			x	
VG Mound A, No. 1				x
VG Mound B, No. 1				x
VG-2			x	
VG Mound A, No. 2				x
VG Mound B, No. 2				x
VG-3			x	
VG Mound A, No. 3				x
VG Mound A, No. 4				x
VG 5			x	
VG Mound A, No. 5				x
VG- 6			x	
VG Mound A, No. 6				x
VG PH, No. 1				x
VG PH, No. 2			x	x
VG PH, No. 3			x	
No. of Rooms, VG			7	10
1948, Cedro Canyon (24 rooms)				
C Mound A, No. 1	x		x	x
C Mound A, No. 2	x		x	x
C Mound A, No. 3	x		x	x
C Mound A, No. 4	x		x	x
C Mound A, No. 6	x		x	
C Mound A, No. 21	x		x	x
C Mound A, No. 22				x
C Mound A, No. 23	x		x	x
C Mound A, No. 24	x			x
C Mound A, No. 25				x
C Mound A, No. 31	x		x	
C Mound B, No. 1	x		x	x
C Mound B, No. 2	x		x	x
C Mound C, No. 1	x			x
C Mound C, No. 3	x		x	x
C Mound C, No. 4	x		x	x
C Mound C, No. 5	x			x
C Mound C, No. 6	x			x
C Mound C, No. 7	x			x
C Mound C, No. ?	x			
C Mound D, No. 1	x			x
C Mound E, No. 1	x		x	x
C Mound E, No. 2	x			x
C Mound E, No. 3	x			x
No. of Rooms, CC	22		13	21

Table C.1. Tijeras Pueblo Room Identifications by Excavation Year and Source.

Room Number	Maps	Tijeras Pueblo Catalogue	Lab. of Anthro. Inventory	Student Notebooks
1968 (14 rooms)				
F-3	x		x	
F-4	x			
F-7	x			
F-8	x		x	
F-9	x			
F-10	x			
F-11	x		x	
F-13	x			
F-14	x		x	
F-15	x			
F-16	x			
F-17	x			
F-21	x			
F-26	x			
No. of Rooms	14		4	
1970s (140 rooms)				
1 (Block 4)	x	x		x
2 (Block 4)	x	x		x
3 (Block 5)	x	x		x
4 (Block 6)	x	x		x
5 (Block 6)	x	x		x
6 (Block 5)	x	x		x
7 (Block 3)	x	x		x
8 (Block 3)	x	x		x
9 (Block 5)	x	x		x
10 (Block 5)	x	x		x
11 (Block 6)	x	x		x
12 (Block 6)	x	x		x
13 (Block 6)	x	x		x
14 (Block 5)	x	x		x
15 (Block 4)	x	x		x
16 (Block 4)	x	x		x
17 (Block 3)	x	x		x
18 (Block 6)	x	x		x
19 (Block 1)	x	x		x
20 (Block 1)	x	x		
21 (Block 1)	x	x		x
22 (Block 1?)		x		
23 (Block 1)	x	x		x
24 (Block 1)		x		x
25 (Block 5)	x	x		x
26a (Block 5)	x	x		x
26b (Block 5)	x	x		x

Table C.1. Tijeras Pueblo Room Identifications by Excavation Year and Source.

Room Number	Maps	Tijeras Pueblo Catalogue	Lab. of Anthro. Inventory	Student Notebooks
27 (Block 4)	x	x		x
28 (Block 4)	x	x		x
29 (Block 1)	x	x		x
30 (Block 1)	x	x		x
31 (Block 4)	x	x		x
32 (Block 4)	x	x		x
33 (Block 4)	x	x		x
34 (Block 1)		x		x
35 (Block 1)	x			
36 (Block 1)	x	x		x
37 (Block 1)	x			
38 (Block 1)	x	x		x
39 (Block 1)	x	x		x
40 (Block 1)	x	x		x
41 (Block 1)	x	x		x
42 (Block 1)	x	x		x
43 (Block 1)	x	x		x
44 (Block 1)	x	x		x
45 (Block 1)	x	x		x
46 (Block 1)	x	x		x
47 (Block 1)	x	x		x
48 (Block 1)	x			x
49 (Block 1)	x	x		x
50 (Block 1)	x			
51 (Block 3)	x	x		x
52 (Block 3)	x			x
53 (Block 3)	x	x		x
54 (Block 3)	x			
55 (Block 3)	x	x		x
56 (Block 3)	x	x		x
57 (Block 3)	x	x		x
58 (Block 3)	x	x		x
59 (Block 3)	x	x		x
60 (Block 3)	x	x		x
61 (Block 3)	x			
62 (Block 3)	x	x		x
63 (Block 3)	x	x		x
64 (kiva) (Block 3)	x	x		x
65 (Block 3)	x			
66 (Block 3)	x	x		x
67 (Block 3)	x	x		
68 (Block 3)	x	x		x
69 (Block 3)	x	x		x
70 (Block 4)	x	x		x

Table C.1. Tijeras Pueblo Room Identifications by Excavation Year and Source.

Room Number	Maps	Tijeras Pueblo Catalogue	Lab. of Anthro. Inventory	Student Notebooks
71 (Block 4)	x			
72 (Block 4)	x	x		x
73 (Block 4)	x	x		x
74 (Block 4)	x			
75 (Block 4)	x			
76 (Block 4)	x			x
77 (Block 4)	x			
78 (Block 4)	x			
79 (Block 4)	x	x		x
80 (Block 4)	x	x		x
81 (Block 4)	x	x		x
82 (Block 4)	x	x		x
83 (Block 4)	x			
85 (Block 4)	x	x		x
86 (Block 4)	x	x		
87 (Block 4)	x			
88 (Block 4)	x	x		x
89 (Block 4)	x	x		x
90 (Block 4)	x	x		x
91 (Block 4)	x			
92 (Block 4)	x	x		x
93 (Block 4)	x	x		x
94 (Block 4)	x			
95 (Block 4)	x			x
96 (Block 3)	x	x		x
97 (Block 5)		x		x
98 (Block 5)	x	x		x
99 (Block 5)	x	x		x
100 (Block 5)	x	x		x
101 (Block 1)	x	x		x
102 (Block 3)	x	x		x
103 (Block 1)	x	x		
104 (Block 1)	x			
105 (Block 1)	x	x		x
106 (Block 1)	x	x		x
107 (Block 3)	x	x		x
108 (kiva) (Block 3)	x	x		x
109 (Block 3)	x	x		x
110 (Block 3)	x	x		x
111 (Block 2)	x	x		x
112 (Block 2)	x	x		x
113 (Block 2)	x	x		x
114 (Block 2)	x			
115 (Block 2)	x	x		x

Table C.1. Tijeras Pueblo Room Identifications by Excavation Year and Source.

Room Number	Maps	Tijeras Pueblo Catalogue	Lab. of Anthro. Inventory	Student Notebooks
116 (Block 2)	x	x		x
117 (Block 2)	x	x		x
118 (Block 2)	x	x		x
119 (Block 2)	x	x		x
120 (Block 2)	x			
121 (Block 2)				x
122 (Block 2)	x	x		x
123 (Block 1)	x	x		x
124 (Block 2)	x			
125 (Block 4)	x	x		x
126 (Block 2)	x	x		x
127 (Block 5)	x	x		x
128 (kiva) (Block 3)	x	x		x
129 (Block 8)	x	x		x
130 (Block 8)	x	x		x
131 (Block 1)	x	x		x
132 (Block 2)	x	x		x
133 (Block 8)	x	x		x
134 (Block 8)	x	x		x
135 (Block 8)	x	x		x
136 (Block 8)	x			x
137 (Block 4)	x	x		x
138 (Block 4)	x	x		x
139 (Block 4)	x			
140 (Block 4)	x			
No. of Rooms	135	113		114
1986, Site AS-10A (9 rooms)				
10A, F1	x	x		
10A, F2	x	x		
10A, F4	x	x		
10A, F6	x	x		
10A, F7	x	x		
10A, F8	x	x		
10A, F9	x			
10A, F10	x	x		
10A, F11	x	x		
No. of Rooms	9	8		
1986, Site AS-10B (11 rooms)				
10B, F1	x	x		
10B, F2	x	x		
10B, F4	x	x		
10B, F8	x	x		
10B, F9	x	x		
10B, F11	x	x		

Table C.1. Tijeras Pueblo Room Identifications by Excavation Year and Source.

Room Number	Maps	Tijeras Pueblo Catalogue	Lab. of Anthro. Inventory	Student Notebooks
10B, F12	x	x		
10B, F13	x	x		
10B, F14	x	x		
10B, F15	x	x		
10B, F17	x	x		
No. of Rooms	11	11		
Total Room Count	**191**	**132**	**24**	**146**

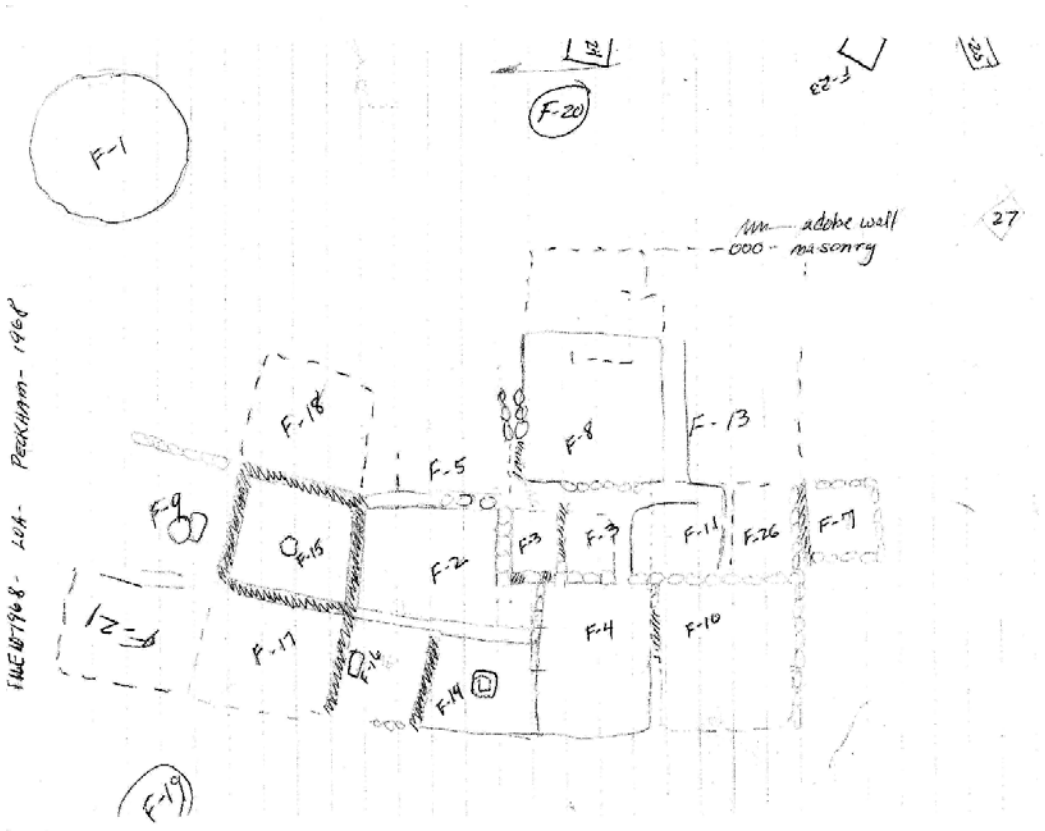

Figure C.1. Hand-drawn Map of the 1968 excavations at Tijeras Pueblo.

Excavations in the 1970s

This study identified 137 rooms at Tijeras Pueblo; in 116 cases, there is evidence that the room was excavated. Nicholas Damp created a variety of GIS-based maps that identified rooms exposed during the various excavations at the site. His maps of the main part of the site (Schuyler 2011, Figure 1.4) include rooms with numbers ranging from 1 to 140. The maps indicate rooms numbered 26a and 26b but do not include rooms numbered 22, 24, 34, 84, 97, or 121. The Tijeras Pueblo Catalogue includes artifacts from Rooms 22, 24, 34, and 97. A student notebook (Catalogue No. 93.16.10) indicates that Room 97 was contiguous with Rooms 98 and 99. I could find no maps showing Rooms 84. There are no artifacts in the collections from Rooms 84 or 121, and no mention of Room 84 in the student notebooks. Two student notebooks (Catalogue Nos. 79.84.168 and 79.84.171) and a map (Catalogue No. 79.84.246) mention or show Room 121 and position it under Room 112.

Room 22 remains somewhat problematic. At least one projectile point and three bags of ash are included in the collections. The room was counted as an excavated room in this study.

Three excavated rooms (Nos. 64, 108, and 128) are identified in this study as kivas.

Excavations in 1986

Based on the published report (Sundt and Bice 1989:1–2), the Albuquerque Archaeological Society excavated AS-10A and AS-10B in 1986. Both of these areas were privately owned. AS-10A included about 20 rooms; nine were identified on the map (Figure C.2) and eight were excavated. In AS-10B 11 rooms were identified and excavated. Features 9 and 11 at AS-10A may have been a single room. In Table C.1, rooms documented in 1986 are assigned numbers based on the maps in Figure C.2**.** Figure C.3 indicates the general relationship between the AS-10 locations and the remainder of the site.

Tables C.2 through C.5 provide details on jewelry artifacts by rooms within room blocks and by excavation. The documents do not identify the mounds for Rooms 1 and 2 in Table C.2. A detailed list of jewelry artifacts found by room during the 1970s excavations can be found in Table 3.6 of *The Jewelry of Tijeras Pueblo* (Schuyler 2011).

Table C.6 lists jewelry artifacts from non-structural areas surrounding room blocks excavated during the 1970s. A list of such artifacts by grid position is provided in Table 3.8 of *The Jewelry of Tijeras Pueblo* (Schuyler 2011).

Table C.7. summarizes jewelry artifacts found in rooms in 1986. Table C.8 identifies the number of rooms by the number of jewelry artifacts found per room, by excavation (and by room block for excavations in the 1970s). Turquoise and other less common jewelry artifacts from Tijeras Pueblo are listed in Table C.9. These last items were not emphasized in the original analysis of jewelry at Tijeras Pueblo (Schuyler 2011) but were identified here for comparisons with Pottery Mound. A Unionidae bead or pendant was not included, as there are Unionidae pendants in the Tijeras Pueblo collection.

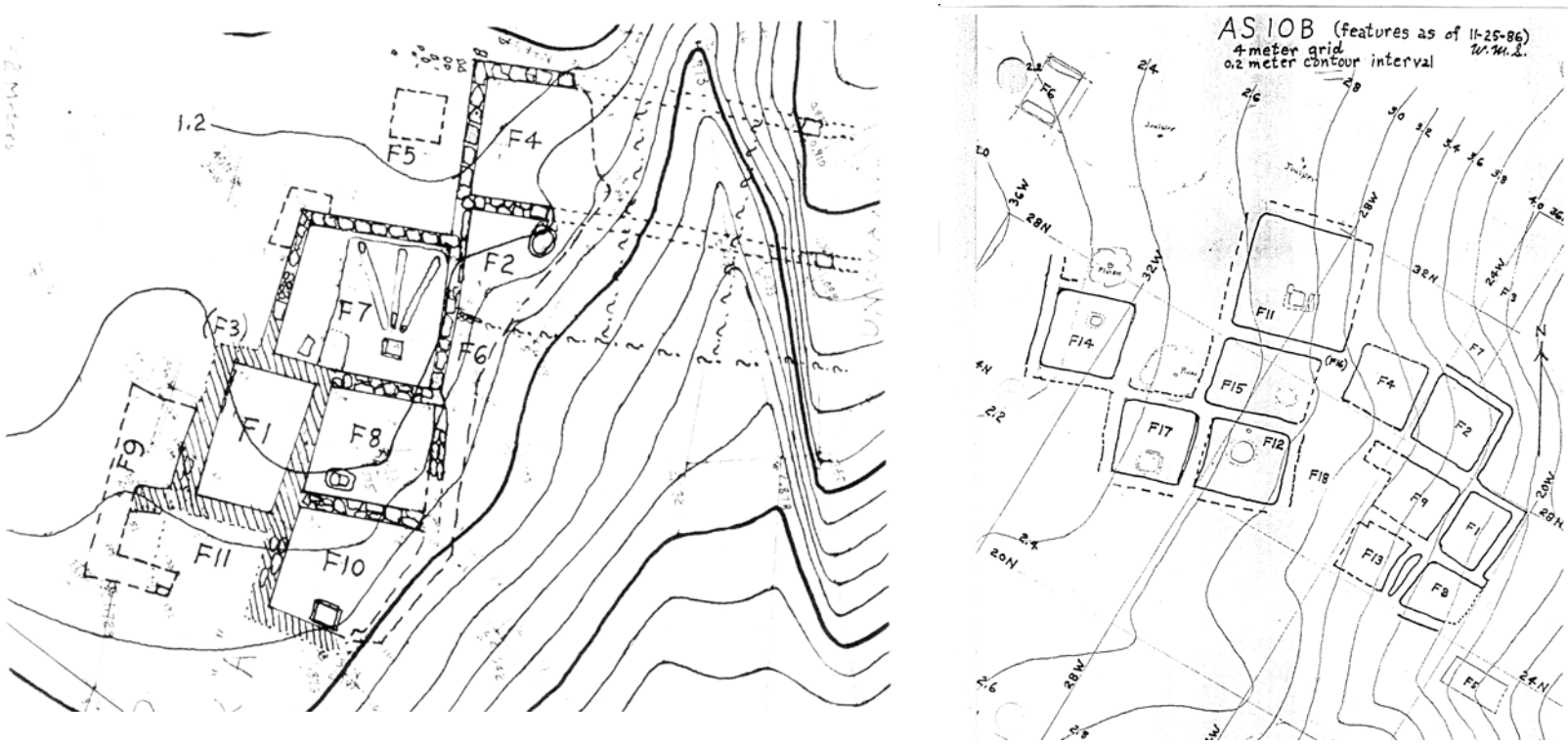

Figure C.2. Map of AS-10, showing feature numbers. Left: AS-10A. Right: AS-10B.

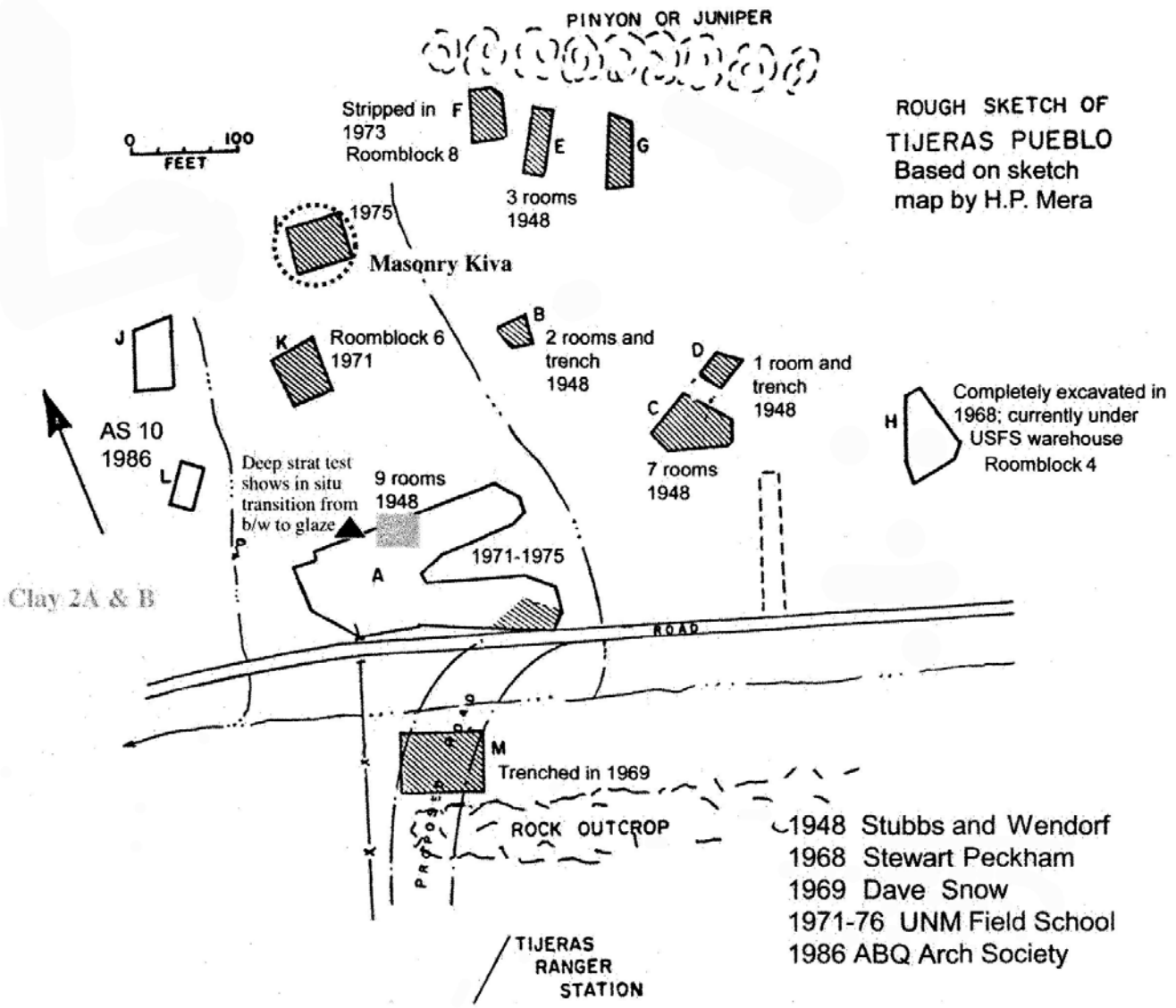

Figure C.3. Sketch map showing Tijeras Pueblo excavations through time. Courtesy of Judith Habicht-Mauche.

Table C.2. Tijeras Pueblo Jewelry Artifacts by Room, 1948 Excavations.

Room	Jewelry Artifacts
Vulture Gulch	
Mound B, Room 2	Mica pendant
Cedro Canyon	
Mound A, Room 1	Tiny bead of unidentified stone
Mound A, Room 2	Bone bead
Mound A, Room 3	Bone bead
Mound A, Room 4	Bone bead
Mound A, Room 6	Bone bead
Mound A, Room 21	Olivella bead Mica pendant
Mound A, Room 23	Bone bead Pendant of unidentified stone
Mound C, Room 4	Jet pendant blank
Room 1	Bone bead Tiny shell bead
Room 2	Bone bead

Table C.3. Tijeras Pueblo Jewelry Artifacts by Room, 1968 Excavations.

Room	Jewelry Artifacts
F 3	Bone bead
F 8	Bone bead
F 11	Pendant of unidentified shell
F 14	Mica pendant with 4 holes

Table C.4. Tijeras Pueblo Jewelry Artifacts Found in Rooms, by Room Block, 1970s.

Room Block 1
11 *Olivella* whole shell beads
4 Bone beads
Tiny calcite bead
Tiny bone bead
Tiny crinoid stem bead
Glycymeris pendant, reworked
2 *Conus* pendants
2 Unionidae pendants
2 Argillite pendants
2 Calcite pendants

Table C.4. Tijeras Pueblo Jewelry Artifacts Found in Rooms, by Room Block, 1970s.

Turquoise pendant
Selenite pendant
Slate pendant
Argillite pendant blank
Unionidae pendant blank
Room Block 2
Bone bead
Olivella whole shell bead
Jet pendant
Unionidae pendant
Argillite pendant
Glycymeris bracelet fragment
Room Block 3
23 *Olivella* whole shell beads
Olivella barrel bead
9 bone beads
5 crinoid stem beads
2 beads of unidentified stone
Conus bead
Tiny calcite bead
Tiny bone bead
2 pendants of unidentified shell
2 *Conus* pendants
Unionidae pendant
Fossilized shell pendant
Turtle shell pendant
Argillite pendant
Shale pendant
Siltstone pendant
Unionidae bead or pendant
Turquoise button
Crinoid stem bead blank
Glycymeris pendant blank
Unionidae pendant blank
Argillite pendant blank
Bone pendant blank
Worked *Glycymeris*
Worked *Cerithidea*
Unworked piece of turquoise
Room Block 4
24 *Olivella* whole shell beads
5 bone beads
2 beads of unidentified shell
2 selenite beads
Tiny shell bead
Tiny crinoid stem bead

Table C.4. Tijeras Pueblo Jewelry Artifacts Found in Rooms, by Room Block, 1970s.

2 argillite pendants
Pendant of unidentified stone
Muscovite pendant
Steatite pendant
2 bone pendants
Claw pendant
Canine pendant
Fish operculum pendant
2 ceramic pendants
Unionidae pendant
Shale pendant blank
Unworked piece of turquoise
Room Block 5
7 *Olivella* whole shell beads
5 bone beads
2 beads of unidentified stone
Tiny bone bead
2 *Glycymeris* whole shell pendants
Cerithidea pendant
Haliotis pendant, reworked
Calcite pendant
Steatite pendant
Turquoise pendant
Bone pendant
Ceramic pendant
Anodonta bead or pendant
Worked turquoise
Worked *Conus*
Room Block 6
2 *Olivella* whole shell beads
Tiny crinoid stem bead
Room Block 8
Olivella whole shell bead
Bone bead
Selenite bead blank
Worked gastropod

Table C.5. Tijeras Pueblo Jewelry Artifacts Found in Kivas, 1970s.
(Kivas are identified by their room numbers.)

Room 64
Olivella whole shell bead
Turquoise bead
Argillite pendant
Turquoise pendant blank
Mosaic
Room 108
4 bone beads, 2 found together
8 *Olivella* whole shell beads
Glycymeris whole shell pendant
Worked piece of *Conus*
Room 128
Olivella bead

Table C.6. Tijeras Pueblo Jewelry Artifacts Found in Non-Structural Areas, 1970s.

Vicinity of Room Block 1
12 bone beads
12 *Olivella* beads
Bead of unidentified shell
Bead of unidentified stone
2 argillite pendants
Unionidae pendant
Calcite pendant
Ceramic pendant
Canine tooth pendant
2 pendants of unidentified shell
Chalcedony bead blank
Selenite bead blank
Siltstone pendant blank
Turquoise pendant blank
Worked piece of *Conus*
Worked piece of *Glycymeris*
Unworked piece of turquoise
Vicinity of Room Block 2
8 *Olivella* beads
2 bone beads
Calcite bead
Crinoid stem bead
Bead of unidentified shell
Bead of unidentified stone

Table C.6. Tijeras Pueblo Jewelry Artifacts Found in Non-Structural Areas, 1970s.

Conus pendant
Bear tooth pendant
Argillite pendant
Turquoise pendant
Pendant of unidentified stone
Bead blank of unidentified stone
Obsidian pendant blank
Vicinity of Room Block 3
30 *Olivella* beads
7 bone beads
2 crinoid stem beads
Argillite bead
Bead of unidentified shell
Bead of unidentified stone
4 tiny beads of unidentified shell
3 Unionidae pendants
2 *Conus* pendants
2 *Glycymeris* pendants
2 turquoise pendants
2 argillite pendants
Jet pendant
Cerithidea pendant
Bone pendant
Crinoid stem bead blank
Worked piece of Unionidae
Worked piece of *Glycymeris*
Unworked crinoid stem
Vicinity of Room Block 4
5 bone beads
4 *Olivella* beads
2 crinoid stem beads
Bead of unidentified shell
Tiny crinoid stem bead
Tiny bead of unidentified shell
Tiny bead of unidentified stone
Argillite pendant
Conus pendant
Gastropod pendant
Canine tooth pendant
Worked *Glycymeris gigantea*
Vicinity of Room Block 5
Bone bead
Crinoid stem bead
Unionidae pendant
Glycymeris pendant
Shale pendant

Table C.6. Tijeras Pueblo Jewelry Artifacts Found in Non-Structural Areas, 1970s.

Pendant of unidentified shell
Worked piece of gastropod
Vicinity of Room Block 6
2 *Olivella* beads
Tiny bone bead
Ceramic pendant
Argillite bead blank
Unworked piece of Unionidae
Unworked piece of gastropod
Vicinity of Room Block 8
3 *Olivella* beads
Bone bead
Conus pendant
Location Not Identified
Olivella bead

Table C.7. Tijeras Pueblo Jewelry Artifacts Found in Rooms, 1986.

Room No.	Jewelry Artifacts
AS-10A	
F1	Tiny crinoid stem bead Tiny bead of unidentified stone
F8	Bone hairpin Unworked Unionidae
AS-10B	
F2	2 Tiny crinoid stem beads
F8	Tiny bead of unidentified stone
F9	Unworked turquoise Unworked unidentified shell
F11	2 tiny beads of unidentified stone
F12	Unworked Unionidae Tiny bead of unidentified shell
F14	Tiny crinoid stem bead 2 tiny crinoid stem bead blanks

Table C.8. Tijeras Pueblo Jewelry Artifacts by Year and Room Block.

No. of Items/ Room	1948		1968	Room Block, 1970s							1986		Total
	VG	CC		1	2	3	4	5	6	8	10A	10B	
1	1	7	4	5	2	4	4	6	3	2		1	39
2		3		8	2	3	6			1	2	4	29
3				1		1	4	5				1	12
4						3	1						4
5						3							3
6								1					1
7						1							1
8				1		2							3
9							2						2
No. of artifacts	1	13	4	32	6	63	50	27	3	4	4	12	219
No. of Rooms	1	10	4	15	4	17	17	12	3	3	2	6	94
Avg.*	1.0	1.3	1.0	2.1	1.5	3.7	2.9	2.3	1.0	1.3	2.0	2.0	2.3

*Per room with one or more artifacts

Table C.9. Unusual Completed Jewelry and Turquoise from Tijeras Pueblo.

Provenience	Catalogue No.	Jewelry Artifacts
Turquoise		
F-9 (AS-10B)	2006.82.450	Unworked turquoise
Room 19	78.67.397	Turquoise pendant
Room 25	2005.25.639	Worked turquoise
Room 58	2005.25.14928	Turquoise button
Room 60	78.67.382	Unworked turquoise
Room 81	2005.25.7840	Unworked turquoise
Room 127	78.67.309	Turquoise pendant
Room 64 (kiva)	78.67.474 78.67.275	Turquoise bead Turquoise pendant blank
030S/120E	78.67.266B 78.67.266A	Unworked turquoise Turquoise pendant blank
030S/020E	78.67.551	Turquoise pendant
020N/000W	78.67.111	Turquoise pendant
030N/020W	78.67.562	Turquoise pendant
Less Common Jewelry Types		
F-8 (AS-10A)	2006.76.195	Bone hairpin
F-14 (1968)	581.14.11	Mica pendant with 4 holes
Room 116	78.67.502	Unionidae pendant with 2 holes
Room 58	2005.25.14928	Turquoise button
Room 117	78.67.412	*Glycymeris* bracelet fragment
Room 64 (mosaic)	76.37.1	Mosaic

Table C.9. Unusual Completed Jewelry and Turquoise from Tijeras Pueblo.

Provenience	Catalogue No.	Jewelry Artifacts
Singles (Completed Jewelry of a Unique Type and Material)		
Room 7	78.67.195	Siltstone pendant
Room 29	78.67.448	Selenite pendant
Room 32	78.67.376	Claw pendant
Room 38		Slate pendant
Room 57	2005.25.11714	Turtle shell pendant
Room 58		*Conus* bead
Room 85	78.67.558	Fish operculum pendant Muscovite pendant
Room 100	78.67.462	Haliotis pendant
Room 127	2005.25.6771	*Anodonta* bead or pendant
Room 64 (kiva)	78.67.474	Turquoise bead
Ranger Station		Travertine pendant
030S/040E	78.67.505	Bear tooth pendant
020S/040E	78.67.500	Calcite bead
010S/000W	78.67.563	Argillite bead
110S/000E	78.67.394	Fossilized gastropod pendant
Groups of Completed Jewelry Found Together		
F-11 (AS-10B)	2006.82.312	2 tiny beads of unidentified stone
Room 26	2005.25.9294	2 *Olivella* beads found with a *Glycymeris* pendant
Room 59	2005.25.7679	3 *Olivella* beads
Room 31	2005.25.14837	4 *Olivella* beads
010N/020W	78.67.458	2 *Olivella* beads
020N/020W	78.67.472	2 tiny beads of unidentified shell

Table C.10 lists the locations of burials excavated in the 1970s at Tijeras Pueblo, by room block. See Table 5.16 for definitions of non-structural areas associated with room blocks.

Table C.10. Tijeras Pueblo: 1970s Burials by Room Block.

Burial No.	Provenience
Room Block 1	
6	Room 19
8	Room 19
9	Room 19
10	Room 19
17	010S/120E
18	000S/110E
20	000S/110E
23	000N/100E

Table C.10. Tijeras Pueblo: 1970s Burials by Room Block.

Burial No.	Provenience
26	000N/100E
40	000N/130E
43	000N/130E
45	000N/130E
46	000N/130E
47	000N/120E
49	000N/120E
52	000N/120E
53	000N/126E
Room Block 2	
30	040S/020E
31	030N/080E
32	040S/020E
33	030N/080E
37	050N/040E
38	Room 122
39	Room 122
Room Block 3	
13	020N/020W
19	030N/020W
21	010N/020W
22	030N/020W
24	030N/020W
25	030N/020W
27	020N/000W
28	020N/000W
29	020N/000W
34	020N/000W
35	020N/000W
36	020N/000W
Room Block 4	
1	110S/010E
2	110S/000E
3	110S/000E
4	130S/050E
5	090S/010E
11	110S/010E
15	110S/010E
16	150S/030E
54	035S/040E
Room Block 5	
7	130S/060E

Table C.10. Tijeras Pueblo: 1970s Burials by Room Block.

Burial No.	Provenience
44	087S/121E
Room Block 6	
12	Room 18
14	310N/000E
Room Block 8	
41	300N/331E
42	300N/331E
48	Room 133
50	Room 134
51	Room 134
55	280N/340E

The Tijeras Pueblo Jewelry Catalogue is an Excel spreadsheet available through the Curator of Archaeology at the Maxwell Museum of Anthropology. For the most part the spreadsheet includes the same definitions as those in Tables A.1 and A.2 (for the Pottery Mound Jewelry Catalogue). In the two catalogues, the order of the data columns varies slightly. Some Pottery Mound data types were not applicable to Tijeras Pueblo, and new data types were needed for Tijeras Pueblo (Table C.11). A complete list of codes for descriptions, materials, and conditions may be found in Table A.4 in Schuyler (2011).

Table C.11. Jewelry Catalogue Data Fields Unique to Tijeras Pueblo.

Column Heading	Definition
Provenience	Horizontal and vertical provenience. For interpretation of codes, see Schulyer 2011, Tables A.2 and A.3.
Standardized Provenience	Either the room number or the grid position
Block	1–6 or 8 for 1970s room blocks, 3-k for kivas in Block 3, 10A or 10B for 1986 excavations, and LA 581 for the 1948 and 1968 excavations
Level	A vertical provenience
Cutting Date	Tree-ring date
Archival status	A1: at Maxwell Museum. A2: at Laboratory of Anthropology
Spec Box #	Catalogue number for the Specimen Box at the Maxwell Museum, containing the earliest recorded information on the artifact