CHAPTER 4
RECONNAISSANCE SURVEY OF 8LA1-WEST

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During the 2007 and 2008 seasons, field school students conducted a shovel test reconnaissance survey of the western aspect of the Juniper Club's spring-run fronting property. This area is designated 8LA1-West, and is entered into the FMSF as site 8LA1/8MR3601 (it spans both Lake and Marion counties). The western aspect of the site was once classified as site 8MR123. We have reassigned these portions to 8MR3601 to reflect the site's position on the south side of the run. This chapter describes the methods and results of this work.

SURVEY SCOPE AND METHODS

The primary goal of the field school's reconnaissance efforts was to document the extent, character, and culture-historical affiliation of cultural resources west of 8LA1-East (Figure 4-1). This tract is positioned along a ca. 600-m long segment of Silver Glen Springs Run. It is bordered to the east by a linear wetland that appears to be a seep spring. This feature effectively separates 8LA1-East from the western landform (see Chapter 3). The western margin of the survey tract approaches the property boundary between the Juniper Club and the U.S. Forest Service (USFS). There is no natural border to the south. Interest in this tract was initially piqued during a site visit in January 2007, when we observed extensive surficial shell deposits up to 70 m from the run, in addition to pottery sherds scattered on the surface. Although it was hard to judge how deep most of the shell deposits extended, we observed 2-m-tall vertical exposures of shell—consistent with shell mining operations seen elsewhere along the St. Johns River—near the intersection of the run and the linear wetland.

The current configuration of this tract reflects a complex history of long-term geomorphic processes, ancient depositional practices, historic forest clearing, shell mining operations, and contemporary landscape maintenance (Figure 4-1). In general, the landform rises from the spring run (ca. 0 m) up to 9.5 m in absolute elevation[1]. The lower margin fronts open water (to the west) and wetlands characterized by cypress and other bottomland species (to the east). The slope is relatively steep along the spring run margin, where the landform rises sharply 4 m in absolute elevation before attenuating into a gradual slope.

There are several negative and positive surface features of note in the tract. Two depressions are present on this portion of the Juniper Club property. One is located to the far east, and is approximately 20-m in diameter and 1-m deep. Another larger depression, ca. 60-m wide and 2-m deep, is situated to the northwest of this feature. These depressions presumably represent ancient sink holes that have undergone extensive infilling. This hypothesis needs to be thoroughly tested, however, as the depressions may

[1] All absolute elevations in this chapter are derived from the 2006 Volusia County LiDAR survey, and are referenced to the North American Vertical Datum of 1988 (NAVD88).

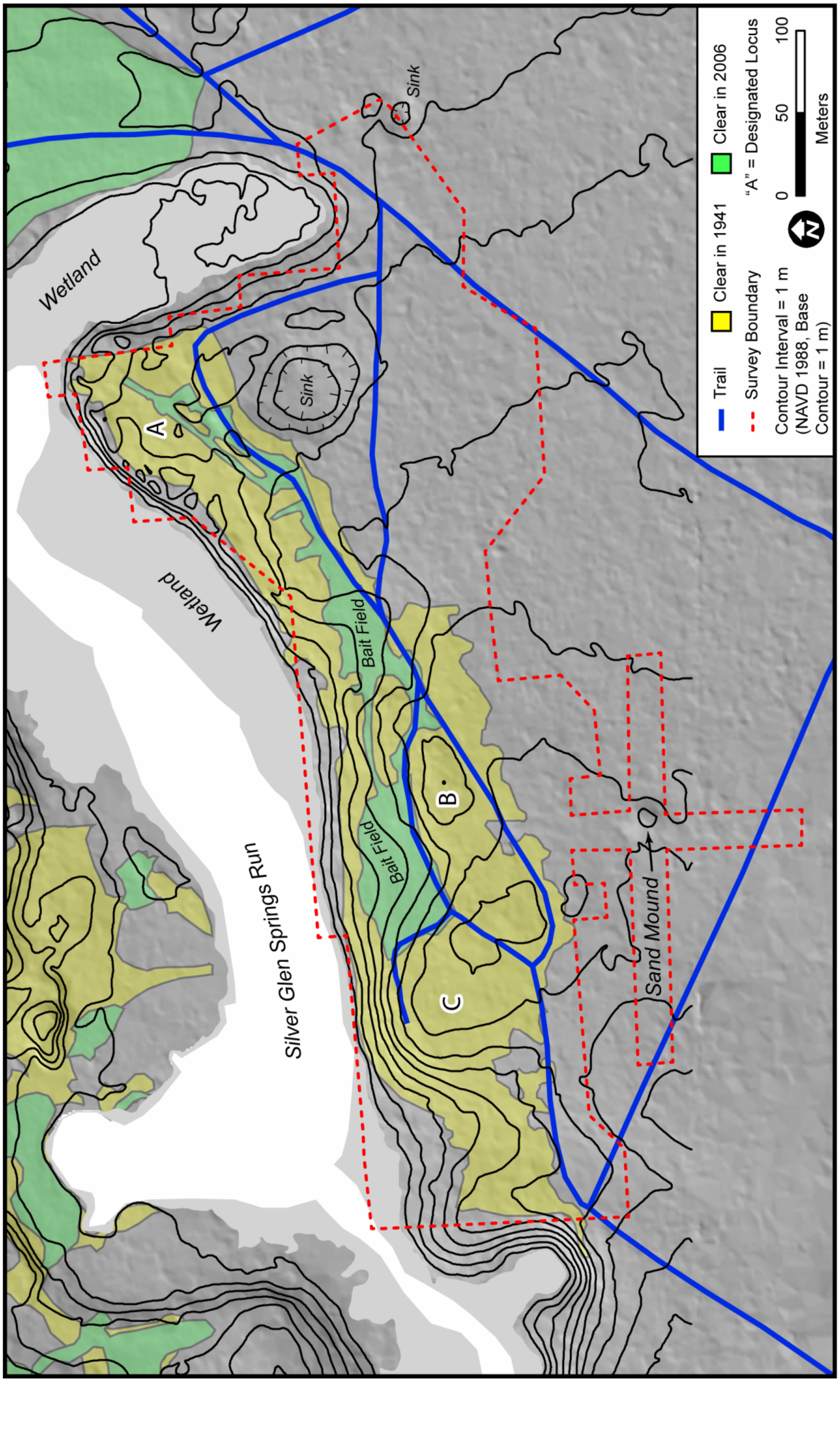

Figure 4-1. Geography of the shovel test reconnaissance project area, highlighting the relationship of surface topography, current trails, and forest clearings identified from aerial photographs in 1941 (yellow) and 2006 (green).

alternatively be related to Mount Taylor-era sediment removal (see Chapter 5). Positive surface features likely represent both geomorphic and anthropogenic processes. Several of the more distinctive subareas were given "locus" designations for ease of communication and description. Along the western aspect of the tract are two ridge noses, between 6 and 8 m in absolute elevation, that overlook the spring run. This ridge complex is designated Locus C. To the east of these ridges, and some 75 m from the water, is an elongated dome that rises ca. 1 to 2 m above the surrounding terrain. This dome and surrounding terrain is designated Locus B. As is detailed in Chapter 6, this dome formed or was accentuated by the deposition of shell and other materials in antiquity. Approximately 120 m southwest of the Locus B dome is a small conical sand mound, roughly 20 m in diameter and 1.5 m high. In shape and scale this mound is consistent with other post-Archaic burial mounds along the St. Johns. However, this temporal attribution has yet to be independently documented. This mound may also be the one opened by C. B. Moore in 1894, although there is limited evidence on the surface for such an excavation. There is a slight depression around this mound that has the appearance of a borrow pit, and it may have resulted from the mound's construction. Finally, the northeast corner of the tract is characterized by variegated topography in an area roughly 200-m long (east-west) and 100-m wide (north-south). It was in this area that we first observed deep shell escarpments and concreted surficial shell, both hallmarks of a mined shell mound. This area is designated Locus A (see Chapter 5).

As discussed in Chapter 2, the north and south sides of the spring run were targeted for shell mining in the 1920s and 1930s. Aerial photographs from 1941 show how this process involved clear-cutting much of the terrace. As highlighted in Figure 4-1, evidence for a bare ground surface (light color) is present up to 120 m south of the run. Between 1941 and 2006, forest (mostly composed of juniper trees) was allowed to grow across much of the terrace. There are, however, two clearings that are maintained as "bait" fields. A tractor is used to disc-harrow the clearings at least once a year, after which the fields are planted with grasses to encourage deer to forage. There is also a linear power line corridor that courses through the survey tract from east (Locus A) to west (Locus C). Finally, distributed across the tract is a system of dirt and shell trails. These trails are approximately 3 to 5-m wide, and are maintained primarily by chain dragging.

A shovel test pit (STP) survey strategy was devised to provide coverage across the once-cleared terrace, from the eastern wetland to near the western property boundary (Figure 4-2). We first established an east-west baseline oriented relative to magnetic north. Starting at the small eastern depression, we tested 34 transects that were oriented north and south of this baseline. These transects were spaced at 20-m intervals. The majority of STPs within transects were also tested at 20-m intervals. The exception to this spacing is in portions of transects predominantly in the east (#2, 4, 6, 8, 9, 10, 11, 12, 13, 14, and 32), where the north-south spacing varied between 20 and 40 m. In addition, we tested around the sand mound in a cruciform pattern. Transects were stopped to the north when either water or saturated deposits were encountered. To the south, transects were generally stopped when we ceased intercepting shell-bearing deposits, or if artifact densities decreased substantially. Because our goal was to characterize near-water

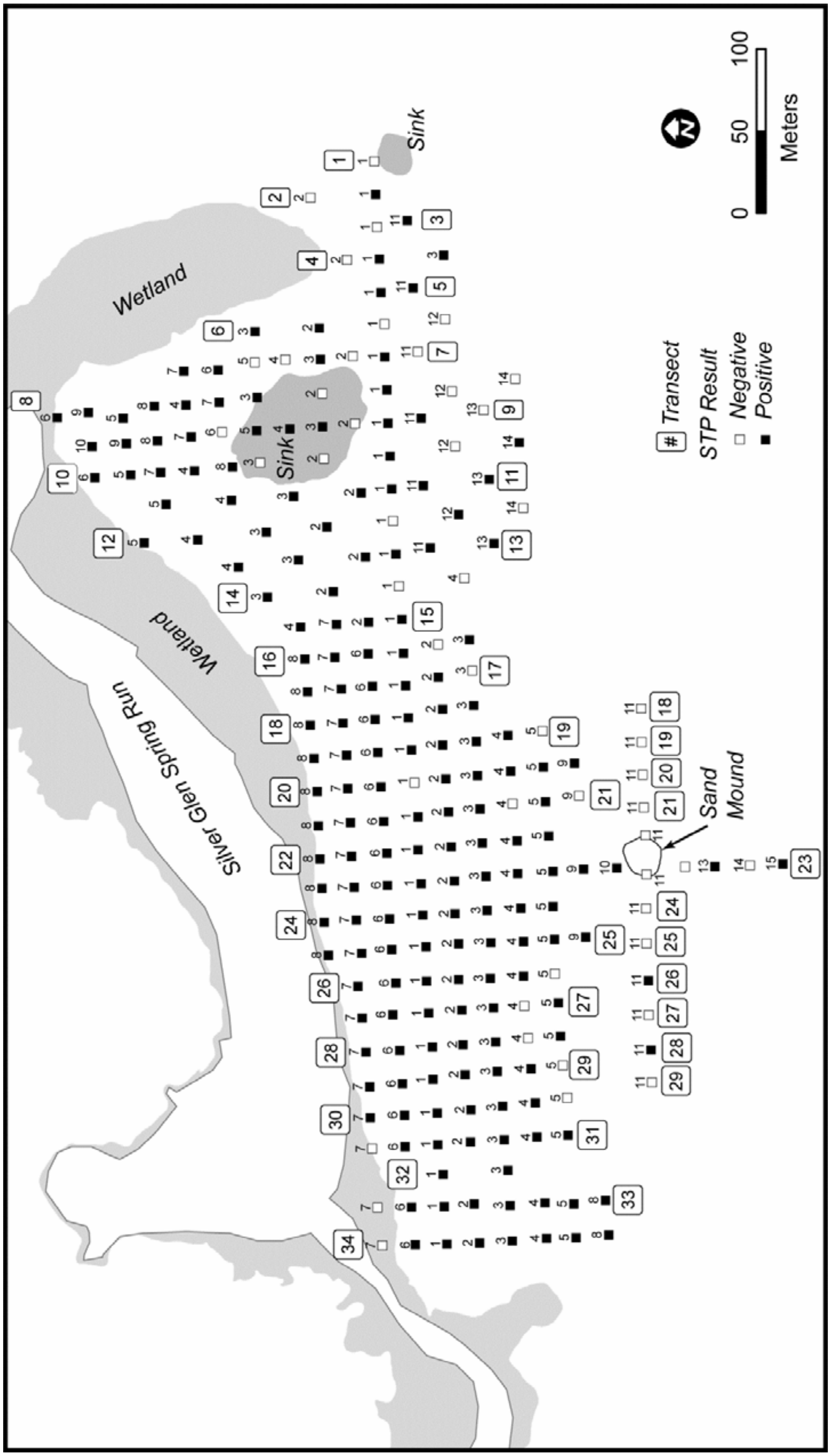

Figure 4-2. Shovel test results.

deposits, we did not attempt to bound the southern border of the site. Although generally characterized by infrequent finds, this component will require further work to determine its full spatial extent and character. Shovel testing on the northern side of the run indicates that extensive shell-free deposits are present within the watershed (Randall et al. 2011). Shovel test pit nomenclature followed a standard system. North-south transects were each given a numeric designation. Within each transect, STPs were given a unique numeric designation. These two designations are combined in the final STP identifier (e.g., Transect 13, STP 1 = STP 13-1).

STP excavation and data recording followed a standard protocol. Each STP measured 30 x 30-cm wide in plan. In general, they were excavated to a maximum depth of 1 m. In several cases STPs intercepted impenetrable concreted shell deposits, in others saturated deposits precluded further excavation. During excavation, all sediment was passed through 1/4-inch screen. All pre-Columbian cultural materials retained in the screen were bagged for subsequent analysis. A select sample of historic and modern materials (i.e. brick fragments, glass, plastic, and the like) was also kept. The stratigraphy in each STP was recorded, including the depth below surface for the top and bottom of each stratum and a description of the matrix. When encountered, shell deposits were categorized using a subjective ordinal scale of low density (more non-shell matrix than shell), high density (more shell than non-shell matrix), and concreted (shell and other matrix cemented together). After excavation and recording were completed, STPs were backfilled. During the survey, STPs were sited with a compass and distances between STPs were measured out by pacing. Precise STP spatial location was acquired in a variety of ways. The location of each STP was recorded on field maps. A subset of STPs also had their position located with a Magellan Meridian Platinum handheld GPS unit. The position of others was captured with a Nikon DTM-310 total station. All of these data were merged together in GIS. The resultant locations have an estimated +/- 5 m horizontal accuracy.

SURVEY RESULTS

During the reconnaissance survey the field crew tested an irregularly shaped area measuring 680-m along an east-west axis and 450-m on a north-south axis, and covering roughly 11.6 hectares. Within this survey tract we excavated a total of 238 STPs (Figure 4-2). Of this total, 189 encountered pre-Columbian artifact-bearing strata and 36 yielded historic or modern materials. Summaries of objects recovered are presented in Table 4-1, while an enumeration of objects recovered from each STP is presented in Table 4-2. Several object classes were routinely recovered. The lithic assemblage is dominated by debitage (n = 394). A significantly smaller number of stage bifaces, hafted bifaces, modified flakes, and unifaces were also encountered. The pottery assemblage included all varieties typically found within the St. Johns basin. The Archaic pottery assemblage included both Orange Plain (n = 65) and Incised (n = 17) varieties. The Post-Archaic assemblage is dominated by St. Johns Plain (n = 530), but also includes St. Johns Check Stamped (n = 71), and other minority types such as sand tempered plain (n = 31). The majority of pottery sherds were classified as “crumb” sherds, those that are less than 1/2-inch in minimum dimension (n = 1197). The zooarchaeological assemblage is composed predominantly of unmodified vertebrate faunal bone. In addition, we recovered three

Table 4-1. Summary of Artifacts Recovered from Shovel Tests.

Category	Count	Weight (g)
Lithics		
Biface	2	5.9
Hafted Biface	4	24.5
Modified Flake	4	10.2
Uniface	4	63.0
Debitage	394	421.0
Pottery		
Orange Incised	17	50.6
Orange Plain	65	191.6
St. Johns Plain	530	2006.1
St. Johns Check Stamped	71	396.1
Misc. Pottery	31	83.9
Crumb Sherd	1197	624.1
Marine Shell	21	98.8
Vertebrate Fauna	3650	2153.9
Modified Bone	3	8.3
Historic	89	618.1

pieces of modified bone and 21 marine shell fragments. Finally, 89 modern or historic objects were also retrieved during testing.

Shell Deposit Distribution

The coverage provided by the STP survey allows us to consider the distribution and variety of cultural deposits across the landform. As the most visible evidence of ancient depositional practices, the presence and character of shell deposits provides an entry point into discussing the spatial distribution of anthropogenic deposition. Shell-bearing deposits were recorded in a total of 113 STPs. The density of shell recorded during testing was used to generate the distribution of shell deposits presented in Figure 4-3. It is important to note that density is a relative measure of the frequency of shell within a particular stratum. As such, it does not equate with shell depth below surface. Using these data, several large-scale patterns are evident. Shell is principally restricted to the northern half of the survey tract, and is typically found within 140 m of the terrace/wetland interface. The trail system associated with the bait fields serves as an approximate boundary between shell-free and shell-bearing deposits. Moreover, dense shell tends to be found closest to the water. As shown in Figure 4-4, the distribution of vertebrate fauna is principally correlated with the appearance, if not density, of shell within an STP. This is an expected result, as shell tends to neutralize Florida's naturally acidic soils that would normally destroy animal bone.

Given the complex history of the landscape, it is no surprise that there is considerable variation in the stratigraphic profiles encountered during the survey. A few examples serve to show the range between deposits. The composition of shell deposits

Table 4-2. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Shovel Tests of 8LA1-West.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
2-1					1	0.1							
2-2													39.4
3-11					4	0.3							
4-1					5	3.0							
4-3					1	0.3							
5-1					4	1.4							
5-11					4	0.5					1	0.1	52.9
6-2					1	0.1			4	4	1	0.1	
6-3					1	1.1							
7-1													11.1
7-3					3	0.2							
7-6					1	9.4			2	3			
7-7					2	13.5			2	3	6	2.4	
7-11													4.4
8-1					1	0.1							
8-2													0.4
8-3					5	1.5							
8-4							2	0.1	1		39	44.8	2.6
8-5					1	0.2					16	3.1	
8-6									3		22	17	
8-7					3	0.5				2			
8-8					2	1.0			1	1	8	2.4	
8-9											40	18.9	2.3
8-12													13.7
9-1					3	1.7							
9-3					1	1.0							
9-4					3	0.4							
9-5					1	0.2							
9-7					9	2.6					67	25.5	
9-8					2	0.2					28	8.3	0.3

Table 4-2. Continued.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
9-9								0.4			142	56.4	
9-10											113	62.7	
9-11													
10-1					1	0.4							
10-4				1							11	3.7	
10-5											49	22.9	
10-6					5	19.0	1			1	123	111.7	
10-7					1	0.0		32.8			202	53.6	
10-8					1	2.3					38	12.6	
10-14					1	0.1		0.4					
11-1					17	6.4					1	0.5	0.3
11-2											8	2.1	4.7
11-3					6	0.7				1			
11-4											71	44.5	
11-5					1	0.8	1				78	38	
11-11					1	0.1					2	0.1	
11-13					2	0.3							
12-1													24.5
12-2									9	14			57.3
12-3								1.6	2		148	67.7	
12-4											4	32.9	
12-5									1		83	64	
12-12					1	1.4							
13-1					1	1.1			1				
13-11					4	1.0							
13-13	1				1	7.4							
13-2					1	3.0		7.2					
13-3					3	0.3							
13-4					1	0.0		51.4	1	1	236	79.3	
14-1								1.0					

Table 4-2. Continued.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
14-2				1	3	3.9				1	33	43.7	
14-3					1	2.1					14	8.1	
15-1					1	0.1							
15-2					5	0.6			10	6	3	2.6	2.8
15-3					32	17.4		3.2	1	1	70	17.2	1.0
15-4					3	1.9		2.5	7	12	92	58.6	
16-1					1	4.6			8	26	11	5.6	8.8
16-3					2	2.4							
16-6									2	3	2	0.3	
16-7								3.2	1	2	8	6.3	0.2
16-8										2	68	24.1	
17-1					2	0.4					1	0.3	10.0
17-2					4	0.6		5.6	2	4			
17-6					2	1.0					7	5.7	3.8
17-7					1	0.5		0.6		5	51	33	
17-8					3	7.5			3	4	12	6	4.7
18-1									1		11	16	
18-2										1	2	2.7	
18-3					1	0.5			1				
18-6					1	1.6					8	3.1	
18-7										1	3	1.8	
18-8									1		6	6.6	
19-1											16	6.8	
19-2					1	0.4					2	1.6	7.4
19-3									1	3	14	3.8	
19-4					1	1.2							
19-6				1						1	30	28.7	
19-7							2		3	5	67	39.9	
19-8					1	2.0			7	20	16	5.8	
20-2					2	0.3			2	1			

Table 4-2. Continued.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
20-3					5	0.6				26			
20-4					2	0.1							
20-5					1	0.7			2	2			
20-6					12	4.2					10	16.9	
20-7											7	4.9	
20-8			1		6	6.6			2	1	17	9.8	
20-9					1	0.1							
21-1											40	19.6	
21-2									3		2	3.7	
21-3								0.5	1				
21-5					10	2.7							
21-6				1	2	4.2							
21-7									1		15	8.5	
21-8					1	2.9		8.3	9	4	18	15.5	
22-1									23	80	15	3.4	
22-2					4	20.1				5	53	24.2	
22-3										10			
22-4					1	0.5							
22-5					1	0.9							
22-6								161.9			117	106.3	
22-7									1	1	36	35.9	
22-8					2	4.9	3		17	18	43	19.2	
23-1									5	9	15	7.9	
23-2									9	5	5	4.9	
23-3					1	2.3			4	1			
23-4		1			2	0.3							
23-5					2	0.6							
23-6*					1	1.0			13	5	11	2.6	
23-7					2	29.5	1		2	4	21	18.7	
23-8		1			6	15.4	1	47.3	51	60	98	133	11.8

Table 4-2. Continued.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
24-1								1.1		5	5	1.1	
24-2									1	4	6	4.8	
24-3					3	0.0			2	5	1	0.6	
24-4					2	0.5			3	12			115.7
24-5					6	1.8			3	3			
24-6			1		2	0.5			2	11	50	25.5	
24-7	1				8	6.5			18	51	92	33	
24-8					5	4.2			28	30	93	50.7	1.1
25-1					1	6.8		0.4	3	23	36	12.9	
25-2					1	7.0			6	22	34	13.7	
25-3									3	12	24	4.6	1.6
25-4								0.3	4	16	8	3	
25-5									2	6			215.4
25-6					4	4.4			3	3	5	61.2	
25-7					5	49.6	2		8	42	47	46.3	
25-8					1	0.8		1.9	51	35	38	48	4.2
25-9									1	7			1.2
26-1					4	0.5			6	12	8	1.2	0.8
26-2					4	1.1			1				1.6
26-3			1		7	10.3			3	17	1	0.7	
26-4					2	0.4			1				1.5
26-6					2	0.7			12	23	64	24.9	2.4
26-7					6	7.3			31	37	65	24.3	
27-1			1		1	0.3			10	11	2	0.4	6.7
27-2					4	0.8			3	13			
27-2 Surf									2				
27-3					7	5.2				6			
27-5										1			
27-6					2	1.0	2		12	37	32	9	
27-7					1	0.5			11	8	16	21.4	1.4

Table 4-2. Continued.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
28-1		1			3	2.7			10	38	69	39	
28-2					13	1.7			2				
28-3									4	7			
28-5									11	10			
28-6							1		2	9	33	16.1	
28-7					2	5.2			7	36	44	21.6	
29-1									7	50	42	14.8	
29-2					5	4.0		2.7	4	6			
29-3					2	0.2							
29-4					4	0.8			3	1			
29-6									12	26	12	6.9	
29-7									4	5	10	2.8	
30-1					4	2.7	5		9	19	54	21.9	
30-2					1	0.1		7.0	12	2			
30-3					5	0.6			4		1	0.1	
30-4					8	2.0			3	1			0.1
30-6					3	3.4			29	37	22	32.1	
30-7					2	7.3			27	1	21	26.6	
31-1		1			18	19.6		5.8	57	66	88	36.3	
31-2					3	0.4			5	17	5	5.1	
31-3					1	20.4		2.2	12	17			
31-4									8	1			
31-5					2	8.1			3	3			
31-6									7	5			
32-1					5	1.4			22	29	15	4.7	

* plus three pieces of modified bone 8.3 g

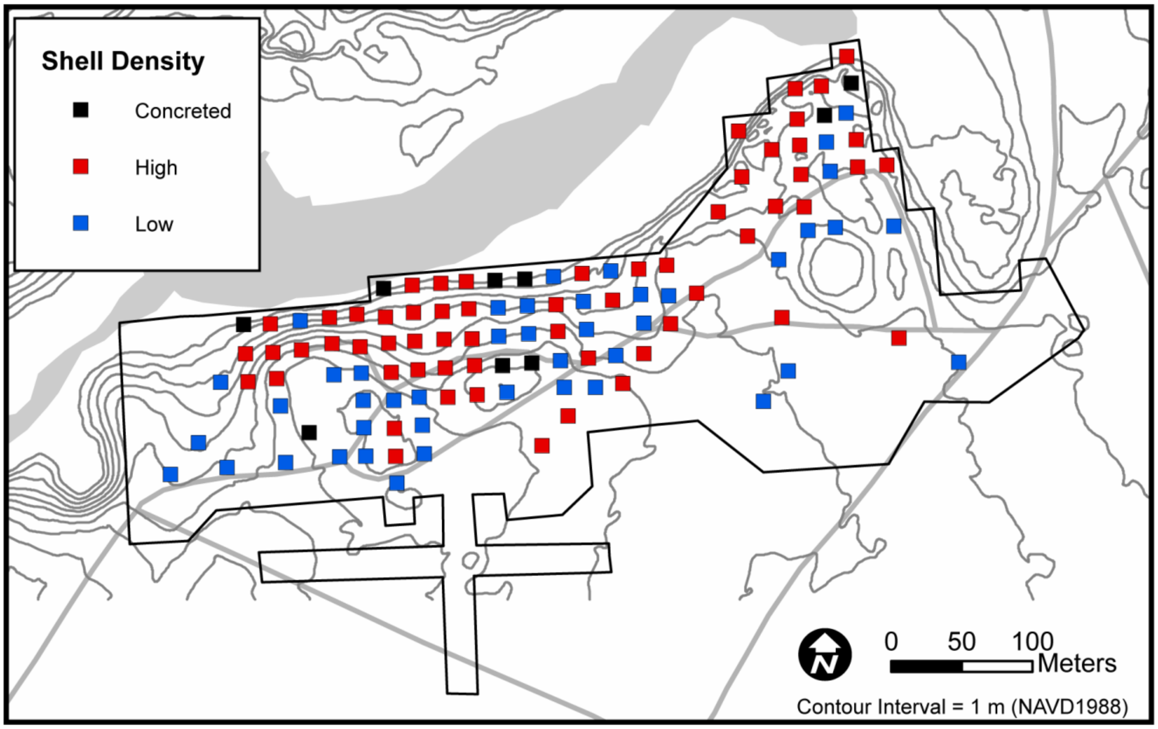

Figure 4-3. Distribution of shell identified during shovel testing, 8LA1-West.

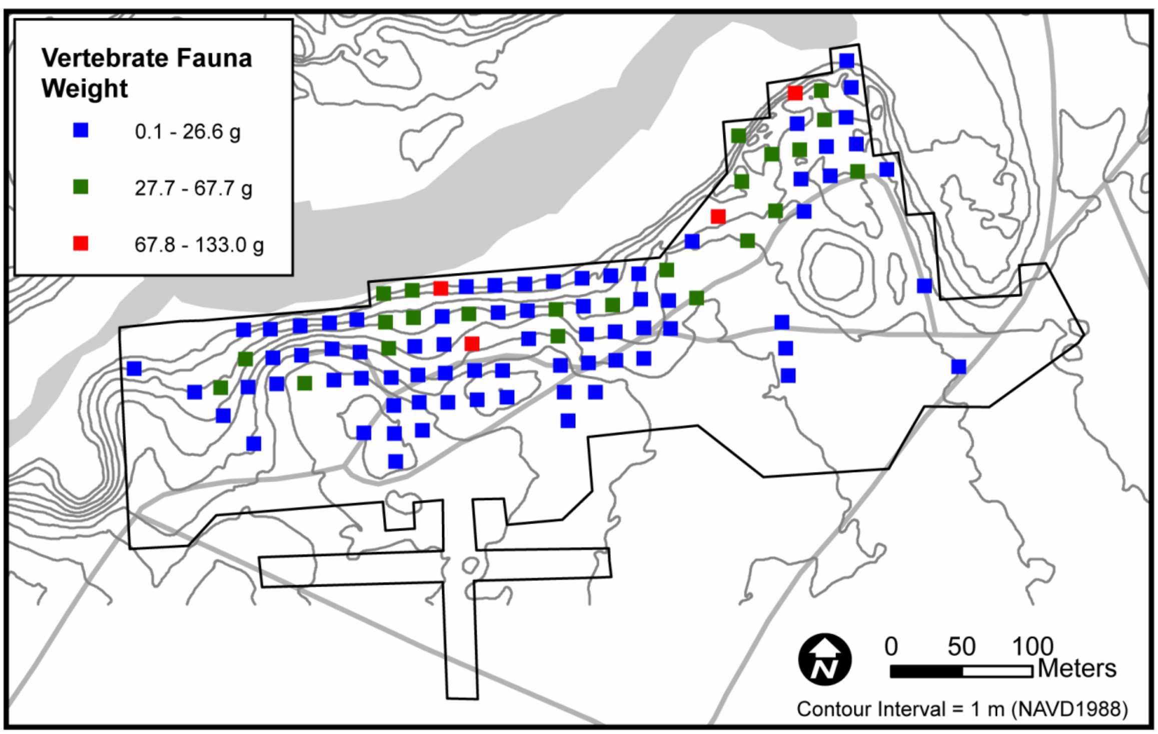

Figure 4-4. Distribution of vertebrate fauna recovered during shovel testing, classified by weight, 8LA1-West.

differs by density and species composition, but tends to include mystery snail, bivalve, and apple snail. A typical STP with dense shell, such as 28-6, yielded the following profile: 0–18 cm below surface (cmbs) dark brown sand with low density whole and crushed shell; 18–32 cmbs, high density whole and crushed shell with some brown sand; 32–100 cmbs, brown fine sand with low density shell. Excavation at high elevations to the south, excluding shell-bearing deposits, encountered profiles similar to STP 24-11: 0–8 cmbs, dark gray/brown sand; 0–85 cmbs, very light gray sand; 85–100 cmbs, dark yellow/brown sand. Slightly different profiles were encountered in the large depression, no doubt due to the different pedogenic processes at work during soil formation, as indicated by the profile within STP 9-4: 0–65 cm cmbs white sand; 65–75 cmbs light brown sand; 75–100 dark gray/brown sand.

At a smaller scale, there are deviations from the larger pattern of shell and non-shell distributions. Concreted shell was noted only in nine STPs. These tend to cluster in several locations. Four STPs encountered concreted shell at low elevations near the terrace/wetland interface. Concreted shell in this location is expected, given that it is thought to form through percolating water. Similarly, two STPs in Locus A intercepted concreted shell, which is frequently encountered in basal deposits of shell mounds (Wheeler et al. 2000). Concreted shell was noted in two STPs within Locus B, both on the northern edge of the dome. Surface cuts there indicate that some shell was removed in this locality, but the presence of concretion may have made extraction too difficult for extensive operations. Finally, one STP within Locus C (19-3) intercepted concreted shell between 85 and 100 cmbs. This deposit is unusual in the area, and may represent the base of a pit. In this same vein, several STPs with shell were found farther south than expected given the broader landscape patterns. For example, STP 20-4 is situated south of the elevated portion of Locus B. The STP intercepted deposits with the following profile: 0–17 cmbs, light gray brown sand; 17–79 cmbs, dark yellow brown sand; 80–99 cmbs, dark gray/brown sand with dense mystery snail, apple snail, and bivalve; 99–100+ cmbs, brown fine sand. Field notes suggest that the basal shell deposit had the appearance of a feature. Although no pottery was recovered, this STP may have intercepted another example of a deep Orange period pit that has been documented in Locus B (Chapter 6) and across the run at 8MR123 (Randall et al. 2011). Other southerly occurrences of shell may have resulted from road construction and maintenance, particularly STPs 5-11, 7-1, and 11-2 in the east and 29-4 and 33-4 in the west.

Within the principal zone of shell, there are several shell-free voids. To the west of Locus A are three shell-free STPs (12-2, 13-3, 14-3). Whether the lack of shell reflects ancient depositional practices or recent shell mining is hard to discern from the STP results alone. Some evidence for disturbance in STP 12-2 was noted, including mottled sediment down to 45 cmbs, a coin (penny), and a metal pipe fragment. However, no such disturbances were noted in the other cases: STP 13-3 yielded a homogenous profile of light brown sand (0–100 cmbs), and STP 14-3 yielded a profile consisting of dark brown/gray sand 0–60 cmbs) and yellow/brown sand (60–100 cmbs). Based on topography alone, these STPs would have been on the backside of the mined shell mound. Elsewhere along the St. Johns River, off-mound testing frequently finds that shell deposits are circumscribed, and so the pattern within Locus A may reflect ancient practices. Another shell-free void, measuring approximately 20 x 40 m in plan, is located on the apex of the ridge nose segment of Locus C (STP 27-2, 27-3, 28-1, 28-2). Although this area was once cleared of trees, presumably as part of the mining operations, there is no other surficial evidence that would suggest the area was mined. As such, this feature may represent a purposefully maintained shell-free zone. Finally, shell is found along most, but interestingly, not all of the terrace/wetland interface. Indeed, shell was rarely encountered west of the Locus C ridge nose, particularly in Transects 31 through 34.

Artifact Distribution

The distribution of artifacts across the landform provides further evidence for differences in land-use practices across the survey area. In general, lithic flakes and tools were the most widely distributed artifact class (Figure 4-5). Flakes were found in quantities ranging between 1 and 32 per STP, while no more than one lithic tool was found in any STP. The presence of lithic objects is independent of shell deposits, and lithics are just as likely to occur in near-water deposits as in the uplands. Indeed, a lithic flake and a biface fragment were found ~290 m south of the spring run, and several lithics flakes were even recovered from the large depression. There are no apparent clusters of lithics across the landform. STPs that yielded large numbers of flakes (greater than 13) were widely distributed, and there is no clear gradation of flake or tool density. The patterning on this side of the run is significantly different than that recently documented north of the Silver Glen Springs main vent (Randall et al. 2011). Lithics were preferentially clustered away from the shell deposits and were found in much higher densities. Moreover, the lithic assemblage was characterized by a wide array of chipped stone tools, including numerous stage bifaces, hafted bifaces, microliths, modified flakes, and sandstone abraders.

In contrast to the lithic assemblage, the pottery assemblage shows spatial patterning that likely reflects changing land-use practices through time (Figure 4-6). At the largest scale, pottery of the Orange and St. Johns series is clustered in the western aspect of the survey tract, and was infrequently recovered in the vicinity of Locus A. As detailed in Chapter 5, stratigraphic excavations within the remnant Locus A shell mound revealed intact preceramic deposits up to 3-m thick. Thus, the lack of pottery in this locus is not necessarily unexpected. However, it is notable that St. Johns pottery is found on the northern, swamp-facing edge of the remnant shell mound, albeit in small quantities. The presence of sherds on the southern edge of the escarpment could be dismissed as resulting from mining and the subsequent movement of material. That could be the case on the north side, as well, but it is much less likely. The implication is that pottery was emplaced upon portions of the mound after the Mount Taylor (preceramic) period, but those deposits were subsequently removed during the mining process.

A closer inspection of the distribution of pottery by type elucidates further chronological and spatial trends. Sherds of the Orange series were recovered in only 29 STPs, in frequencies ranging between 1 and 12 sherds per STP (Figure 4-7). Of this

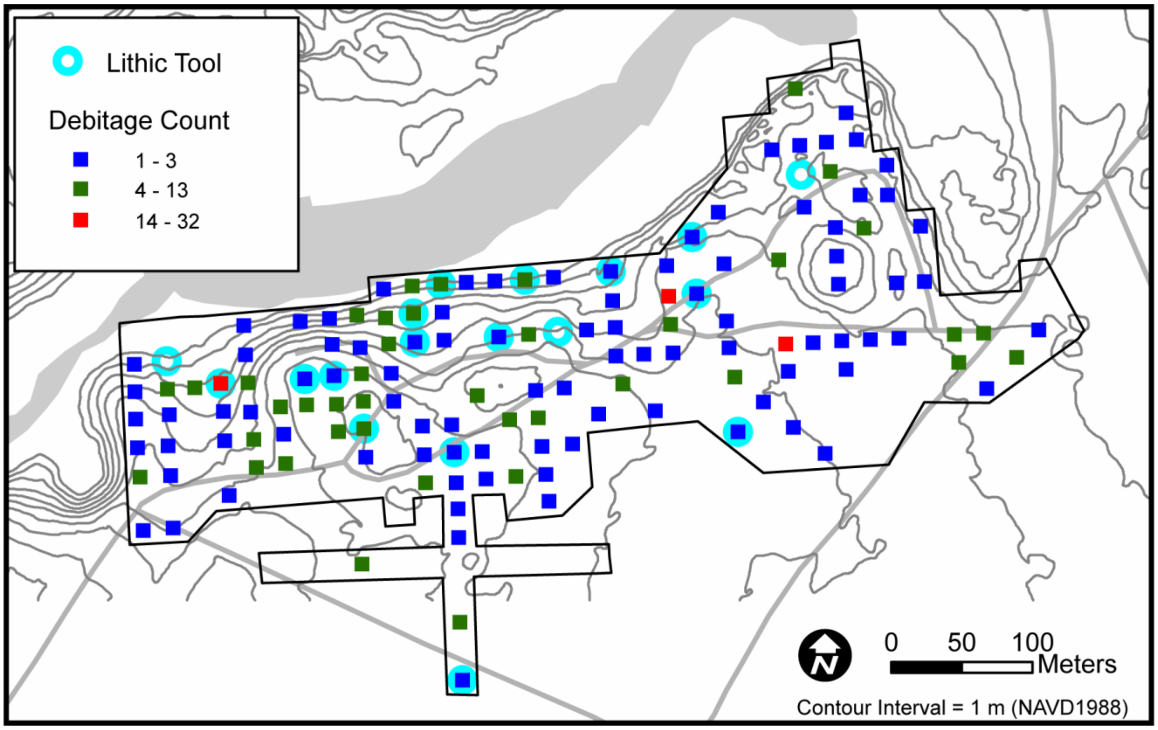

Figure 4-5. Distribution of lithic tools and waste flakes recovered during the shovel test survey.

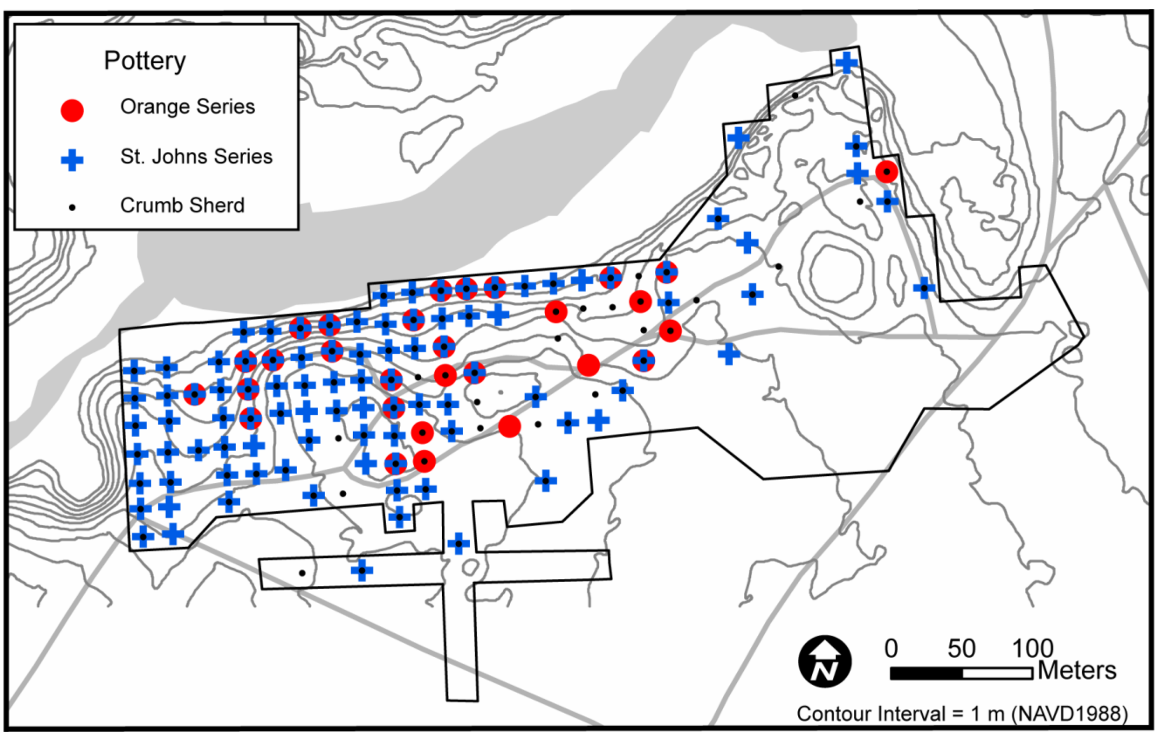

Figure 4-6. Distribution of pottery recovered during the shovel test survey, classified by series.

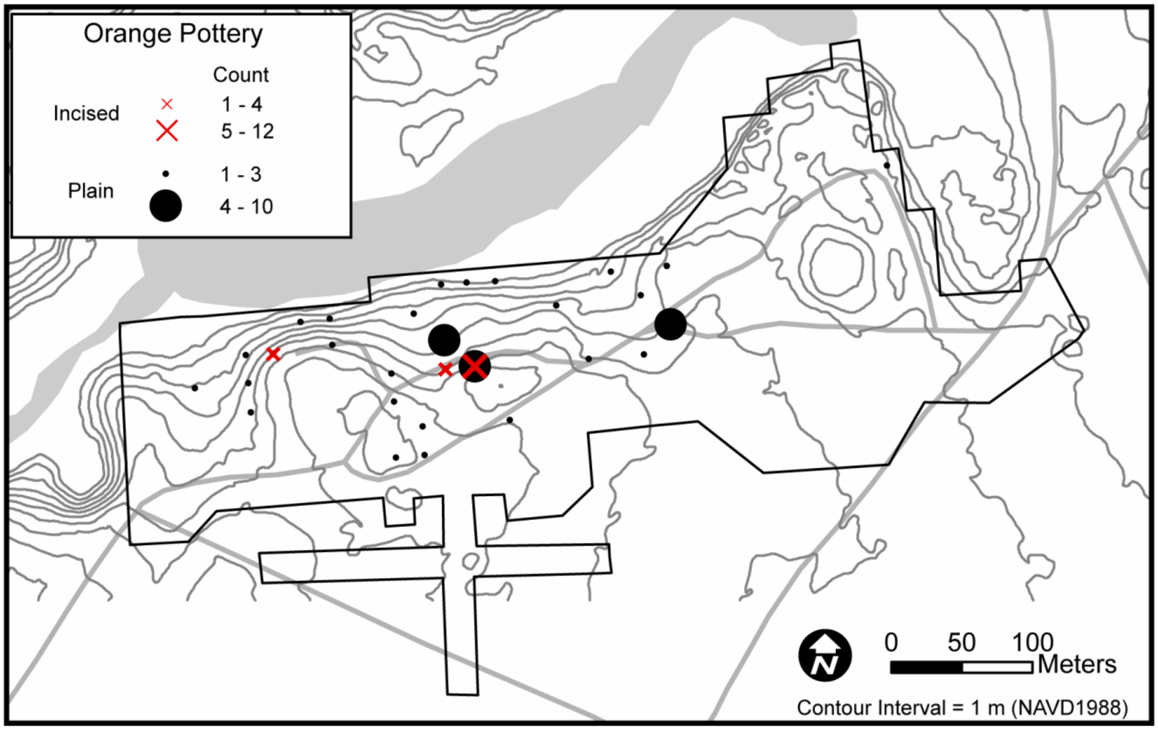

Figure 4-7. Distribution of Orange Plain and Incised sherds recovered during the shovel test survey.

total, three STPs yielded Orange Incised sherds (n = 17), while the remaining 26 yielded only Orange Plain sherds (n = 65). The distribution of Orange Incised and Plain sherds overlaps. Excluding two plain fiber-tempered sherds in STP 7-7, Orange sherds are restricted to the west in the survey tract. Although typically found in small numbers, plain and incised sherds were relatively abundant in STP 22-1, while the nearby STP 23-6 also contained a large number of plain sherds. Aside from the tendency for Orange sherds to be found away from Locus A, this assemblage tends to be restricted to either terrace-edge deposits or the upland dome in Locus B. This pattern is most evident in the vicinity of the Locus C ridge nose, where Orange pottery is not found above 6 m in absolute elevation. This is not to say that fiber-tempered pottery is restricted to low elevations, as the highest density (by STP) of sherds occurs in the vicinity of Locus B. However, the presence of pottery at low elevations around, but not on top of, Locus C would suggest that pottery was preferentially being deposited downslope.

The dominant pottery type recovered during the survey was St. Johns Plain (n = 530) which was encountered in 94 STPs widely distributed across the survey tract (Figure 4-8). St. Johns Plain was not only found in a large number of STPs, but the density of sherds per STP was quite high in some cases (a maximum of 50 sherds was recovered from STP 31-1). Like the Orange series, St. Johns Plain sherds were mostly clustered in the west, although several STPs around Locus A did produce sherds as noted above. More interestingly, however, is that high-density STPs were clustered along the terrace

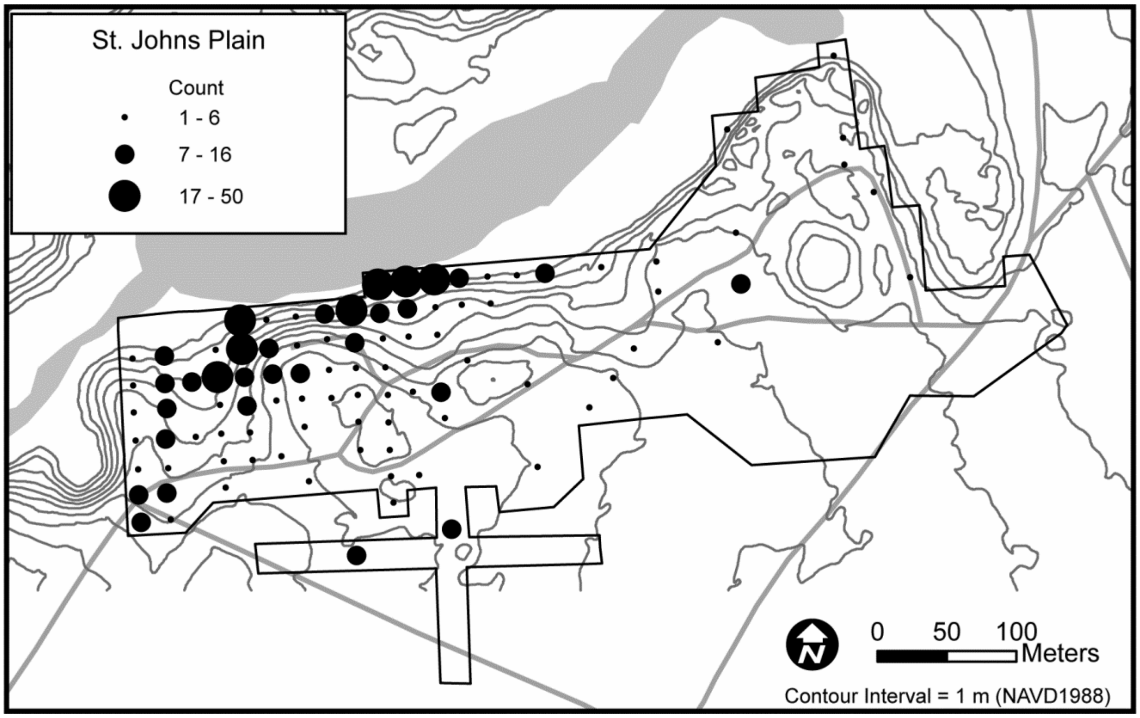

Figure 4-8. Distribution of St. Johns Plain sherds recovered during the shovel test survey.

edge. It would seem that during the St. Johns period there was a preference for depositing sherds downslope, although small numbers of St. Johns Plain sherds were found at high elevations within Locus C. One last notable trend is the presence of moderately dense St. Johns Plain assemblages within STP 23-10 and 26-11 near the sand mound. As the only pottery found near the mound, these lend credence to the hypothesis that the mound was constructed during the St. Johns period, perhaps during St. Johns I times. In contrast to the widespread distribution of St. Johns Plain, only 71 St. Johns Check Stamped sherds were found in a total of 44 STPs (Figure 4-9). Excluding one STP in Locus A (13-4) and Locus B (19-3), St. Johns Check Stamped sherds were restricted to the terrace edge and Locus C. Although the check stamped sherds were recovered at elevations above 6 m, on top of the ridge, the vast majority were actually recovered farther to the west at the survey tract border. This is an interesting trend, as little to no shell was encountered in this location.

CONCLUSIONS

Systematic shovel testing along Juniper Club property fronting the south side of Silver Glen Run shows that subsurface archaeological deposits are distributed widely across the 11.6-ha survey tract. Roughly 80 percent of the 238 shovel test pits (STPs) excavated in the tract yielded pre-Columbian artifacts and/or anthropogenic shell deposits. The latter was observed in 133 STPs, the vast majority within 140 m of the spring run, but also sporadically at distances over 200 m from the run. Shell density

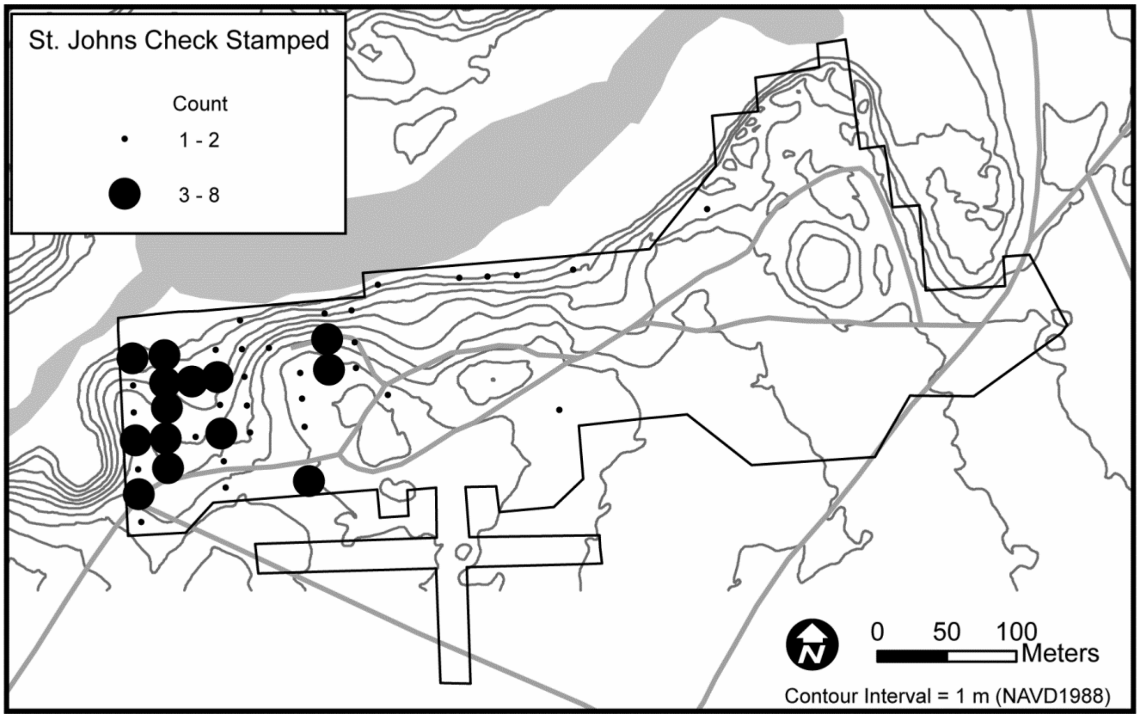

Figure 4-9. Distribution of St. Johns Check Stamped sherds recovered during the shovel test survey.

varied markedly in STPs across the survey tract. Dense subsurface shell coincides with the footprint of the mined Mount Taylor shell ridge designated Locus A, but it also occurs across the terrace slopes of Loci B and C and in their respective shell domes to the south, forming the apex of adjacent ridge noses. Vertebrate fauna coincide with shell due largely to the enhanced preservation of organic matter afforded by the acid-neutralizing affects of degraded shell. Several areas devoid of shell are noteworthy. West of Locus A, the Mount Taylor shell ridge, STPs lacking shell may signal the actual termination of this oldest shell deposit, but we hasten to add that shell-mining operations in this locus may have created an artificial void. More meaningful perhaps is the small shell void at the apex of Locus C. Ongoing work in this location is providing evidence for a St. Johns II-period village with a presumptive central plaza. Shell was largely absent as well to the west of Locus C, on the western margin of the club property. We have not yet to conduct secondary testing in this location, but based on the density of check-stamped St. Johns pottery (see below), a nonshell component coeval with the Locus C village appears to be present.

Like shell, subsurface pre-Columbian artifacts are distributed widely across the survey tract, and reveal spatial patterning indicative of distinct archaeological components. This is most evident in the distribution of pottery. Sherds are generally absent in Locus A, the location of a preceramic shell ridge. Occasional St. Johns period sherds in this locus may signal a reuse of the shell ridge after an extended period of abandonment, but this remains speculative because the upper portion of the ridge was compromised by shell mining. The oldest pottery, that of the Orange series, is concentrated in Loci B and C, largely in the shell nodes of each locus, but also in the downslope portion of Locus C. St. Johns pottery is likewise distributed across Loci B and C, with especially dense occurrences in the downslope aspects of both loci. Check-stamped St. Johns pottery is concentrated in Locus C and especially in the shell-free ridge nose to the west of Locus C, most notably in STPs of transects 31-34.

In sum, reconnaissance survey of 8LA1-West shows that the entire landform fronting the spring run contains intact subsurface deposits with few lacunae. Variation in the composition and density of subsurface shell and artifacts enables us to subdivide 8LA1-West into three loci (Loci A, B, and C) and to implement for each a program of secondary testing and data recovery. Provided in the balance of this report are the results of testing at Loci A and B; testing at Locus C began in earnest only this past summer (2011) and will continue in 2012 and possibly beyond. The results of this work will be provided in a later report.