

## ARTIFACT INVENTORIES AND RESEARCH QUESTIONS

*Jonathan B. Mabry and J. Homer Thiel  
Desert Archaeology, Inc.*

A large number of artifacts were discovered over the course of the Rio Nuevo archaeological fieldwork, ranging in age from about 4,100 years old, up to the 1950s. Unfortunately, many of the artifacts were discovered in poor contexts—features altered by rodents or later human activities, or truncated by the historic-era plowzone. A decision was made to focus analyses on samples from the best-preserved features that would provide data to address the research questions raised in the proposal submitted to the City of Tucson.

The numbers of artifacts recovered from excavated features are provided in this chapter, including overall counts by site locus and time period. The sample sizes are summarized in Table 5.1. The artifact totals in this chapter represent the initial inventories during laboratory processing. These are somewhat different from the final artifact totals presented in other chapters reporting the results of the analyses. Contexts and research issues are identified for the analyzed samples from each temporal component at each site locus. Chapters 6-18 (this volume) provide additional information about the artifacts, plant remains, faunal bone, shell, and human remains recovered during the Rio Nuevo Archaeology project.

### **CLEARWATER SITE, AZ BB:13:6 (ASM), MISSION LOCUS**

Beneath the Spanish and Mexican period remains at the San Agustín Mission, a Cienega phase (circa 800 B.C.-A.D. 50) village was found. Portions of 22 pithouses were excavated, as well as 23 pits of various types, five inhumations, a hearth, and a portion of a canal. Superpositioning of pithouses and two distinctive flood deposits filling the features indicate two intervals of occupation. A large Hohokam canal was also found.

#### **Samples Selected for Analyses**

The focus of analyses was on the pithouse assemblages, although the botanical and faunal remains and whole ground stone artifacts in several extramural features were also examined (Table 5.2). The

most important artifact contexts were floors, near floor fills, and intramural features. The ceramics recovered were primarily intrusive Hohokam sherds in the upper fills of houses, but all sherds from the Mission locus were scanned to look for incipient plain ware sherds.

#### **Research Questions**

What is the range of diversity of crops, wild plants, and animals used as food resources? What do the floral and faunal remains tell about the floodplain environment? Based on the residual utilities of floor and near floor artifacts, which pithouses had de facto assemblages? What types of activities occurred in the houses? Where did the inhabitants get their materials for making stone tools? What types of objects were manufactured of fired clay? What types of bone tools were used? What types of shell ornaments were made, and where did the shells come from?

### **SAN AGUSTÍN MISSION**

Excavations at the San Agustín Mission resulted in the discovery of three trash middens (Features 64, 161, and 166), three trash-filled pits (Features 177, 178, and 203), and a roasting pit (Feature 193) that contained mission-occupation (1771-1821) artifacts and food remains discarded by the O'odham residents of the mission (Table 5.3). There were no datable artifacts and only a handful of nonlocal items (Table 5.3 includes some glass and metal items that were intrusive in the upper levels of each feature). The most likely dates for the features would be between the 1790s, when the first mission church was refurbished (wall plaster fragments from mission-occupation structures came from several features), and the 1820s, when the mission was largely abandoned.

#### **Samples Selected for Analyses**

Selected subsets of all artifacts, faunal bone, shell, and plant remains from the features were analyzed.

**Table 5.1.** Analyzed samples of artifacts and subsistence remains from the Rio Nuevo Archaeology project, by loci, contexts, and time intervals.

	Ceramics	Flaked Stone	Ground Stone	Shell	Faunal Bone	Rare/ Unusual	Flotation Samples	Historic Ceramics	Historic Miscellaneous
San Agustín Mission Locus									
Cienega phase pithouses									
Select context 10 (3 houses)	140	481	16	1	200	-	-	-	-
Contexts 11, 20, 30	44	768	70	5	316	8	43	-	-
Hohokam pithouses									
Contexts 11, 20, 30	77	29	2	1	2	-	1	-	-
Pima features									
All contexts	3,916	20	25	2	6,496	-	13	7	264
Chinese feature									
All contexts	743	77	15	645	11,436	1	21	630	12,343
Congress Street/Brickyard Loci									
Block 5 Early Agricultural occupations									
Stratum 504 features	79	571	17	-	52	-	68	-	-
Stratum 504 nonfeature	1	1,456	21	-	92	10	95	-	-
Stratum 503 features	-	42	1	-	62	-	12	-	-
Stratum 503 nonfeature	1	202	-	-	6	1	52	-	-
Cienega phase pithouses									
Select context 10 (3 houses)	51	889	60	4	2,081	11	-	-	-
Contexts 11, 20, 30	75	2,283	66	14	1,144	25	67	-	-
Early Ceramic period pithouses									
Contexts 11, 20, 30	96	64	3	-	12	1	6	-	-
Early Ceramic/Hohokam pithouses									
Select context 10 (1 house)	2,214	489	3	40	228	1	4	-	-
Contexts 11, 20, 30	166	217	5	11	56	-	4	-	-
Mission Gardens Locus									
Early Ceramic period pithouse									
Contexts 11, 20, 30	786	118	9	2	15	23	5	-	-
Hohokam pithouses									
Contexts 11, 20, 30	128	112	8	-	25	9	5	-	-
Tucson Presidio									
Spanish-Mexican									
All contexts	1,430	278	28	17	3,436	-	21	136	202
American Territorial									
All contexts	1,358	322	13	34	6,505	5	11	943	6,883
Hohokam pithouses									
All contexts	174	219	12	1	66	1	15	-	-
BB:13:481, prehistoric canals	111	-	-	-	-	-	-	-	-
BB:13:481, protohistoric canals	38	-	-	-	-	-	-	-	-
BB:13:481, historic canals	793	-	-	-	-	-	-	-	-
Totals	12,391	8,637	374	777	32,230	96	443	1,716	19,692

**Table 5.2.** Inventories of artifacts recovered from prehistoric pithouses at the Mission locus of the Clearwater site, AZ BB:13:6 (ASM).

Feature Number	Ceramic	Flaked Stone	Ground Stone	Shell	Faunal Bone	Rare/ Unusual	Flotation Samples	Other
Cienega phase								
7	5	90	10	-	33	2	7	1 charcoal, 3 pollen
15	14	250	26	2	46	2	5	2 pollen, 1 daub
17	-	5	-	-	4	-	2	-
28	4	82	1	-	19	-	2	-
29	50	30	6	-	86	-	3	2 pollen, 1 daub
32	14	26	3	-	11	-	2	1 pollen
57	116	195	1	-	150	-	2	1 macrobotanical, 2 pollen
62	1	1	-	-	-	-	1	-
65	9	64	6	-	44	5	6	2 pollen
88	8	3	-	-	2	-	1	1 piece glass
97	21	165	11	-	30	-	3	1 piece glass, 1 piece historic ceramics, 2 pollen
100	9	7	2	1	61	-	2	1 charcoal, 1 pollen
112	1	77	7	2	90	4	5	2 charcoal, 2 pollen, 2 daub
121	-	46	11	1	54	-	3	2 pollen, 3 daub
122	-	2	1	-	1	-	2	1 pollen
126	3	30	4	-	15	-	4	5 pollen
128	3	189	4	1	36	-	3	-
151	2	93	4	1	20	-	1	1 macrobotanical, 1 pollen, 1 soil
182	-	-	-	-	-	-	-	-
191	-	2	-	-	4	-	1	-
211	-	-	-	-	-	-	-	-
218	16	25	-	-	25	-	1	-
Cienega phase totals	276	1,382	97	8	731	13	56	43
Hohokam								
2	77	29	2	1	2	-	1	1 daub sample, 1 piece metal
Total, all	353	1,411	99	9	733	13	57	45

**Table 5.3.** Inventories of artifacts recovered from historic-era Native American features from the Mission locus of the Clearwater site, AZ BB:13:6 (ASM).

Feature Number	Native American Ceramics	Flaked Stone	Ground Stone	Shell	Faunal Bone	Flotation Samples	Historic Other	Glass	Metal	Historic Ceramics	Samples
64	856	50	7	1	2,000	1	1	114	26	2	-
161	164	3	-	-	119	2	-	-	-	-	-
166	1,471	65	14	1	2,480	4	44	3	17	3	-
177	184	9	2	-	400	2	1	7	-	-	Pollen
178	337	31	1	-	460	2	24	2	1	2	Pollen, macrobotanical
203	538	40	2	-	950	1	20	1	-	-	Charcoal, pollen, other
193	69	6	1	-	60	1	3	-	-	-	Charcoal, pollen
Total	3,619	204	27	2	6,496	13	93	127	44	7	8

### Research Questions

What was life like for the Native Americans living at the mission? No comparable samples associated with this timespan have previously been examined from the Tucson Basin. Basic questions to be addressed include what foods were eaten, the origin and use of ceramics, and if characteristic flaked stone and ground stone implements were used.

### CLEARWATER SITE, AZ BB:13:6 (ASM), CONGRESS STREET AND BRICKYARD LOCI

A large number of artifacts and samples were recovered from the Clearwater site south of Congress Street and north of the A-Mountain storm drain (Tables 5.4-5.6). After trenching, eight different excavation blocks were opened. Block 5 had the most excavated features and the oldest occupations (in strata 503 and 504), and was investigated during two phases of fieldwork. Across the site were three main strata containing features from five periods of prehistoric occupation and some historic-era features (Chapter 20, this volume). Stratum 502, the uppermost, contained a few Cienega phase pithouses, extramural features, inhumations, and canals; a few Early Ceramic and Hohokam pithouses, extramural features, and canals; and a few historic-era pits and canals. Stratum 503 contained Early Agricultural period features dating to 3,300-3,200 b.p. (uncalibrated radiocarbon years before present); excavated features

included 7 small pits, 3 roasting pits, and 1 bell pit. Below Stratum 503, Stratum 504 contained a number of Early Agricultural period features dating to circa 3,600 b.p. to 3,800 b.p.; excavated features included 8 pithouses, 31 small pits, 1 roasting pit, 1 bell pit, and 1 extramural surface. In addition to features, extramural deposits were also sampled in strata 503 and 504.

A Cienega phase village and a few Early Ceramic period features were found below the historic-era brickyard. Superpositioning and distinct fills indicate at least two intervals of occupation during the Cienega phase (Chapter 4, this volume). The Cienega phase features include 21 pithouses, about half of them possibly arranged in a ring, and most of the rest located in a cluster to the northeast. A "big-house," Feature 9357, was located between these two sets of houses. The 40 Cienega phase extramural features include large and small pits, roasting pits, bell pits, four inhumations, and an extramural surface. Two pithouses and a roasting pit appear to date to the Early Ceramic period. There was also a large Hohokam canal.

### Samples Selected for Analyses

The most important occupations in Block 5 were those in strata 503 and 504; a selection of artifacts and samples from features and extramural deposits in these strata were analyzed. In Stratum 502 outside of Block 5, the most important contexts were pithouse floors, near floor fills, and intramural features

**Table 5.4.** Inventories of artifacts recovered from Block 5, Stratum 504, Congress Street locus of the Clearwater site, AZ BB:13:6 (ASM).

Feature No.	Ceramic	Flaked Stone	Ground Stone	Shell	Faunal Bone	Rare/ Unusual	Flotation Samples	Other
Pithouses								
506	40	67	1	-	1	-	9	-
516	-	179	3	-	-	-	6	-
580	-	15	-	-	2	-	4	-
581	3	23	2	-	17	-	4	-
608	-	2	-	-	-	-	2	-
629	-	6	-	-	-	-	1	-
3359	23	43	1	-	3	-	4	-
3364	10	75	-	-	13	-	2	-
3371	-	21	2	-	4	-	2	-
Total	76	431	9	-	40	-	34	-
Bell Pit								
631	1	-	-	-	-	1	-	-
Roasting Pit								
632	1	-	-	-	-	-	1	-
Small Pits								
584	-	2	-	-	-	-	1	-
592	-	6	1	-	-	-	1	-
593	-	55	-	-	1	-	1	-
594	-	6	-	-	-	-	1	-
595	-	8	-	-	-	-	1	-
596	-	1	-	-	-	-	1	-
597	-	3	-	-	-	-	1	-
598	-	-	1	-	-	-	1	-
599	-	-	4	-	-	-	1	-
600	-	-	-	-	-	-	1	-
601	-	24	-	-	-	-	1	-
609	-	-	-	-	-	-	1	-
610	-	-	-	-	-	-	1	-
611	-	-	-	-	-	-	1	-
612	-	-	-	-	-	-	1	-
613	-	-	-	-	-	-	2	-
615	-	-	-	-	-	-	1	-
616	-	-	-	-	-	-	1	-
619	-	9	-	-	2	-	1	-
622	-	15	-	-	6	-	1	-
623	-	2	-	-	-	-	1	-
624	-	1	-	-	-	-	2	-
625	-	-	-	-	-	-	1	-
626	-	1	-	-	-	-	1	-
628	1	-	-	-	-	-	1	-
630	-	-	-	-	2	-	1	-
3360	-	6	-	-	1	-	1	-
3362	-	-	1	-	-	-	1	-
3370	-	-	1	-	-	-	1	-
3375	-	1	-	-	-	-	1	-
3381	-	-	-	-	-	-	1	-
Total	1	140	8	-	12	-	33	-

**Table 5.4.** Continued.

Feature No.	Ceramic	Flaked Stone	Ground Stone	Shell	Faunal Bone	Rare/ Unusual	Flotation Samples	Other
Extramural Surface								
3414	-	-	2	-	-	-	-	-
Total, all	79	571	17	-	52	1	68	-

**Table 5.5.** Inventories of artifacts recovered from Block 5, Stratum 503, Congress Street locus of the Clearwater site, AZ BB:13:6 (ASM).

Feature Number	Ceramic	Flaked Stone	Ground Stone	Shell	Faunal Bone	Rare/ Unusual	Flotation Samples	Other
Roasting Pits								
558	-	2	-	-	1	-	1	-
572	-	19	-	-	57	-	2	-
9128	-	-	-	-	-	-	-	-
Total	-	21	-	-	58	-	3	-
Small Pits								
554	-	-	-	-	-	-	1	-
588	-	2	-	-	-	-	1	-
589	-	9	-	-	-	-	2	-
3360	-	6	-	-	1	-	1	-
3368	-	2	-	-	3	-	1	-
3369	-	1	-	-	-	-	1	-
3374	-	-	1	-	-	-	1	-
3384	-	-	-	-	-	-	-	-
Total	-	20	1	-	4	-	8	-
Bell Pit								
3373	-	1	-	-	-	-	1	-
Total, all	-	42	1	-	62	-	12	-

for the Cienega, Early Ceramic, and Hohokam intervals. Artifacts associated with the Cienega phase inhumations, many of which were recorded by analysts in the field and then repatriated, were also described and included in summaries of Cienega phase assemblages.

For the materials recovered from features beneath the historic-era brickyard, the focus of analyses was on the pithouse assemblages, although the botanical and faunal remains in the extramural features were sampled, and whole ground stone artifacts in extramural features were analyzed. The most important artifact contexts were floors, near floor fills, and intramural features. The ceramics were mostly intrusive Hohokam sherds in the upper fills of houses, although they were scanned for incipient plain ware sherds.

### Research Questions

Are there differences in material culture and subsistence between the Stratum 503, Stratum 504, Cienega, Early Ceramic, and Hohokam occupations? During each interval, what is the range of diversity of crops, wild plants, and animals used as food resources? What do the floral and faunal remains tell about the floodplain environment? Based on the residual utilities of floor and near floor artifacts, which pithouses had de facto assemblages? What types of activities occurred in the houses? Where did the inhabitants obtain their materials for making stone tools? What types of objects were produced from fired clay? What types of bone tools were used? What types of shell ornaments were manufactured, and where did the shells come from?

**Table 5.6.** Inventories of artifacts recovered from Cienega phase and Early Ceramic period pithouses at the Brickyard locus of the Clearwater site, AZ BB:13:6 (ASM).

Feature Number	Ceramic	Flaked Stone	Ground Stone	Shell	Faunal Bone	Rare/ Unusual	Flotation Samples	Other
Cienega								
3220	10	97	16	1	32	1	2	-
3245	1	43	-	-	8	-	2	-
3260	1	42	1	2	31	-	4	2 pollen, 1 daub
3262	12	100	11	1	76	-	4	2 pollen
3264	4	289	6	1	195	7	4	1 pollen
3270	2	347	14	2	90	6	5	4 pollen, 1 daub
3273	-	93	5	2	37	2	4	1 macrobotanical, 2 species identified, 4 pollen
3274	10	134	1	-	19	2	3	1 pollen
3290	9	25	-	-	-	-	1	-
3294	9	476	4	4	147	8	2	-
3296	15	106	8	-	24	-	2	1 pollen
3300	1	44	-	-	3	-	-	-
3306	3	16	-	-	-	-	1	-
3308	28	27	-	-	6	-	2	-
3312	1	15	2	-	7	-	2	-
3323	41	173	3	1	11	3	1	1 species identified, 1 pollen
3325	2	62	-	-	31	-	1	1 species identified
3327	19	271	13	1	107	1	4	4 pollen, 1 temper sample, 2 daub
3332	9	119	-	1	33	-	1	-
9168	2	145	-	3	142	-	4	2 pollen
9357	61	938	58	1	2,196	1	15	2 macrobotanical, 5 pollen, 2 daub
9372	-	77	2	-	44	2	5	3 pollen
Total	240	3,639	144	20	3,239	33	69	44
Early Ceramic								
3293	118	43	-	-	14	-	4	2 macrobotanical, 3 pollen
9376	2	27	3	-	3	1	1	-
Total	120	70	3	-	17	1	5	5
Total, all	360	3,709	147	20	3,256	34	74	49

#### TUCSON PRESIDIO, AZ BB:13:13 (ASM), SPANISH AND MEXICAN PERIODS

Excavations at the Tucson Presidio, AZ BB:13:13 (ASM), took place in three areas. The first, in front of the Pima County courthouse, yielded a small set of

artifacts of very little research value. The second, at the Tucson Museum of Art, yielded more artifacts from stratified deposits, but these items had been smashed into small pieces by foot traffic and were of limited usefulness. Work at the northeastern corner resulted in the discovery of six presidio-occupation

**Table 5.7.** Inventories of artifacts recovered from presidio-occupation (1775-1856) features, Tucson Presidio, AZ BB:13:13 (ASM).

Feature Number	Native American Ceramics	Flaked Stone	Ground Stone	Shell	Faunal Bone	Flotation Samples	Historic Other	Glass	Metal	Historic Ceramics	Samples
373	121	46	1	11	557	5	6	2	6	30	3 rare
409	1,095	162	19	4	1,910	9	13	38	130	82	4 rare, 1 temper
420	48	15	-	-	520	2	1	1	1	10	-
422	17	8	1	-	60	1	-	-	-	3	1 macro- botanical
423	6	3	-	-	37	1	-	-	-	2	-
441	143	44	7	2	352	3	1	1	2	9	-
Total	1,430	278	28	17	3,436	21	21	42	139	136	9

(1775-1856) borrow pits containing trash (Features 373, 409, 420, 422, 423, and 441). English ceramics from several of these pits indicate they were filled between circa 1820-1840. This may coincide with repairs to the presidio wall, documented to have occurred in both the late 1820s and in the early 1850s. The numbers of recovered artifacts dating to the Spanish and Mexican periods from the excavated pit features in the northeastern corner of the presidio are summarized in Table 5.7.

### Samples Selected for Analyses

All artifacts from the presidio-occupation features were analyzed. Flotation samples and faunal bone from these features were also identified.

### Research Questions

What was life like for the residents of the Tucson Presidio? Previous excavations have typically yielded sheet-trash deposits that are mixed or heavily trampled. One ash-filled trash pit from the City Hall lawn has been studied, but no other comparable trash-filled contexts have been found. The artifacts and plant remains should provide baseline information about the material culture and diet of the presidio residents.

### TUCSON PRESIDIO, AZ BB:13:13 (ASM), AMERICAN TERRITORIAL PERIOD

Many American Territorial period artifacts were recovered from the northeastern corner of the Tucson Presidio. Particularly impressive were artifacts

recovered from Feature 376, a very deep borrow pit. This pit was probably filled between 1870 and 1890, and yielded artifacts suggesting both Mexican-Americans and Euro-Americans contributed refuse to the feature. Other borrow pits, two outhouses, and numerous pits and postholes contained artifacts dating from the 1890s to the 1910s. Trash collection began in Tucson in the 1910s, and little trash appears to have been discarded on the block after that time.

### Samples Selected for Analyses

The Native American ceramics from Feature 376 were analyzed; all historic-era artifacts from American Territorial period features were analyzed. Selected flotation samples from other historic-era features were also examined.

### TUCSON PRESIDIO, AZ BB:13:13 (ASM), PREHISTORIC ERA

Portions of five Hohokam pithouses were discovered beneath the corner of the Tucson Presidio, including two pithouses that probably date to the Pioneer period, Feature 380 and Feature 430. Two Hohokam pits were also excavated, and the numbers of artifacts recovered from these features are presented in Table 5.8.

### Samples Selected for Analyses

The pottery, arrow points and retouched tools, whole ground stone, and subsistence remains from all of these contexts were analyzed.



**Table 5.8.** Inventories of artifacts recovered from prehistoric Hohokam features found at the Tucson Presidio, AZ BB:13:13 (ASM), during the RNA 12 phase.

Feature Number	Ceramic	Flaked Stone	Ground Stone	Shell	Faunal Bone	Rare/Unusual	Flotation Samples	Other
350	-	-	-	-	-	-	-	-
380	60	32	4	-	1	1	6	1 pollen, 1 historic ceramic
406	24	67	-	-	50	-	2	-
417	88	117	8	1	15	-	6	-
430	2	3	-	-	-	-	1	1 pollen
Total	174	219	12	1	66	1	15	3

### CHINESE GARDENERS

Feature 4, an approximately 9-ft-deep well, contained a large sample of artifacts discarded by the Chinese farmers renting Leopoldo Carrillo's property (Table 5.9). There are relatively few artifacts with manufacturing dates, and these date to between 1880 and 1900. The well was likely abandoned after the water table dropped in the 1890s, due to the downcutting of the river. Therefore, a more likely scenario is that the well was filled between 1890 and 1900.

#### Samples Selected for Analyses

All artifacts and food remains from the well were analyzed.

#### Research Questions

What was life like for the Chinese gardeners at this time? A previous Desert Archaeology, Inc., excavation uncovered a Chinese gardener's household from the same time frame. The recovered artifacts and food remains suggested that farmers were attempting to maintain their traditional ways of life—eating foods prepared in traditional ways with imported seasonings, eating from vessels in traditional forms, and so forth (Thiel 1997). The initial impression of the artifacts from the well suggested that these farmers may have tried even harder to retain their Chinese lifestyle.

### MISSION GARDENS, PREHISTORIC ERA

Prehistoric features excavated at the Mission Gardens locus included three Early Agricultural period inhumations, two Early Ceramic period pit-

**Table 5.9.** Inventories of artifacts recovered from the Chinese well, Feature 4, at the San Agustín Mission locus, the Clearwater site, AZ BB:13:6 (ASM).

Artifact Type	Count
Native American ceramics	743
Flaked stone	77
Ground stone	15
Shell	645
Faunal bone	11,436
Flotation	21
Historic other	94
Glass	855
Metal	11,394
Historic ceramic	630
Other, pollen	25
Rare/Unusual	1

houses, and numerous extramural features. Seven inhumations may date to the Early Ceramic, Hohokam, or Protohistoric intervals. The numbers of artifacts recovered from prehistoric pithouses in this locus are presented in Table 5.10.

#### Samples Selected for Analyses

The contexts for analysis included the pithouse floors, near floor fills, and intramural pits; the whole ground stone artifacts in extramural features were also analyzed.

#### Research Questions

Research goals for the prehistoric features at the Mission Gardens were limited to dating and description.

**Table 5.10.** Inventories of artifacts recovered from prehistoric pithouses at the Mission Gardens locus, the Clearwater site, AZ BB:13:6 (ASM).

Feature Number	Ceramic	Flaked Stone	Ground Stone	Shell	Faunal Bone	Rare/ Unusual	Flotation Samples	Other
3005	84	63	7	–	13	2	3	1 species identified, 1 pollen
3014	212	183	10	–	28	9	5	2 species identified, 1 pollen
3038	817	124	9	2	14	23	4	1 historic ceramic
Total	1,113	370	26	2	55	34	12	6

### AZ BB:13:481 (ASM) CANALS

Irrigation canals were found at the Mission San Agustín, Mission Gardens, and Congress Street/Brickyard loci. These included 6 Early Agricultural period canals, 13 Hohokam canals, 4 Protohistoric canals, and 13 Historic canals and 1 mill spillway. These linear water-control features were assigned site number AZ BB:13:481 (ASM). Table 5.11 summarizes the inventories of artifacts collected from all of the exposed canal cross sections.

### Samples Selected for Analyses

The nature of canals, which were filled with sediments that could have originated from nearby or

from a distance, makes the artifacts inside those canals somewhat problematic. Ceramics found in a canal could date to the time of filling, or they could represent sherds that eroded from other, older sites instead. Despite these problems, Native American sherds were scanned for decorated ceramics that could be dated. All historic-era artifacts were also examined.

### Research Questions

Research questions studied for the canals included their date of construction and filling. Ostracode samples were examined to provide more detailed information about the local environment of selected canals (see Chapter 16).

**Table 5.11.** Inventories of artifacts recovered from irrigation canals and a mill spillway, AZ BB:13:481 (ASM), on the western side of the Santa Cruz River.

Feature Number	Ceramic	Flaked Stone	Ground Stone	Shell	Faunal Bone	Rare/ Unusual	Flotation Samples	Other
San Agustín Mission Locus								
Historic Era								
3	97	66	–	–	74	–	2	5 historic other, 355 glass, 268 metal, 24 historic ceramics
9	584	16	1	60	466	–	3	2 historic other, 21 glass, 23 metal, 61 historic ceramics
Subtotal	681	82	1	60	540	–	5	759
Early Agricultural Period								
53	36	15	2	1	27	–	4	–
127	–	–	–	–	–	–	–	–
Subtotal	36	15	2	1	27	–	4	–
Hohokam Periods								
137	–	–	–	–	–	–	–	–
Total	717	97	3	61	567	–	9	759

Table 5.11. Continued.

Feature Number	Ceramic	Flaked Stone	Ground Stone	Shell	Faunal Bone	Rare/ Unusual	Flotation Samples	Other
Congress Street/Brickyard Loci								
Early Agricultural Period								
139	4	33	7	1	3	-	1	-
140	-	-	-	-	2	-	-	1 pollen
141	1	-	-	-	-	-	1	-
152	-	-	-	-	-	-	-	-
Subtotal	5	33	7	1	5	-	2	1
Hohokam Periods								
142	2	6	1	-	-	-	-	-
143	1	1	-	-	-	-	2	-
144	42	65	-	1	-	2	-	-
146	3	-	-	-	-	-	-	-
149	21	-	1	-	-	-	-	-
151	1	-	-	-	-	-	-	-
154	-	-	-	-	-	-	-	-
Subtotal	70	72	2	1	-	2	2	-
Historic Era								
138	112	7	9	90	202	-	1	1 macrobotanical, 12 historic other, 245 glass, 99 metal, 67 historic ceramics
145	-	-	-	-	-	-	-	-
147	-	-	-	-	-	-	-	1 historic ceramics
148	-	1	-	-	-	-	-	-
150	-	-	-	-	-	-	-	-
153	-	-	-	-	-	-	-	-
155	-	-	-	-	-	-	-	-
Subtotal	112	8	9	90	202	-	1	425
Total	187	113	18	92	207	2	37	426
Mission Gardens Locus								
Hohokam Periods								
200	-	-	-	-	-	-	-	-
202	-	-	-	-	-	-	-	-
203	-	-	-	-	-	-	-	-
210	-	-	-	-	-	-	-	-
212	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-
Protohistoric Period								
201	38	5	-	2	-	-	1	-
204	-	-	-	-	-	-	-	-
205	-	-	-	-	-	-	-	-
207	-	-	-	-	-	-	-	-
Subtotal	38	5	-	2	-	-	1	-
Historic Era								
206	-	-	-	-	-	-	-	-
208	-	-	-	-	-	-	-	-
209	-	-	-	-	-	-	-	-
211	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-
Total	38	5	-	2	-	-	1	-



## REFERENCES CITED

Thiel, J. Homer

1997 *Archaeological Investigations of a Chinese Gardener's Household, Tucson, Arizona (Revised)*. Technical Report No. 96-22. Center for Desert Archaeology, Tucson.

