TYLER BEND

TIMOTHY C. KLINGER
LAWRENCE L. AYRES



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National Register Assessment of 3SE64, 3SE95, 3SE150 and 3SE188
within the Proposed Tyler Bend Development Area,
Buffalo National River
Searcy County, Arkansas

by
Timothy C. Klinger
and
Lawrence L. Ayres

submitted by
Historic Preservation Associates
Post Office Box 1064
301 West Mountain Street
Fayetteville, Arkansas 72702

submitted to
National Park Service
Southwest Region
P. O. Box 728
Santa Fe, New Mexico 87504

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ABSTRACT

National Register assessments were conducted for the Southwest Region of the National Park Service (NPS) by Historic Preservation Associates (HPA) at 4 prehistoric sites (3SE64, 3SE95, 3SE150 and 3SE188) in the Tyler Bend area of the Buffalo National River in Searcy County, Arkansas. Work was conducted pursuant to the requirements of various federal laws, policies and standards of the NPS and requirements of the Arkansas State Archeologist. Previous investigations at the sites had been conducted in 1979 by NPS archeologist James E. Bradford and in 1980 by NPS archeologist Michael Sierzchula (3SE64, 3SE150 and 3SE188). Investigations by HPA as required by the Scope of Work included surface collections, limited disking in transects across the sites, limited plowzone removal, backhoe testing for evidence of deeply buried deposits and extensive auger tests. 3SE64 appears to represent the results of short term habitation activities during the Archaic or Woodland periods. 3SE95 was probably inhabited during the Archaic Period. 3SE150 is a large site representing the results of multiple episodes of limited and perhaps habitation activities during the Archaic or Woodland periods. 3SE188 was used for limited activities during an unknown period of the prehistoric past. Characteristics common to each of the sites include the absence of subplowzone features or other undisturbed cultural deposits, no preserved floral or faunal remains, assemblages limited to only a few classes of lithic artifacts and few diagnostics. None of the sites investigated meet the minimum requirements for eligibility to the National Register of Historic Places. No further cultural resources work is recommended at this time.

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INTRODUCTION

BACKGROUND AND PURPOSE OF THE REPORT

On 29 May 1986 quotations under RFQ7029-6-0013 were sought by the Southwest Region of the National Park Service for National Register assessments of four prehistoric archeological sites (3SE64, 3SE95, 3SE150 and 3SE188) in the Buffalo National River of Searcy County, Arkansas. This work was necessary in order to comply with the requirements of the National Historic Preservation Act of 1966 (as amended) and the rules and regulations promulgated pursuant to its passage. The NPS has proposed the development of the Tyler Bend area on the Buffalo River for recreational purposes, making necessary the assessment of each site which may be impacted by the undertaking.

The HPA quote was submitted on 10 June 1986. Award of Order No. PX7029-6-0470 was made on 25 June 1986 and was received by HPA on 30 June 1986.

PROJECT LOCATION AND DATES OF INVESTIGATION

The prehistoric archeological sites investigated during this project are situated in north central Searcy County northwest of Marshall and southeast of St. Joe, Arkansas (Figure 1). 3SE64 is located on the Buffalo River floodplain. 3SE95 is situated on the first terrace of the Buffalo. 3SE150 covers most of the floodplain on the interior curve of the Buffalo at Tyler Bend. 3SE188 occupies a small bench that overlooks both 3SE150 and Tyler Bend itself.

Impacts anticipated as a result of the planned development include significant ground disturbance during and as a result of the construction as well as increased collector activities. Investigations at Tyler Bend began on 9 July 1986 with fieldwork completed on 12 August 1986.

PROJECT SPONSOR, PARTICIPANTS AND CURATION

The sponsoring agency for the work was the Southwest Region of the National Park Service (NPS). The investigation was conducted by Historic Preservation Associates (HPA). Mr. Timothy C. Klinger served as Principal Investigator and Mr. Larry Ayres supervised the fieldwork. The artifacts were processed in the laboratory and analyzed by Mr. Ayres.

All artifacts and accompanying records will be curated at the NPS Buffalo National River Headquarters. Arkansas Archeological Survey Site Revisit Forms along with copies of the field notes will be curated by the Office of the State Archeologist in Fayetteville.

PROJECT GOALS

The goals of the work were to determine to the extent possible whether any of the sites might contain significant data and therefore be eligible for nomination to the National Register of Historic Places (NRHP). Data concerning the horizontal and vertical extent, condition, period(s) of occupation and possible function for each site were required. An assessment of the impact anticipated as a result of the proposed development was also

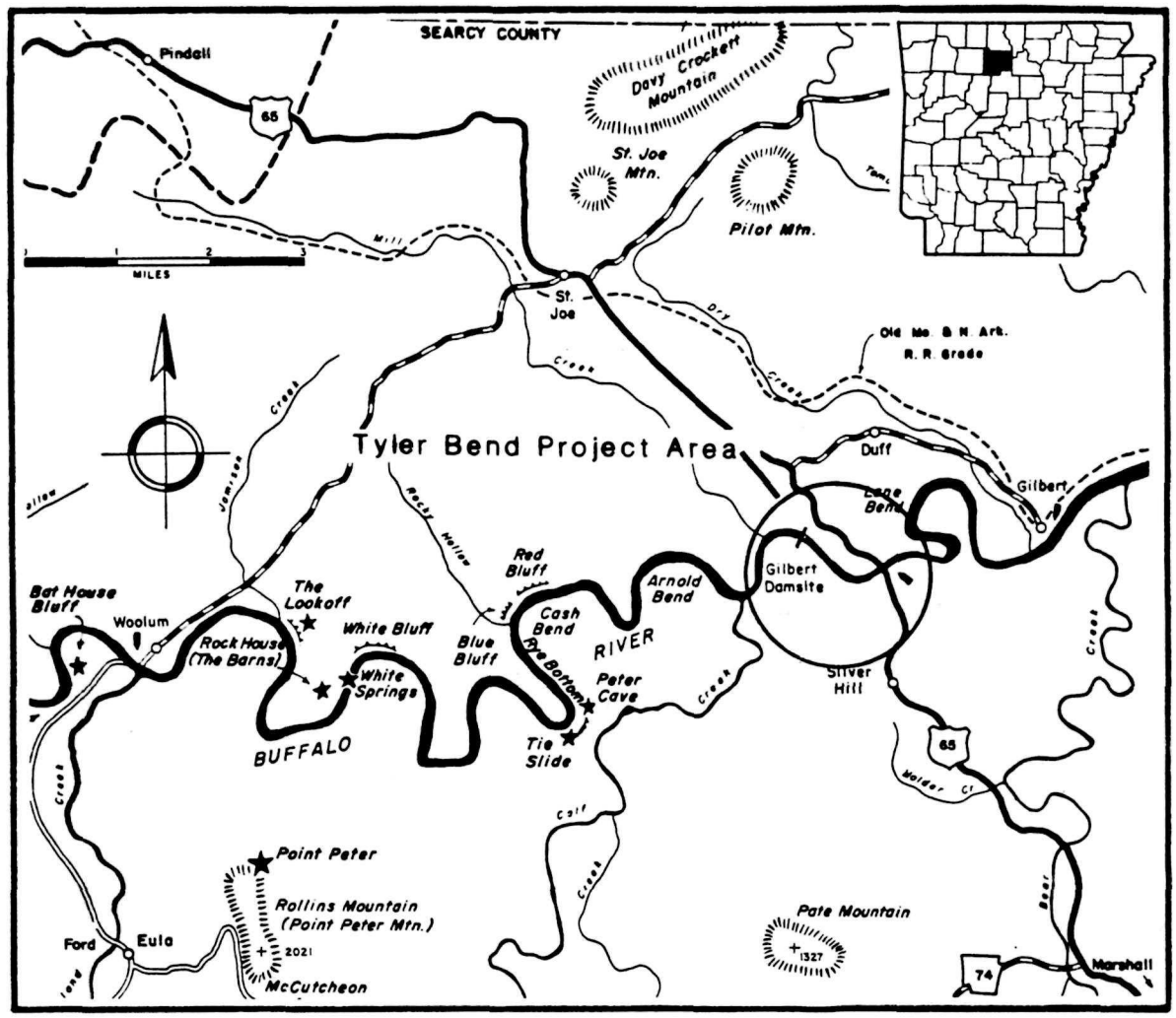


Figure 1. Tyler Bend project area (after Smith 1970:167).

needed as were recommendations for acceptable mitigation measures should any of the sites be determined potentially significant.

ENVIRONMENTAL SETTING

PHYSICAL ENVIRONMENT

The Buffalo National River is located within the Ozark Plateaus physiographic province in Arkansas. Situated entirely within the Springfield Plateau subdivision of the Ozark Plateaus, the area is bordered on the north by the Salem Plateau and on the south by the Boston Mountains.

The Springfield Plateau is characterized by a gently sloping surface with broad stream valleys (Sabo et al 1982:11). Stream action has produced deep valleys which, in areas such as the head waters of the Buffalo River, are quite rugged due to their proximity to the escarpments of neighboring subdivisions (Foti 1974:16)

Surface geology of the Springfield Plateau in the project area is composed of the Boone formation consisting of Lower Mississippian age chert and limestone with various intrusive areas of shale and sandstone (National Park Service 1981:13). In the areas surrounding the project, the Boone formation has weathered into deep valleys with steep hillsides and bluffs. Soils from this limestone formation are classified as Ozark Highlands limestone soils which tend to be well drained with slow to excessive permeability (National Park Service 1981:13). Within the project area, the soils on which the investigated sites are situated have been classified as the Razort and Noark series (National Park Service 1981:13-17)(Figure 2).

Razort series soils are located on floodplains and low terraces that tend to be flooded. They are characterized by 0% - 3% slopes and are deep, well-drained and moderately permeable. The surface layer is 20 cm of silt loam with a subsurface layer of silt loam a meter thick overlying a gravelly silt loam.

Noark series soils are found on slopes ranging from 3% - 45% and are deep and well-drained with moderate to slow permeability. Surface and subsurface layers are composed of a cherty silt loam 25 cm thick. This is underlain by a subsoil composed of 18 cm of cherty clay and a base of cherty clay. Depth to bedrock is 1.8 m or more.

Between the specific project sites are areas of Bruno, Arkana-Moko complex, Clarksville and Nixa series soils (National Park Service 1981:14-17)(Figure 2).

Bruno series soils are located on floodplains. Slopes range from 0% - 5% and they are excessively drained. The surface layer is a sandy loam with a subsurface layer of a sandy loam to a depth of 1.5 m.

Arkana-Moko Complex soils are found on slopes ranging from 8% - 40% and are well drained but with very slow to moderate permeability. The surface layer is composed of very cherty or stony silt loams 5 cm - 18 cm thick, while the subsurface layer consists of very cherty and stony clay and silt loams 10 cm to 20 cm thick. This is underlain by a very cherty silty clay to clay subsoil 41 cm thick on top of limestone bedrock.

Clarksville soils are characterized by slopes of 20% - 40% and are very cherty and somewhat excessively drained on steep side slopes and narrow ridge tops. The surface layer is 33 cm of very cherty silt loam over a subsurface layer of very cherty silty clay loam and very cherty silt clay slightly over 2 m thick.

Nixa series soils are found on upland ridgetops and side slopes with slopes of 3% - 12% and are deep with very slow permeability. Surface and subsurface layers are composed of a 20 cm thick layer of very cherty silt loam underlain by 25 cm of cherty silt loam on top of a brittle fragipan of very cherty silt loam.

The natural vegetation supported by these soils is the oak-hickory association of the upland hardwood forest, while the presettlement vegetation was probably composed of the upland and lowland forest zones identified by Miller in Sabo et al (1981:22-29). Common tree species along the floodplain include american elm (Ulmus americana), green ash (Fraxinus pennsylvanica), silver maple (Acer saccharinum) and boxelder (Acer negundo) with sycamore (Platanus sp.), black river birch (Betula nigra), black willow (Salix nigra) and cottonwood (Populus sp.) found on the stream bank. Oak-hickory or oak-pine associations are now common in other parts of the project area (National Park Service 1981:23-24). The areas in which each of the sites is located are now being used as hay meadows.

The Buffalo River exerts a tremendous force on the local environment as shown not only by local topography but also by the strength of its periodic floods. Average flow at Tyler Bend can vary from a 2 year low of 36 cfs to a 100 year flood with an estimated discharge of 140,000 cfs (National Park Service 1981:21). Flooding cycles can result in alterations in the ground surface of the floodplain. Areas from which the soil had been scoured were observed at 2 of the sites investigated (3SE95 and 3SE150). These areas encompassed up to 30 m^2 and had surface impacts to a depth of 20 cm to 25 cm. There were also places where small saplings or bushes had been washed away, leaving depressions approximately 2 m in diameter and 1 m deep. Mr. Bill Yancey, who cuts hay on the sites, said that the worst of the scouring occurred during a major flood about 6 years ago.

The previously established boundaries of the sites generally conform to the hay fields. 3SE64 (Tyler Bend No. 1) lies on the Buffalo River floodplain, approximately 800 m to 900 m downstream from Tyler Bend. It is bordered on the southeast and southwest by the base of the upland slope, on the northeast by the current channel of the river and on the northwest by an intermittent stream which has cut a channel about 2.5 m deep. The colluvium has extended onto the field along the southwest edge of the site as indicated by large amounts of gravel and rock. Some disturbance has occurred in the northern portion of the site in the form of a wash which measures approximately 15 m to 20 m wide, 130 m long and 1 m to 2 m deep.

At 3SE95 (Harv Grinder site) the prehistoric material is located on the first terrace, approximately 15 m above the Buffalo River and 200 m to 300 m downstream from the Highway 65 bridge. The site is bounded on the north by the terrace edge, on the east by Goodhue Hollow (which may be eroding into the site), on the south by the back side of the terrace and on the west by an unnamed hollow that is followed by Highway 65. The terrace within this area has eroded leaving an undulating surface.

3SE150 occupies the majority of the floodplain on the interior curve of Tyler Bend. It is bordered on the south by the base of an upland slope and on the north by both current and abandoned channels of the river. At about the center or the northern edge of the site is a broad, gentle rise approximately 1 m higher than the surrounding ground surface. There are also areas of scouring and pitting caused by previous floods.

3SE188 (Tyler Bend Bench 1 and 2) is a small site, occupying the point of a ridge or bench above Tyler Bend. This location offers an excellent vantage for observing the entire Tyler Bend area. Access is possible along

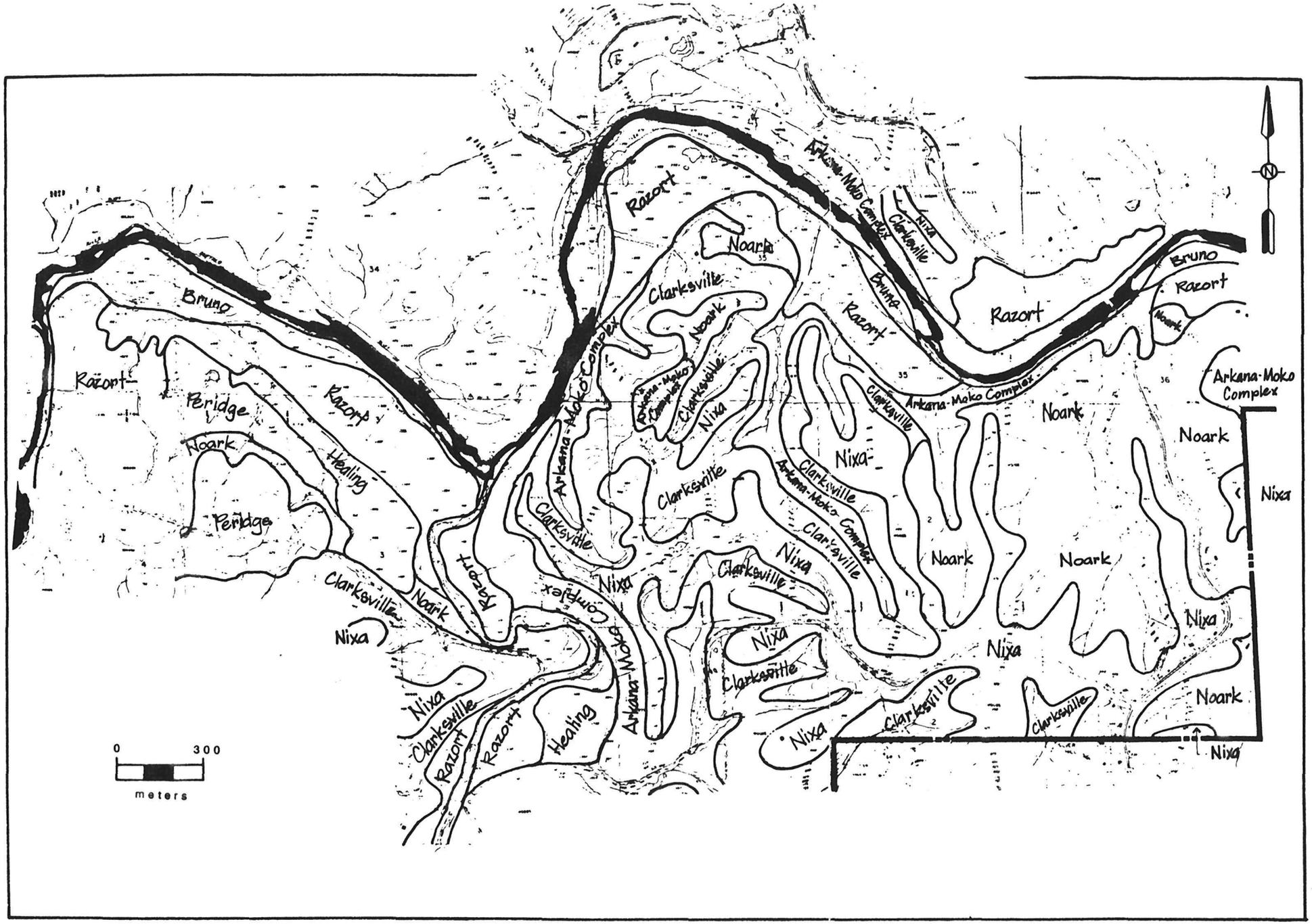


Figure 2. Soils in the project area (after National Park Service 1978).

the northeast slope, which is much gentler than that on the west side. The Tyler Bend access road drops off of the ridge from the south and follows the northeast slope onto the floodplain.

CULTURAL ENVIRONMENT

Table 1 outlines the general cultural sequence in the project vicinity and is based on information presented by Sabo et al (1982:48-117). Within the general locality of the project, sites representing almost the entire cultural sequence have been recorded. The oldest archeological evidence found is a small, unfinished, fluted point resembling the Folsom type that was recovered from the earliest cultural level at Calf Creek Cave (3SE7) in Searcy County (Dickson 1970 cited in Sabo et al 1982:51-52). A Dalton point was recovered from 3SE9 while 3SE33 produced evidence of a very long occupation including Gary and Langtry points, various arrow points, mussel shell fragments, clay tempered pottery and shell tempered pottery.

Cultural materials recovered by Sierzchula (1984) did not allow the identification of specific cultural periods at 3SE64 or 3SE150, while 3SE188 was minimally identified as a Late Archaic/Early Woodland period site. 3SE95 had not been scientifically investigated by other than a surface survey conducted by Bradford (1979) prior to this project. The original state site form lists a corner notched point and a small arrow point found by the recorder as well as reports of a Dalton and other points, gorget fragments, pottery and possible burials. If this information is correct, it suggests that 3SE95 may have been occupied intermittently during the Early Archaic through Mississippi periods.

PREVIOUS INVESTIGATIONS

A considerable amount of archeological work has been completed in the Ozarks in recent years. While the interior of the region is not heavily populated, the development and management of National Forest and NPS lands has resulted in 13 cultural resources projects (Table 2; also see Wolfman 1979 for a general review). This list was assembled by the Office of the State Archeologist and summarizes 55 years of professional archeological work. Beginning in 1973 the pace of research picked up following a 39 year hiatus and surged even more beginning in 1979.

INVESTIGATIONS CONDUCTED IN THE TYLER BEND AREA

Previous archeological work at Tyler Bend has been conducted by the NPS. Initial investigations were conducted by Jim Bradford of the Southwest Region during a 4 day period in March of 1979. Bradford checked 28 localities planned for development. At 7 of these development areas he found evidence of 3 of the sites included in this project (3SE64, 3SE95 and 3SE150) (Bradford 1979). 3SE188 was not located until a subsequent survey. During his survey, Bradford collected no cultural material and no detailed analysis was completed (Bradford 1979:8) although specific recommendations were offered (Bradford 1979:14-16):

> 6. Tyler Bend Day Use Area A (DA-6)[3SE150] - Certain non-land modifying activities (i.e. ball field, picnicking, etc.) would not have a measurable impact on the site area contained in this facility. However, if any land modification is necessary (i.e. ground leveling, road grading, toilet installation, etc.), then a testing and/or excavation program should investigate the site prior to these developments.

Table 1.
Cultural sequence for the Arkansas Ozarks

Cultural Period	Cultural Phase	Date Range
Maximum Occupation		75-20 BP
Civil War		90-75 BP
American Pioneer		147-90 BP
European	Spanish	187-147 BP
	French	277-188 BP
Ethnohistoric	Osage	187-146 BP
	Cherokee	156-122 BP
Mississippi	Neosho	300-450 BP
	Caddo	450-1100 BP
Woodland	Late Woodland	1100-1350 BP
	Middle Woodland	1350-1800 BP
	Early Woodland	1800-2500 BP
Archaic	Late Archaic	2500-5000 BP
	Middle Archaic	5000-8000 BP
	Early Archaic	8000-9500 BP
Transitional	Dalton	9500-10,500 BP
Paleo-Indian	Paleo-Indian	10,500-12,000 BP

7. Tyler Bend Future Option A (DA-6)[3SE150] - No known development is as yet planned for this area. However, if such does occur then the same recommendation as #6 above (Day Use Area A) would apply - particularly to the north boundary area of this tract.[1]
8. Tyler Bend Landscape Management (DA-6)[3SE150] - Development of the majority of this area would not impact the archeological site. However, the southern boundary (common to the Campground area) exhibits some cultural material and some limited testing should be done prior to any alteration of this portion of land.
9. Tyler Bend Campground (DA-6)[3SE150] - As with the Day Use Area A above (#6)[1], non-land altering development or activities would not appreciably impact the cultural resource. However, due to high human impact on exposed areas of the site, a testing program is recommended prior to any development for this facility.
10. Tyler Bend Day Use Area B (DA-6)[3SE150] - The same recommendation applies to this area as proposed for Day Use Area A (#6)[1].
11. Tyler Bend Future Option B (DA/AAS-64)[3SE64] - The same recommendation applies to this area as proposed for Future Option A (#7) above.
13. Tyler Bend Future Option C (DA-9/AAS-95)[3SE95] - The portion of this facility immediately adjacent to the river would not impact any prehistoric cultural material. The elevated area immediately south contains a limited amount of cultural material and a limited testing program would be warranted prior to any development in this area. The extreme eastern portion of this area, just upstream from the confluence of Buffalo River and Goodhue Hollow, should be avoided by development.

Based on Bradford's report, additional survey and testing was conducted at seven archeological sites along the Buffalo National River between May and September 1980 by archeologist Michael Sierzchula of the NPS (Sierzchula 1984:i). Three (3SE64, 3SE150 and 3SE188) of the 4 sites investigated by HPA were studied by Sierzchula (1984:i)(Table 3) who summarized his investigation as follows:

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1. See Tyler Bend Day Use Area A (DA-6)

Table 2
Archeological projects completed in Searcy County, Arkansas

Dates of Fieldwork	Project Name	Sponsoring Agency	Type of Work	Report(s)
1931-34	Bluff Shelter Survey.	Univ. of Arkansas Museum	Survey/excavation	Dellinger
1973	Buffalo Nat'l R. Severance Lands	Nat'l Park Service	Survey	Wolfman 1973
1974	Buffalo R. Wilderness Study & Environmental Assessment	Nat'l Park Service	Survey	Wolfman 1974
1979	Buffalo Nat'l R. Campground Survey	Nat'l Park Service	Survey	Bradford 1979
1979	Buffalo Nat'l R.: Lost Valley, Steel Creek and Buffalo Point Development Areas	Nat'l Park Service	Survey	Bradford 1979
1979	Buffalo Nat'l R.: Pruitt & Tyler Bend Development Areas	Nat'l Park Service	Survey	Bradford 1979
1980	Arch'l Investigations of Selected Areas of Buffalo Nat'l R.	Nat'l Park Service	Survey/excavation	Sierzchula 1984
1981	Marshall Overview	McGoodwin, Williams & Yates, Inc.	Records/documents search	Quinn 1981
1981	Ozark-St. Francis Records check	U. S. Forest Service	Records/documents search	Moore-Jansen & Hilliard 1981
1981	Ozark-St. Francis Overview	U. S. Forest Service	Records/documents search; Report writing	Sabo et al 1982
1982	Ozarks Record Analysis	U. S. Forest Service	Records/documents search	Waddell 1982
1983	Marshall Sewer Improvements	Environmental Technical Consultants, Inc.	Survey	Collier 1983
1983	Buffalo Forest Unit	U. S. Forest Service	Survey	Kay 1983

Constraints on the Investigation

Two initial constraints were encountered at the beginning of the project. First, due to insufficient funds and time, a research design for the project was not written. Excavations and research were based on the author's general knowledge of archeology in the Arkansas Ozarks and conversations with Dr. Dan Wolfman (Arkansas Archeological Survey archeologist at Russellville).

Second, the crew (ranging from one to six members) was summer manpower program employees of the National Park Service and did not have any archeological training. As a result all received on-the-job training.

Site specific constraints center around waist-high hay and weeds at sites 3SE150 and 3SE64.

Investigation Results and Recommendations

Four archeological sites are recommended for clearance, due to the disturbance level and/or their inability to meet criteria necessary to be nominated to the National Register of Historic Places. These include . . . Tyler Bend Bench 1, and Tyler Bend Bench 2.[2]

Further testing is recommended at 3SE64. Prior to any testing conducted, plowing or some form of activity to strip large areas of vegetation is needed to locate artifact concentrations. This activity is needed due to the vegetation density in the field in which 3SE64 is located.

Intensive testing is recommended at 3SE150 due to the recovery of prehistoric cultural material below depths disturbed by subsequent farming activities.

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2. Tyler Bend Bench 1 and 2 were latter combined and recorded as 3SE188.

Table 3. Artifacts recovered from sites at Tyler Bend by Sierzchula

Site #	Provenience (Depth in cm)	Cores		Decort. Flakes		Debitage		Lunate Flakes		Shatter		Fire-Cracked Rock		Bifaces		Projectile Points		Chert Chunk		Ground Stone		Historic Material		TOTAL	
		Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)
3SE64	Surface			2	10.06	5	8.52																	7	18.58
	Test Unit 1																							0	0.00
	0 - 10 cm					1	1.63																	1	1.63
	10 - 20 cm					3	0.61																	3	0.61
	30 - 40 cm					1	0.96																	1	0.96
	TOTAL	0	0.00	2	10.06	10	11.72	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	12	21.78
3SE150	Surface			5	13.48	77	36.56																	82	50.04
	Test Unit 1S/1E																								
	Surface			1	1.24																			1	1.24
	0 - 10 cm			5	3.08	45	31.22																	50	34.30
	10 - 20 cm			22	8.63	6	25.20																	28	33.83
	20 - 30 cm			1	0.31	35	55.29							1	12.05	1	3.02							38	70.67
	30 - 40 cm	Artifacts Lost																						0	0.00
	40 - 50 cm			2	25.32	15	4.14																	17	29.46
	50 - 60 cm			1	1.41	13	7.62																	14	9.03
	Unit Total	0	0.00	32	39.99	114	123.47	0	0.00	0	0.00	0	0.00	1	12.05	1	3.02	0	0.00	0	0.00	0	0.00	148	178.53
	Test Unit 41S/0E																								
	0 - 8 cm					11	5.4																	11	5.41
	8 - 18 cm			2	0.71	77	35.1	1	2.10	2	5.39											Glass		82	43.34
	18 - 28 cm			2	0.79	59	21.6					3	143.89			1	3.00							65	169.26
	28 - 38 cm			5	17.88	43	20.8			1	13.94													49	52.61
	38 - 48 cm					23	11.5			1	19.64													24	31.17
	48 - 58 cm					24	20.0																	24	20.03
	58 - 68 cm					66	28.8																	66	28.81
	68 - 78 cm					28	24.6																	28	24.57
	78 - 88 cm					10	16.6																	10	16.55
	Unit Total	0	0.00	9	19.38	341	184.41	1	2.10	4	38.97	3	143.89	0	0.00	1	3.00	0	0.00	0	0.00	0	0.00	359	391.75
	Test Unit 48S/26W																								
	Surface			2	1.32	44	23.7							1	47.74									47	72.78
	0 - 10 cm	1	311.00	6	5.47	61	22.5							1	1.60									69	340.59
	10 - 20 cm			2	2.98	23	8.0																	25	10.97
	20 - 30 cm			1	0.31	12	6.8																	13	7.15
	30 - 40 cm			1	1.28	10	13.5					3	300.85											14	315.58
	40 - 50 cm					41	54.5																	41	54.45
	50 - 60 cm					2	3.5					2	234.83	1	8.85									5	247.16
	70 - 80 cm					1	3.7																	1	3.67
	80 - 90 cm					2	0.5																	2	0.51
	Unit Total	1	311.00	12	11.36	196	136.63	0	0.00	0	0.00	5	535.68	3	58.19	0	0.00	0	0.00	0	0.00	0	0.00	217	1052.86

Table 3. Artifacts recovered from sites at Tyler Bend by Sierzchula

Site #	Provenience (Depth in cm)	Cores		Decort. Flakes		Debitage		Lunate Flakes		Shatter		Fire-Cracked Rock		Bifaces		Projectile Points		Chert Chunk		Ground Stone		Historic Material		TOTAL	
		Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)
	Test Unit 48S/23E																								
	0 - 10 cm					34	7.90																	34	7.90
	10 - 20 cm			4	0.64	50	16.59			1	2.13													55	19.36
	20 - 30 cm			2	0.75	32	9.32	1	0.08															35	10.15
	30 - 40 cm	Artifacts Lost																						0	0.00
	40 - 50 cm			1	2.70	9	3.88																	10	6.58
	50 - 60 cm			2	2.23	11	4.86																	13	7.09
	60 - 70 cm					16	61.56																	16	61.56
	70 - 80 cm					4	10.20																	4	10.20
	Unit Total	0	0.00	9	6.32	156	114.31	1	0.08	1	2.13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	167	122.84
	Test Unit 90S/91E																								
	0 - 11 cm					2	0.39																	2	0.39
	11 - 21 cm					2	2.00																	2	2.00
	21 - 31 cm					1	0.21																	1	0.21
	31 - 41 cm					1	0.05																	1	0.05
	41 - 51 cm					1	1.98																	1	1.98
	Unit Total	0	0.00	0	0.00	7	4.63	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	7	4.63
	Test Unit 48S/124E																								
	Surface			5	3.79			1	0.06															6	3.85
	0 - 10 cm			6	4.54	104	41.22									1	0.93							111	46.69
	10 - 20 cm					5	1.12																	5	1.12
	20 - 30 cm					2	1.51																	2	1.51
	Unit Total	0	0.00	11	8.33	111	43.85	1	0.06	0	0.00	0	0.00	0	0.00	1	0.93	0	0.00	0	0.00	0	0.00	124	53.17
	Test Unit 33S/160W																								
	Surface					1	0.75																	1	0.75
	0 - 10 cm			1	1.31	15	22.01			1	17.10													17	40.42
	10 - 20 cm					2	0.54																	2	0.54
	Unit total	0	0.00	1	1.31	18	23.30	0	0.00	1	17.10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	20	41.71
	Test Unit 48S/192W																								
	0 - 14 cm					3	0.96																	3	0.96
	14 - 24 cm			1	0.15																			1	0.15
	Unit Total	0	0.00	1	0.15	3	0.96	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	1.11
	Backhoe Trenches																								
	No. 1					9	9.92							2	55.75									11	65.67
	No. 2	1	164.13	4	13.77	81	111.94					2	41.22	5	177.61			1	292.61					94	801.28
	No. 3			9	54.31	28	63.04			2	20.68													39	138.03
	Trench Total	1	164.13	13	68.08	118	184.90	0	0.00	2	20.68	2	41.22	7	233.36	0	0.00	1	292.61	0	0.00	0	0.00	144	1004.98
	SITE TOTAL	2	475.13	56	114.93	950	692.99	3	2.24	8	78.88	10	720.79	10	291.55	2	3.93	1	292.61	0	0.00	0	0.00	1042	2673.05

Table 3. Artifacts recovered from sites at Tyler Bend by Sierzchula

Site #	Provenience (Depth in cm)	Cores		Decort. Flakes		Debitage		Lunate Flakes		Shatter		Fire-Cracked Rock		Bifaces		Projectile Points		Chert Chunk		Ground Stone		Historic Material		TOTAL	
		Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)
3SE188	Tyler Bend Bench 1																								
	Surface			5	8.06	71	179.97			1	11.48					5	20.3			2	622.00			84	841.79
	Test Unit 0N/12W																							0	0.00
	Surface			1	0.78																			1	0.78
	0 - 10 cm			9	23.34	99	85.21									1	1.8							109	110.34
	10 - 20 cm			6	28.95	44	28.82							2	45.0	1	4.3							53	107.07
	20 - 30 cm			1	0.81	14	11.53																	15	12.34
	Unit Total	0	0.00	17	53.88	157	125.56	0	0.00	0	0.00	0	0.00	2	44.96	2	6.13	0	0.00	0	0.00	0	0.00	178	230.53
	Test Unit 7N/0E																								
	10 - 14 cm			3	5.68	93	41.98																	96	47.66
	14 - 24 cm			7	21.65	104	37.09	1	0.1													1 nail		112	58.88
	24 - 34 cm			1	1.01	13	6.33																	14	7.34
	Unit Total	0	0.00	11	28.34	210	85.40	1	0.14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	222	113.88
	Test Unit 0N/22E																								
	0 - 11 cm			16	41.79	86	26.52	1	0.2															103	68.50
	11 - 21 cm					166	50.65							1	0.7			1	190.6					168	241.87
	21 - 31 cm			2	5.84	102	24.21																	104	30.05
	31 - 41 cm			1	4.59	22	19.56																	23	24.15
	41 - 51 cm					3	3.08																	3	3.08
	51 - 61 cm					1	0.17																	1	0.17
	Unit Total	0	0.00	19	52.22	380	124.19	1	0.19	0	0.00	0	0.00	1	0.67	0	0.00	1	190.55	0	0.00	0	0.00	402	367.82
	Test Unit 0N/41E																								
	0 - 11 cm					4	1.39																	4	1.39
	11 - 21 cm					53	20.68																	53	20.68
	21 - 31 cm			1	0.96																			1	0.96
	Unit Total	0	0.00	1	0.96	57	22.07	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	58	23.03
	Tyler Bend Bench 2																								
	Surface	1	13.4	14	29.31	120	68.16							3	158.7									138	269.59
	Test Unit 17N/0E																							0	0.00
	0 - 15 cm			7	7.58	94	54.22			1	5.41			1	29.1									103	96.30
	15 - 25 cm			4	13.25	44	25.97																	48	39.22
	Unit Total	0	0.0	11	20.8	138	80.2	0	0.0	1	5.4	0	0.0	1	29.1	0	0.0	0	0.0	0	0.0	0	0.0	151	135.5
	Test Unit 35N/0E																								
	Surface									1	11.89			1	84.85									2	96.74
	0 - 10 cm					14	4.63																	14	4.63
	10 - 20 cm					6	2.29																	6	2.29
	Unit Total	0	0.00	0	0.00	20	6.92	0	0.00	1	11.89	0	0.00	1	84.85	0	0.00	0	0.00	0	0.00	0	0.00	22	103.66
	SITE TOTAL	1	13.38	78	193.60	1153	692.46	2	0.33	3	28.78	0	0.00	8	318.31	7	26.41	1	190.55	2	622.00	0	0.00	1253	1463.82

The specific interpretations and recommendations that Sierzchula made for each site were as follows (Sierzchula 1984:39, 43 and 56-57):

Site Function [3SE64]
The recovery of a heavily used metate would indicate an extended occupation of the site. However, so little cultural material was recovered that this is not substantiated. Based on this information, one can only state that the site function of 3SE64 is unknown.

Research Potential [3SE64]
The research potential of 3SE64 is unknown.

Disturbance [3SE64]
Plowing accounts for the known disturbance at 3SE64.

Recommendations [3SE64]
It is recommended that the field in which 3SE64 is located be plowed in order to expose any cultural material present before any land altering activities are conducted. This would aid in the location of activity areas on the surface and allow for a more direct approach in testing.

Site Function [3SE150]
While 3SE150 is recorded as a single site, it is highly probable that it represents a number of scattered activity areas and small sites occupied at different times. Material recovered from the test units and surface collections indicate a light scattering of cultural material with isolated concentrations (cf. Bradford 1979a).

While tools and projectile points were recovered during investigations at 3SE150, none were identifiable. A burial was reportedly plowed up near 90S 91E (Bradford; personal communication). However, no associated artifacts were reported nor have any other burials been recorded.

Research Potential [3SE150]
All areas tested revealed no cultural material below the plow zone except just south of the low rise near the primary datum. Indications of buried cultural material was recorded in Level 7 in Test Unit 48S 23E. This situation was also present in the last 3 cm of Level 5 and Level 6 in Test Unit 48S 26W. Each of the levels in the above test units were separated from other cultural material by a layer of sterile soil. The areal extent and nature of the buried cultural deposits is unknown at this time due to the limited time available during testing.

Little information concerning small floodplain sites in the Arkansas Ozarks is currently available. Any information recovered from excavations conducted at a site of this nature would be of extreme importance in the reconstruction of the prehistory in the Ozarks.

Disturbance [3SE150]
Plowing and surface collection by individuals living in the area are the extent of known disturbances which have occurred at 3SE150.

Recommendations [3SE150]
If land alterations or subsurface disturbance (foundations for barbecue pits, etc.) are not going to be located in the vicinity of 48S 23E and 48S 26W (50 m in all directions from each unit), no further investigations are necessary. However, if disturbance is planned for this area, intensive testing is recommended to document the areal extent and nature of the buried cultural material recovered in Test Units 48S 23E and 48S 26W.

Research Potential [3SE188]
The research potential of Tyler Bend Bench 1 is negligible due to past disturbances and collector behavior.

Disturbance [3SE188]
Due to the shallowness of the soil layer at Tyler Bend Bench 1, plowing has completely mixed and disturbed all the levels containing cultural material. Also, local informants indicate that heavy collecting has occurred at this site.

Recommendations [3SE188]
This site is recommended for archeological clearance. However, if information pertinent to the prehistory of the Buffalo National River or undisturbed deposits

are uncovered during any construction which might take place, work should stop and an archeologist contacted to assess the situation.

The conclusions and recommendations for Tyler Bend Bench 1 apply to Tyler Bend Bench 2 as well, since they were recorded as a single site (Sierzchula 1984:46).

The absence of a scale on Sierzchula's sketch maps prevented the plotting of all of his excavations in relation to those conducted by HPA with an acceptable degree of accuracy. Previous test units that were relocated during our fieldwork were mapped and plotted on the HPA site maps included with this report. Sierzchula's sketch maps are reproduced in Figure 3 to provide information on the general location of all of his work.

METHODOLOGY

Data collection methods were designed to conform to the requirements set forth in the Scope of Work in so far as field conditions permitted. Primary activities involved the collection of surface exposed artifacts, limited disking in transects across the sites, exposing subplowzone areas using stripbacks (areas in which the plowzone has been removed with a front end loader or scraper), backhoe testing for evidence of deeply buried deposits and a grid of auger tests excavated to depths of 30 cm to 50 cm at 30 m intervals. At 3SE95 two 50 cm x 50 cm x 8 cm blocks of plowzone in transect D were screened through 1/4 in mesh as a check of artifact density in a perceived concentration of material. The work at 3SE188 was limited to auger tests and stripbacks as required by the Scope of Work. All work was accomplished with a tractor and disk, a tractor mounted front end loader and tiller, a tractor mounted auger and a backhoe. Only a minimal amount of hand excavation was conducted.

A datum was established at each site with all work referenced to it. At 3SE64, 3SE95 and 3SE150 the datum consisted of a 3 inch aluminum disk with the state site number stamped on it which was nailed to a tree of sufficient size and location that it would probably not be removed in the near future. At 3SE188 a 4 inch metal well-head pipe was used as a permanent datum. A map was drawn of each site in sufficient detail to allow all subsequent testing activities to be plotted in relation to the datum and to all major features of the landscape.

SURFACE INVESTIGATIONS

Each site was first inspected to determine the degree of surface visibility but due to vegetation little or no surface visibility was found. On 3SE64, 3SE150 and 3SE188 hay was still standing as high as 2 m though dirt roads did pass through 3SE150 and 3SE188. No artifacts were observed in the road at 3SE150 and only a few artifacts were found in the road at 3SE188. Hay at 3SE95 had recently been cut and baled but the ground surface was still completely covered allowing for no surface collections.

A set of 3 m wide transects were disked across each site (with the exception of 3SE188) in the general pattern of 1 primary transect down the long axis and 2 or more ancillary transects crossing the primary transect at preset intervals. Standing hay at 3SE64 (Figure 4) required that the transect locations be estimated and the hay surrounding them be cut prior to actually laying the transects out for disking. One primary and 5 ancillary transects

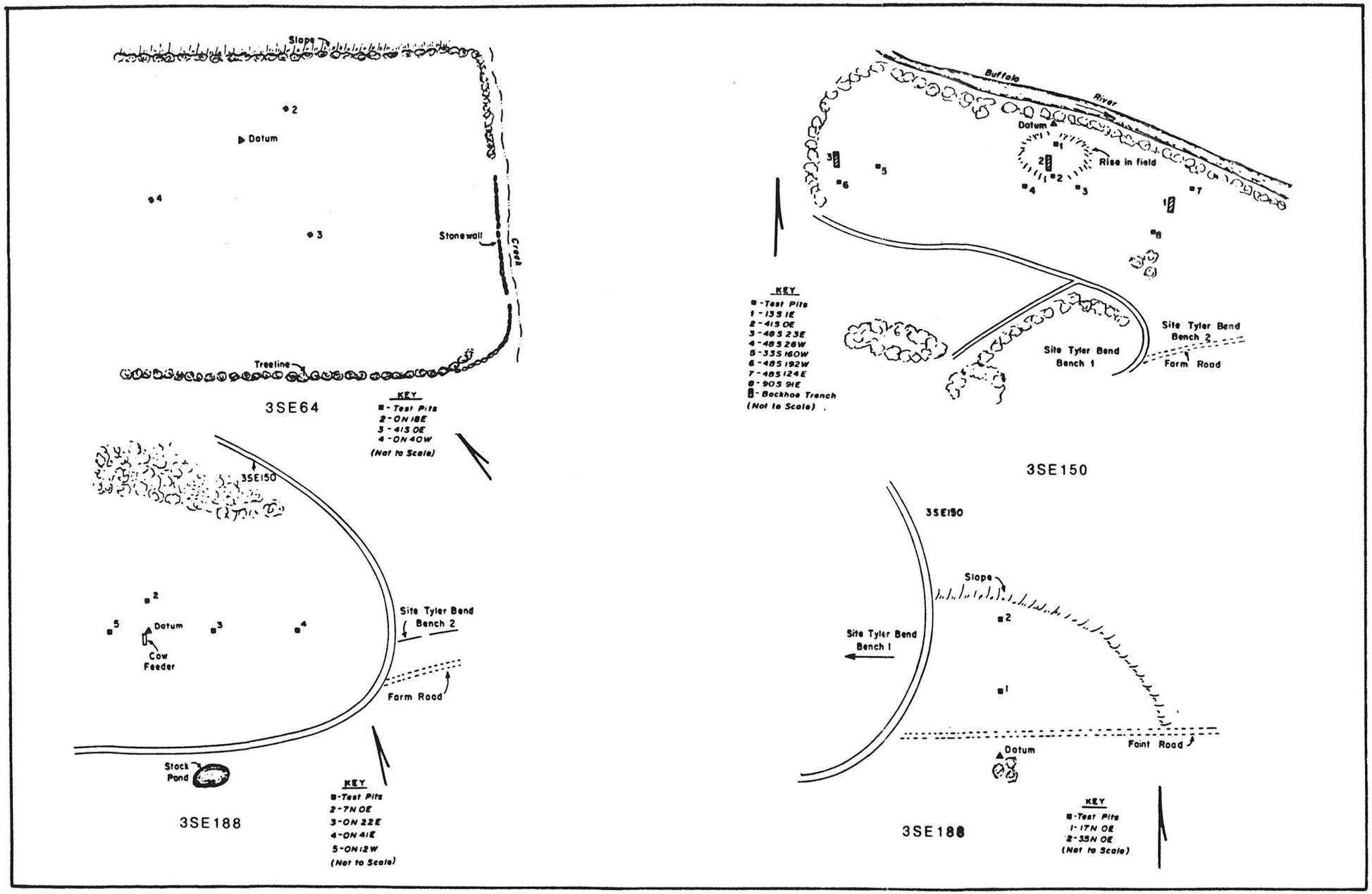


Figure 3. Previous investigations at 3SE64, 3SE95, 3SE150 and 3SE188 (after Sierzchula 1984).

were disked at 3SE64 with a combined total length of 1,435 m (4,305 m^2). These transects were arbitrarily divided into 7 collection areas to allow the analysis of the thin scatter of artifacts. At 3SE95 (Figure 5) the hay had previously been cut and baled which allowed a much better view of site topography. One primary and 2 ancillary transects were disked at 3SE95 for a combined length of 590 m (1,770 m^2). These transects were arbitrarily separated into 8 collection areas which were kept much smaller than at the other sites to allow tighter control of the heavier concentration of artifacts. Two primary and 5 ancillary transects were disked at 3SE150 (Figure 6) with a total length of 2,035 m (6,105 m^2). As at 3SE64, standing hay had to be cut prior to plowing the transects with the height of the hay (a little over 2 m) resulting in the transects being layed out with almost no relationship to the natural topography. The 7 transects were divided into 10 collection areas. No transects were disked at 3SE188.

No rain fell following the disking to help expose the newly exposed surface artifacts. Because of the intense heat and low humidity during this time, however, much of the soil dried into dust and blew away resulting in the exposure of a reasonable number of artifacts.

SUBSURFACE INVESTIGATIONS

Subsurface investigations were accomplished through a combination of stripbacks, 24 inch wide backhoe trenches and 12 inch diameter auger tests. Backhoe trenches and auger tests were filled immediately following recording while stripbacks were left open until the end of the project. Placement of the stripbacks and backhoe trenches was based on observed artifact density and topographic features although they were generally placed within the transects themselves. During the first period of field work, all backhoe trenches were excavated but because of the excessively dry conditions very fine variations in soil color and texture could not be distinguished. A water sprayer was used to moisten the profiles to aid in clarifying the stratigraphy. Most of the stripbacks were only partially completed when dry conditions made the soil extremely hard and compact. The tractor operator broke the front end loader while excavating a stripback at 3SE150. Subsequent stripping was limited to the areas loosened by disking. Auger tests were placed across each site on a 30 m grid based on the primary transect by pacing off 30 m intervals and setting a surveyors flag for the tractor operator to follow. Placement of the auger tests varied to some degree around the site boundaries and natural barriers. Following the excavation of the auger tests the soil was carefully troweled through to recover any artifacts (including preserved floral, faunal other bone remains) in the matrix and then the auger test was refilled and packed down.

Extremely dry conditions and the resulting hard soil at 3SE64 (Figure 7) allowed the completion of only 1 stripback (no. 5) during the first period of fieldwork. Six other stripbacks were excavated following a period of rain for a total of 277.75 m^2. Excavated depths ranged between 21 cm and 28 cm. Two backhoe trenches were excavated (Figure 7) with a combined length of 5.5 m to a maximum depth of 1.94 m. The horizontal distribution of artifacts was documented through the excavation of 92 auger tests (Figure 8).

Five stripbacks were excavated with a combined area of 164.75 m^2 at 3SE95 (Figure 9). Stripback depths ranged from 22 cm to 26 cm. Two 3 m long backhoe trenches were excavated to a maximum depth of 1.95 m (Figure 9). Forty-six auger tests (Figure 10) on a 30 m grid provided documentation of the horizontal distribution of artifacts.

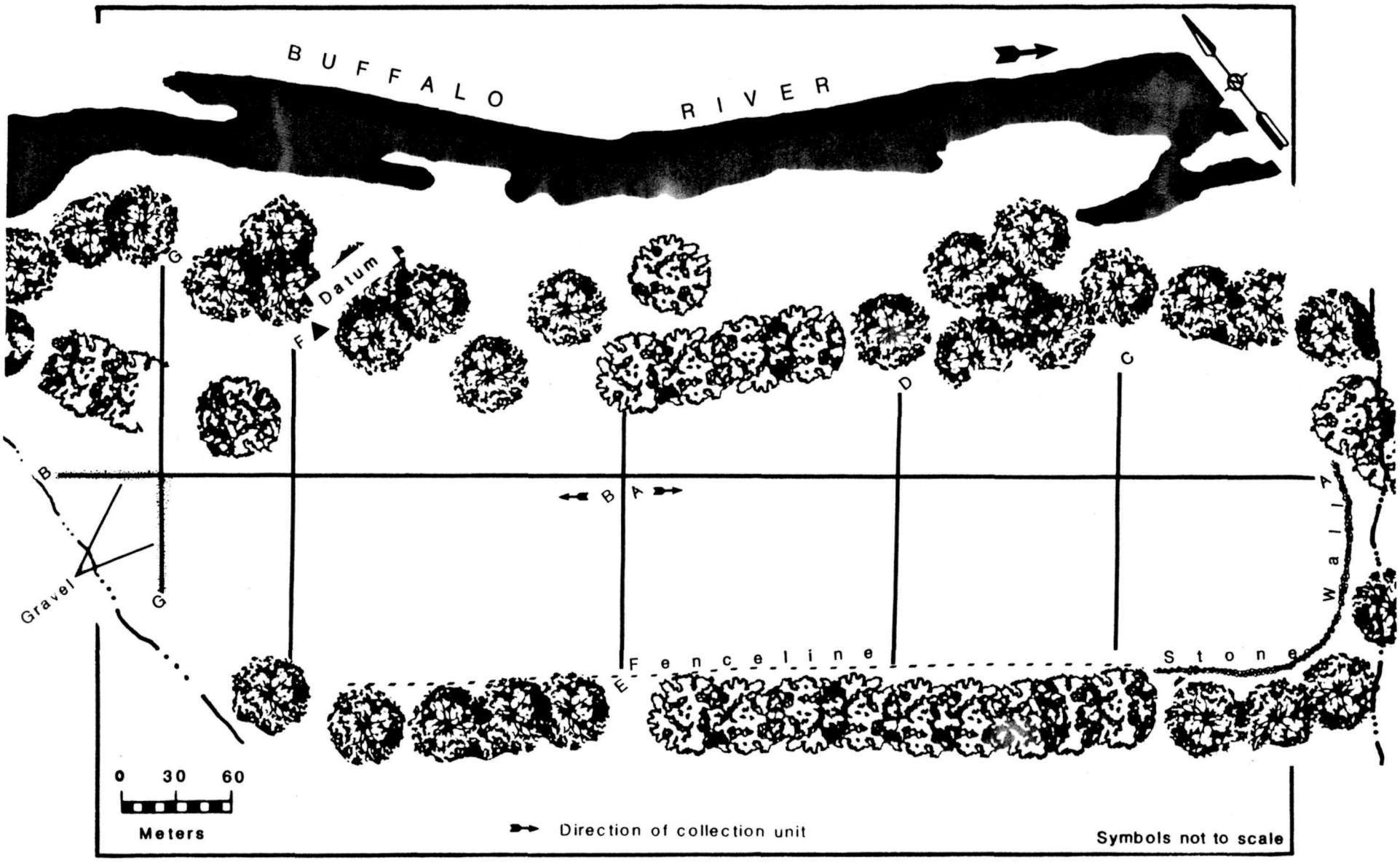


Figure 4. Location of disked transects at 3SE64.

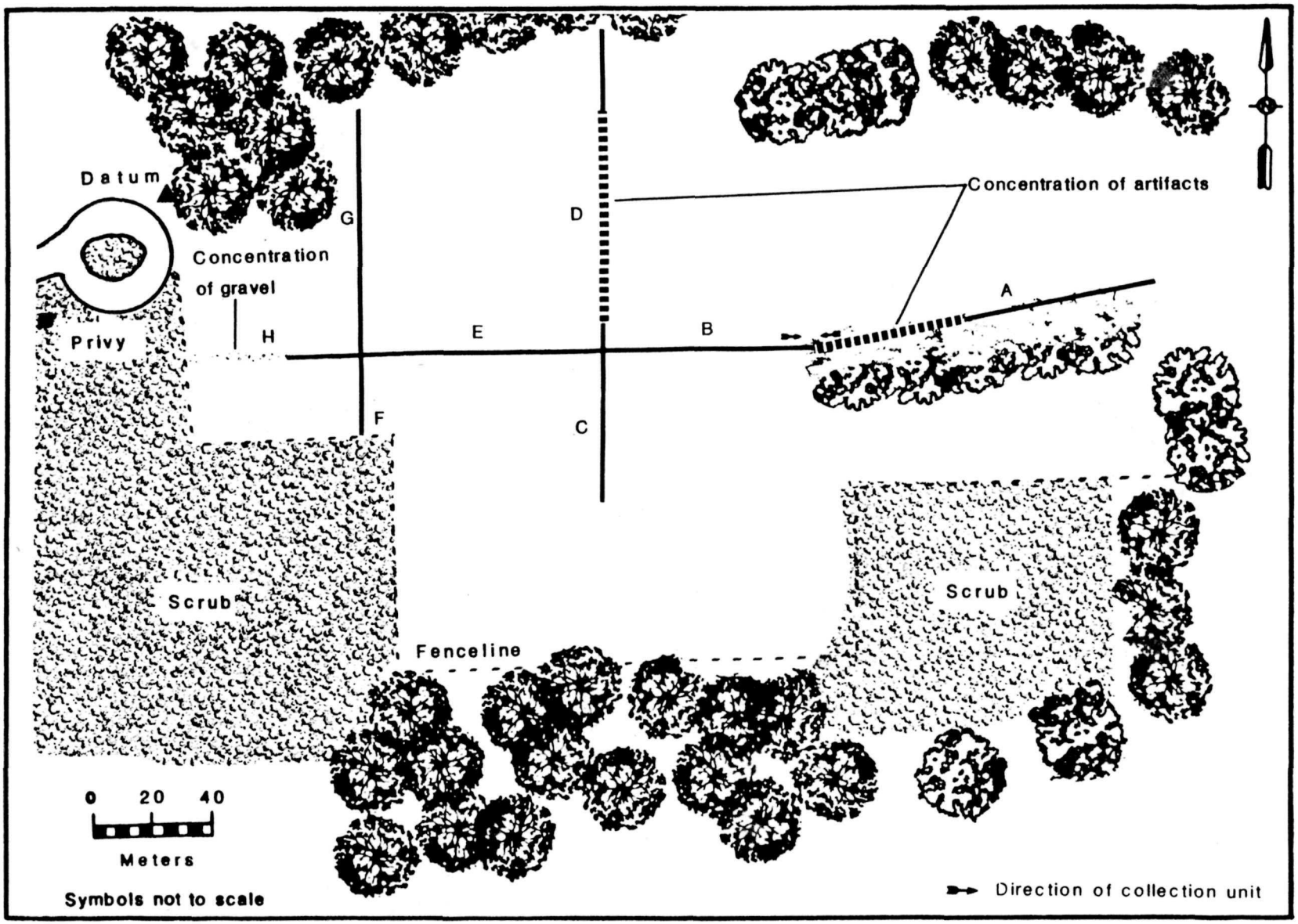


Figure 5. Location of disked transects at 3SE95.

Due to its extensive area, 11 stripbacks were excavated at 3SE150 for a total exposed area of 342.5 m^2. Stripback depths ranged from 20 cm to 28 cm below the surface (Figure 11). Four backhoe trenches with a combined length of 12.5 m were excavated to a maximum depth of 2.6 m (Figure 11). Auger tests were excavated at 171 locations (Figure 12) and allowed the documentation of the horizontal distribution of artifacts.

No backhoe trenches were required by the Scope of Work for 3SE188 but 4 stripback areas (Figure 13) and 12 auger tests (Figure 14) were excavated. The 4 stripbacks exposed 147.5 m^2 to a minimum depth of 18 cm below the surface. Twelve auger tests were sufficient to cover the majority of this site and document the horizontal distribution of artifacts.

LABORATORY METHODS

All artifacts were washed, numbered and placed in museum storage boxes immediately after being brought in from the field. The artifacts were then sorted, counted, weighed (in grams) and each analytical unit assigned an NPS accession number and bagged separately. 3SE64 was assigned NPS accession number 73, along with catalog numbers 2442 through 2457. 3SE95 was assigned NPS accession number 74, along with catalog numbers 2458 through 2485. 3SE150 was assigned NPS accession number 75, along with catalog numbers 2486 through 2518 (number 2495 was no used). 3SE188 was assigned NPS accession number 76, along with catalog numbers 2519 through 2525.

The prehistoric materials were sorted into analytical categories established previously (Klinger, Imhoff and Cochran 1983:101-110). Lithics were assigned to appropriate tool types and waste flakes sorted into categories that reflect a sequence of reduction from raw materials to finished tools (Appendix C). The lithic collections were not reviewed for evidence of thermal alteration or sorted into classes of raw materials. Chippable lithologies are available as gravel in the Buffalo River and probably outcrop along various areas of the adjacent bluff faces.

RESULTS

3SE64 (TYLER BEND NO. 1)

Surface and Transect Results

No artifacts were observed on the surface prior to disking the transects at 3SE64. Careful observation of the transect collection areas (Figure 4) resulted in the recovery of only 11 artifacts (Table 4). One interior flake was recovered from collection area A and another from area C. A large possible mano was recovered from the southwestern end of area F, though this was an area where many natural river cobbles occurred. The greatest concentration of artifacts was located in the northeast end of area G where 1 secondary decortication flake and 7 interior flakes were found. No cultural material was recovered from collections areas B, D or E.

Stripback Results

Four of the 7 stripbacks produced a total of 35 separate artifacts including a dart point (Figure 7 and Table 4). Stripback 3 produced a single biface fragment. The most productive unit at 3SE64 was stripback 5 which

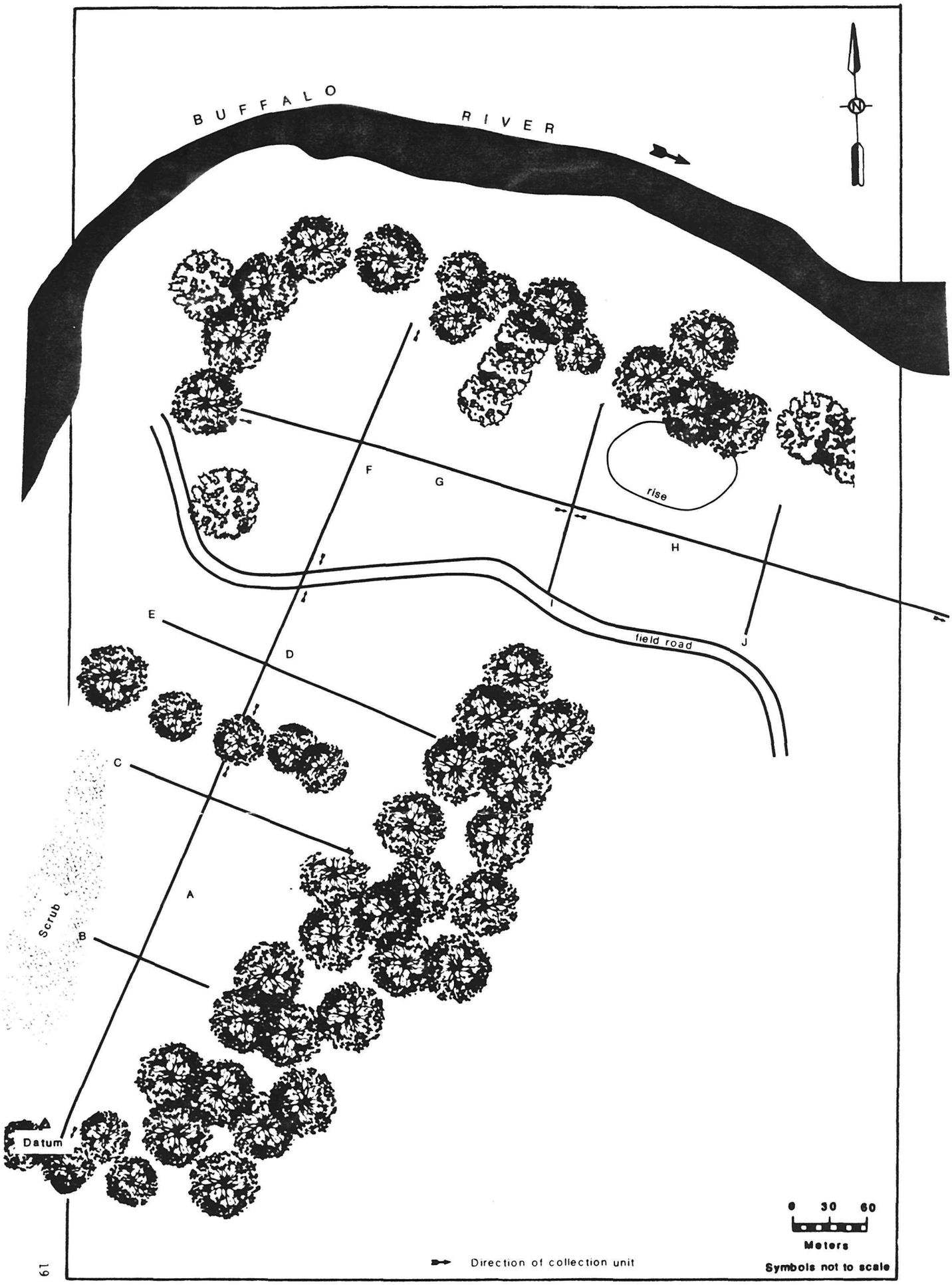


Figure 6. Location of disked transects at 3SE150.

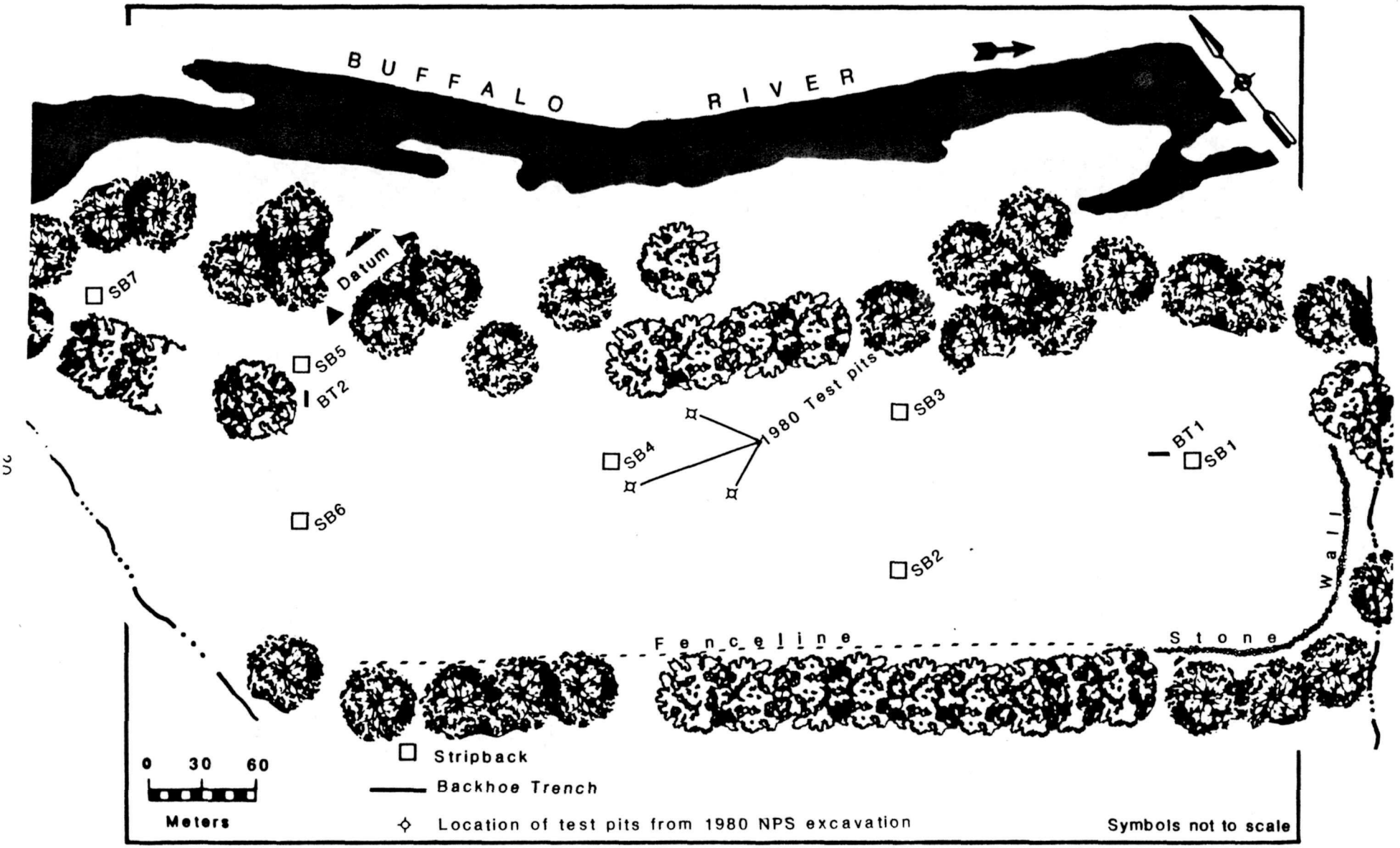


Figure 7. Location of strip backs and backhoe trenches at 3SE64.

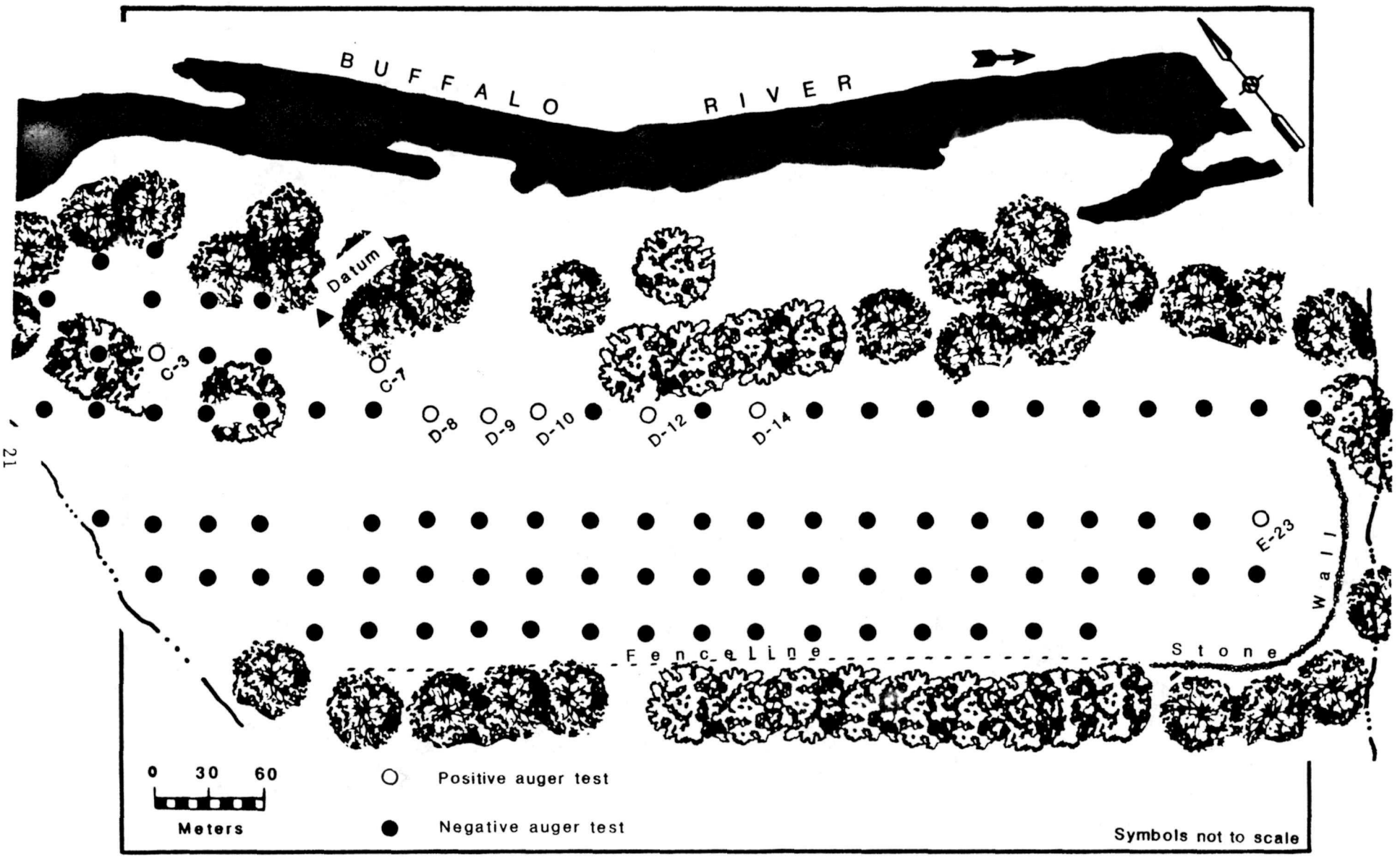


Figure 8. Location of auger tests at 3SE64.

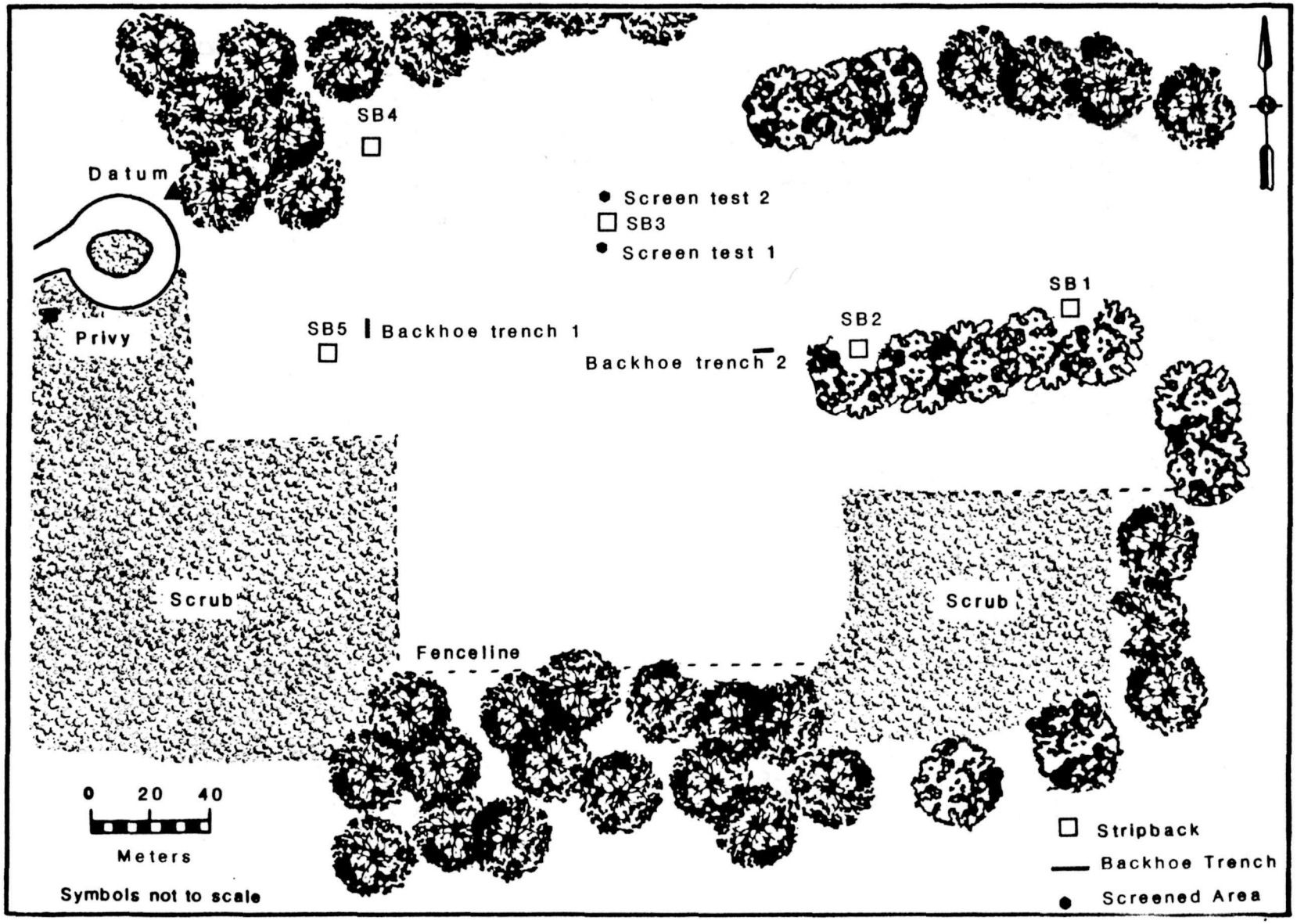


Figure 9. Location of backhoe trenches, strip backs and screened tests at 3SE95.

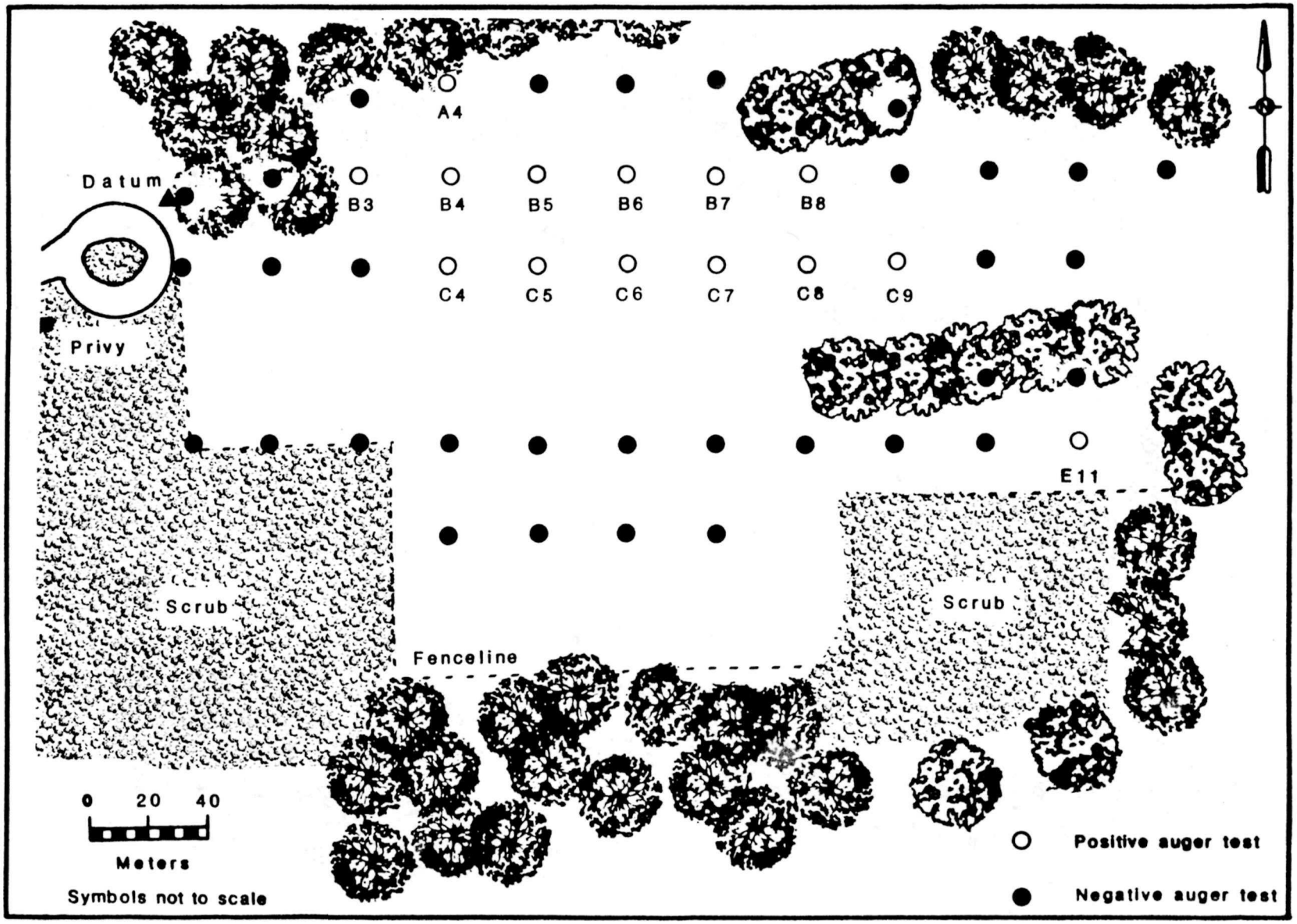


Figure 10. Location of auger tests at 3SE95.

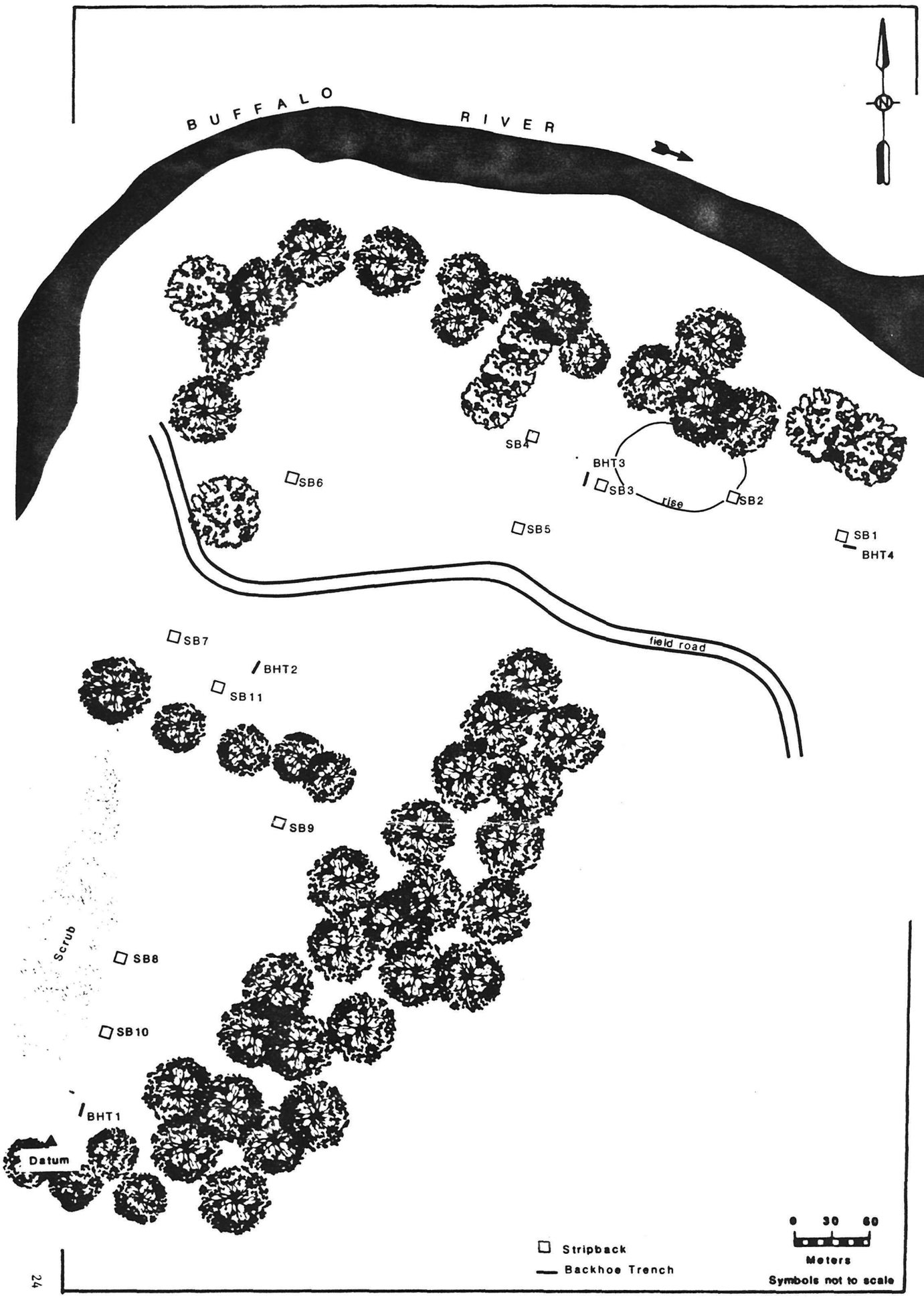


Figure 11. Location of strip backs and backhoe trenches at 3SE150.

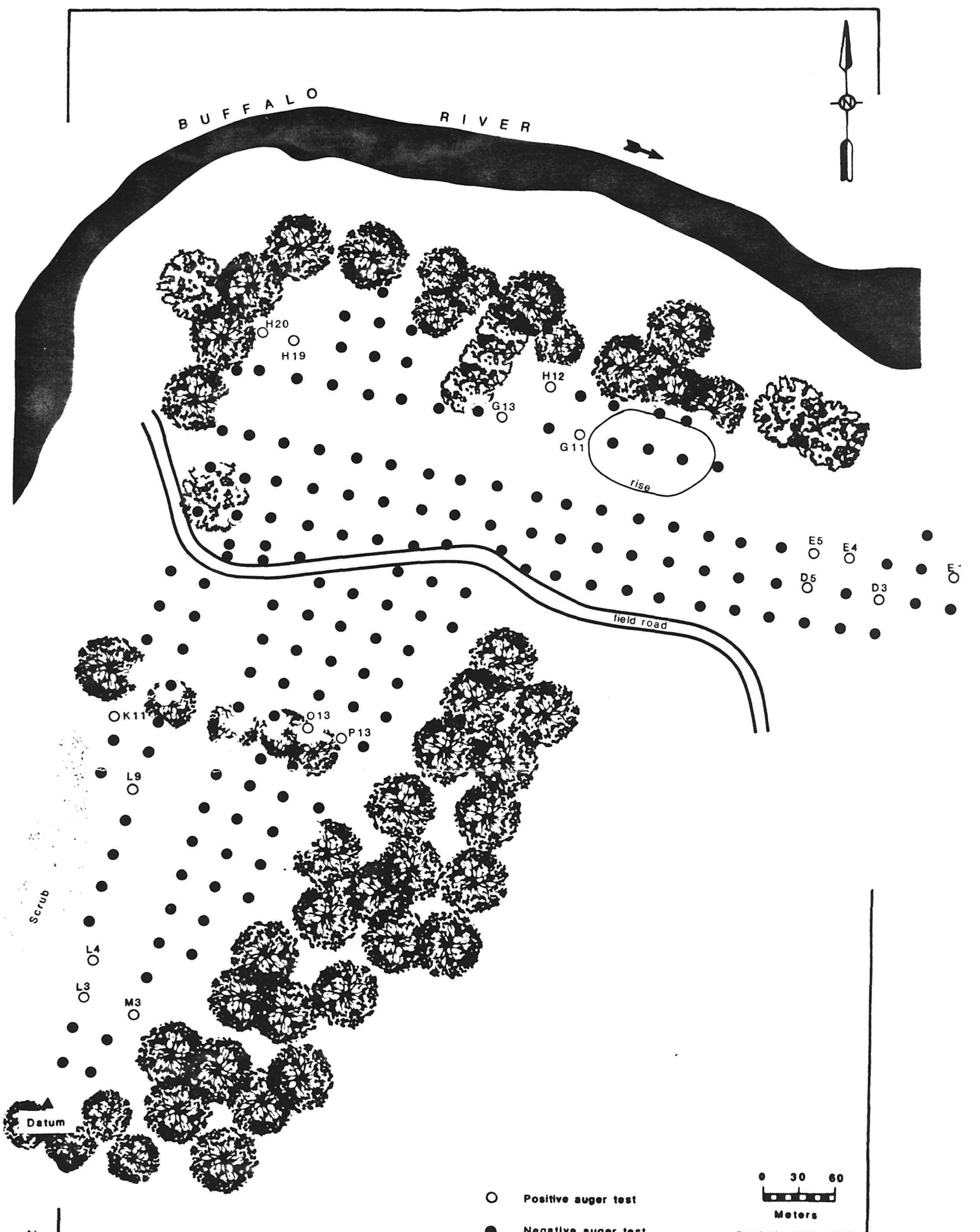


Figure 12. Location of auger tests at 3SE150.

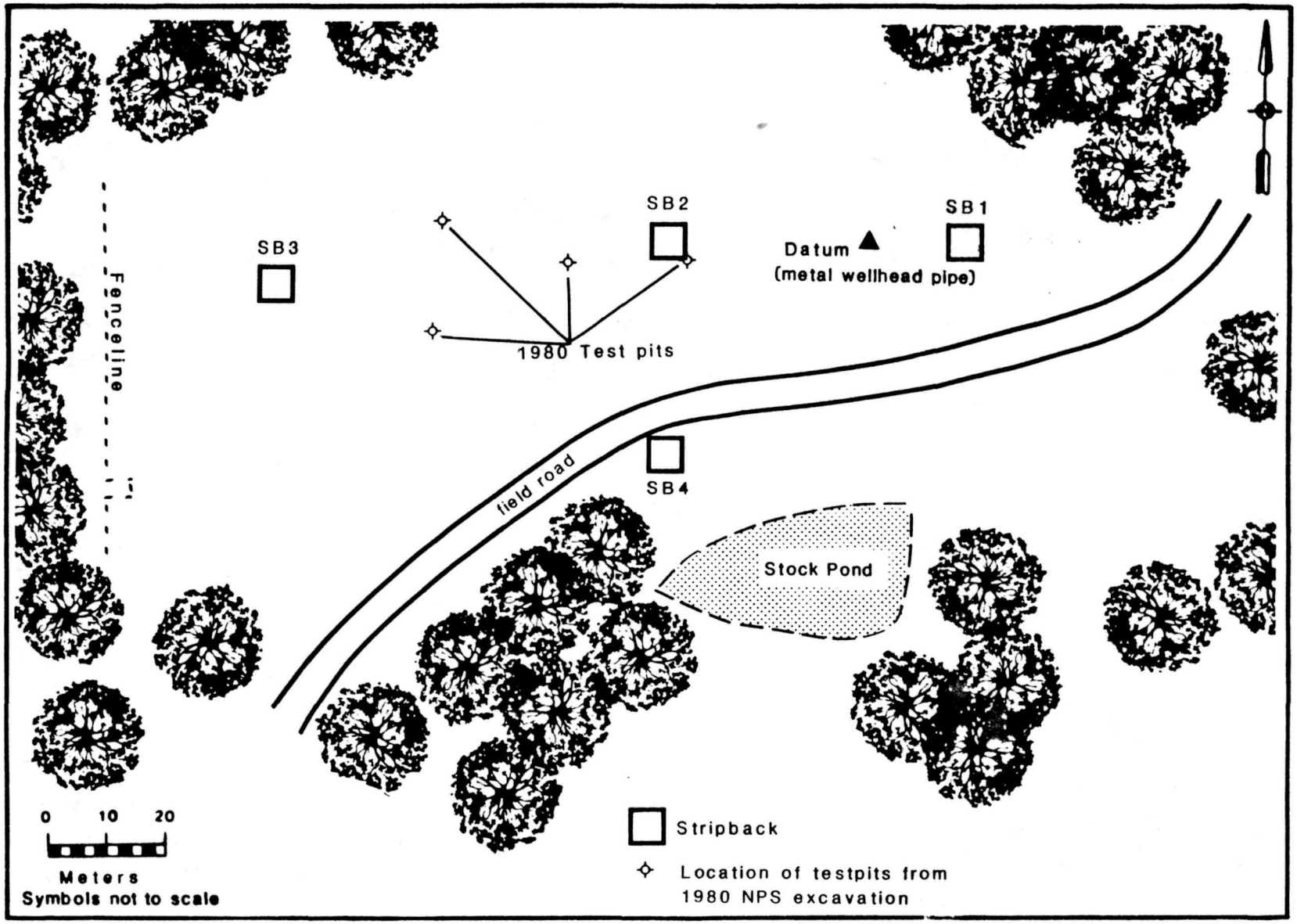


Figure 13. Location of strip back areas and 1980 test pits at 3SE188.

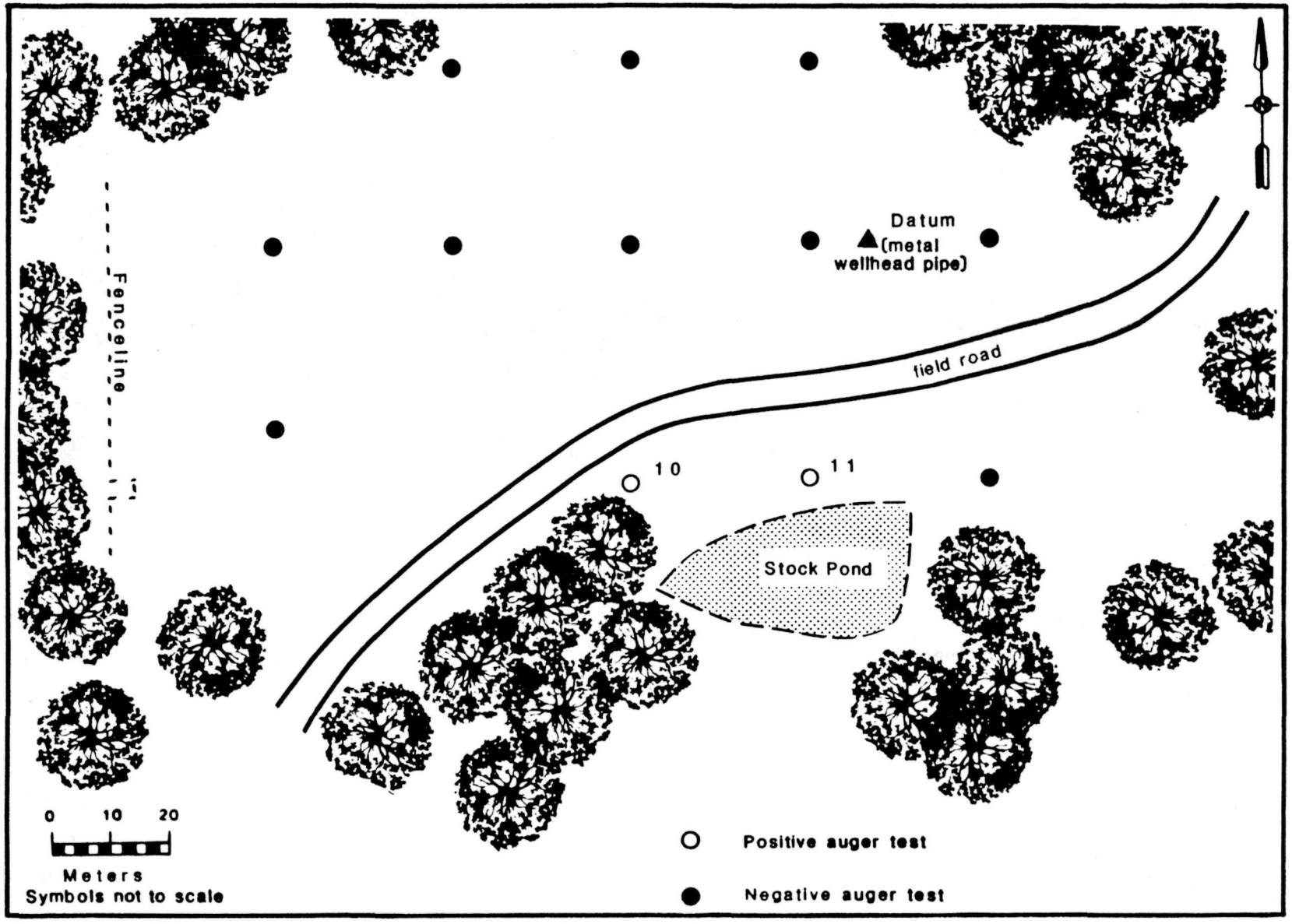


Figure 14. Location of auger and shovel tests at 3SE188.

Table 4. Artifacts recovered from sites at Tyler Bend

Site #	Provenience (Depth in cm)	Cores		Primary Decort. Flakes		Secondary Decort. Flakes		Interior Flakes		Retouch Flakes		Modified Flakes		Shatter		Fire-Cracked Rock		Bifaces		Dart Points		Ground Stone		Hammer Stones			TOTAL	
		Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	CWt(g	Ct. W		Ct.	Wt(g)
3SE64	Area A surface							1	10.2																		1	10.2
	Area C surface							1	1.7																		1	1.7
	Area F surface																					1	982.7				1	982.7
	Area G surface					1	0.9	7	8.9																		8	9.8
	Sb. 3 0 - 22																	1	30.4								1	30.4
	Sb. 5 0 - 23			1	27.7	3	3.8	20	21.5											1	6.7 a						25	59.7
	Sb. 6 0 -21							2	3.8																		2	3.8
	Sb. 7 0 - 24	1	89.0	1	20.0	1	1.3	3	4.7	1	0.2																7	115.2
	At. C3 0 - 41													1	4.7												1	4.7
	At. C7 0 - 42			1	8.4																						1	8.4
	At. D8 0 - 43									1	0.2																1	0.2
	At. D9 0 - 44							2	8.4																		2	8.4
	At. D10 0 - 44							1	0.5																		1	0.5
	At. D12 0 - 44													1	0.4												1	0.4
	At. D14 0 - 42																	1	0.4								1	0.4
	At. E23 0 - 30																			1	2.3						1	2.3
	Total	1	89.0	3	56.1	5	6.0	37	59.7	2	0.4	0	0.0	2	5.1	0	0.0	2	30.8	2	9.0	1	982.7	0	0.0		55	1238.8
SE95	Area A surface					3	39.6	8	64.4	2	0.2							1	20.9			1	350.7				15	475.8
	Area B surface	1	29.0	1	25.7	2	48.3	9	31.9					2	8.7												15	143.6
	Area D surface	1	138.2			5	12.3	31	34.1	9	0.6					4	237.4	3	15.1	3	25.2 b						56	462.9
	Area D S1 0 - 8					5	4.4	76	26.4	18	1.4					6	4.4										105	36.6
	Area D S2 0 - 8			1	1.0	6	2.2	70	50.6	13	1.3					3	1.8			1	2.2						94	59.1
	Area E surface	2	180.1	1	10.1	5	26.5	30	108.9									1	18.7	1	9.3						40	353.6
	Area F surface	1	218.9					2	4.1	3	0.4					1	1.4	1	43.5	1	2.5						9	270.8
	Area G surface	5	323.0	1	0.5	3	5.1	24	50.3							2	10.7	3	74.9	2	9.9			1	262.4		41	736.8
	Area H surface	2	285.2			2	1.0	19	29.7											1	10.0						24	325.9
	Sb. 1 0 - 25													1	8.9												1	8.9
	Sb. 2 0 - 26	2	153.1			6	16.5	29	68.2					1	1.9			2	13.5	2	15.6			1	47.8		43	316.6
	Sb. 3 0 - 25	1	17.6	2	4.7	9	36.7	60	105.3	3	0.3	1	16.3	2	4.9	3	4.0	5	99.9	1	8.7						87	298.4
	Sb. 4 0 - 24					4	24.5	21	21.2	13	2.0			4	26.8	1	0.4										43	74.9
	Sb. 5 0 - 22					1	1.0	12	13.2									2	33.7								15	47.9
	At. A4 0 - 39					1	0.6																				1	0.6
	At. B3 0 - 38							1	3.0																		1	3.0
	At. B4 0 - 42	1	39.7			1	38.6																				2	78.3
	At. B5 0 - 33							2	1.3																		2	1.3
	At. B6 0 - 38							6	13.8	2	0.3																8	14.1
	At. B7 0 - 39							3	2.3																		3	2.3
	At. B8 0 - 44	1	31.1					5	1.3																		6	32.4
	At. C4 0 - 37							3	4.0																		3	4.0
	At. C5 0 - 36							1	0.6																		1	0.6
	At. C6 0 - 32							3	2.1																		3	2.1
	At. C7 0 - 43							4	5.5																		4	5.5
	At. C8 0 - 32							1	3.4																		1	3.4
	At. C9 0 - 34							1	7.5																		1	7.5
	At. E11 0 - 29							1	4.1																		1	4.1
	Total	17	1415.9	6	42.0	53	257.3	422	657.2	63	6.5	1	16.3	10	51.2	20	260.1	18	320.2	12	83.4	1	350.7	2	310.2		625	3771.0

Table 4. Artifacts recovered from sites at Tyler Bend

Site #	Provenience (Depth in cm)	Cores		Primary Decort. Flakes		Secondary Decort. Flakes		Interior Flakes		Retouch Flakes		Modified Flakes		Shatter		Fire-Cracked Rock		Bifaces		Dart Points		Ground Stone		Hammer Stones		TOTAL	
		Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	Ct.	Wt(g)	CWt(g	Ct. W	Ct.	Wt(g)
SE150	Area A surface					2	33.5	13	18.9											1	8.8 c					16	61.2
	Area C surface	1	138.5					3	5.7											1	2.4					5	146.6
	Area E surface							1	0.5																	1	0.5
	Area G surface	1	415.4					6	12.7																	7	428.1
	Area H surface							5	7.9																	5	7.9
	Sb. 2 0 - 20	1	43.8	2	99.4	2	5.5	11	18.3	5	0.8					3	10.7			1	13.1					25	191.6
	Sb. 3 0 - 21	2	146.5			4	9.9	6	27.8							1	8.6	2	26.9	1	9.1 d					16	228.8
	Sb. 4 0 - 28					1	0.2	2	2.0																	3	2.2
	Sb. 5 0 - 26							3	11.4									1	30.4							4	41.8
	Sb. 6 0 - 21							1	0.9																	1	0.9
	Sb. 7 0 - 26	1	832.1					1	4.9											1	4.6 e					3	841.6
	Sb. 8 0 - 22							9	6.1					2	7.6											11	13.7
	Sb. 9 0 - 24	2	149.8			3	28.3	2	3.8					1	13.2											8	195.1
	Sb. 10 0 - 26			1	38.2			12	34.2																	13	72.4
	Sb. 11 0 - 21			1	4.9	2	28.6	8	5.1							1	0.9			1	10.2					13	49.7
	At. D3 0 - 44							1	1.4																	1	1.4
	At. D5 0 - 45							1	0.9																	1	0.9
	At. E1 0 - 42							1	2.6																	1	2.6
	At. E4 0 - 40							1	5.3																	1	5.3
	At. E5 0 - 46							1	3.4																	1	3.4
	At. G11 0 - 41							1	2.5																	1	2.5
	At. G13 0 - 37							2	3.9																	2	3.9
	At. H12 0 - 38							1	0.4																	1	0.4
	At. H19 0 - 33							2	2.3																	2	2.3
	At. H20 0 - 33	2	25.9					3	11.7																	5	37.6
	At. K11 0 - 38																	1	9.4							1	9.4
	At. L3 0 - 35			1	8.0																					1	8.0
	At. L4 0 - 30							3	0.2																	3	0.2
	At. L9 0 - 41							1	1.2																	1	1.2
	At. M3 0 - 35													1	33.4											1	33.4
	At. O13 0 - 31							2	1.8																	2	1.8
	At. P13 0 - 34							1	0.6																	1	0.6
	Total	10	1752.0	5	150.5	14	106.0	104	198.4	5	0.8	0	0.0	4	54.2	5	20.2	4	66.7	6	48.2	0	0.0	0	0.0	157	2397.0
SE188	Road Surface							1	2.9									1	23.3							2	26.2
	Sb. 1 0 - 18					2	13.2	20	19.4							2	1.8									24	34.4
	Sb. 2 0 - 21					8	48.8	37	22.9			1	30.4			3	4.4									49	106.5
	Sb. 3 0 - 20					5	12.6	49	40.6			1	19.1	1	1.6	4	16.7	3	82.2							63	172.8
	Sb. 4 0 - 19			1	1.8	4	16.0	41	54.5	8	1.2					2	1.8	1	4.0							57	79.3
	Pt. 10 0 - 32							1	0.9																	1	0.9
	Pt. 11 0 - 35					1	3.3																			1	3.3
	Total	0	0.0	1	1.8	20	93.9	149	141.2	8	1.2	2	49.5	1	1.6	11	24.7	5	109.5	0	0.0	0	0.0	0	0.0	197	423.4

Dart Points: a (15a) Gary; b (15c) Afton; c (15i) Kings Corner Notched; d (15m) Langtry; e (15n) Langtry

produced 24 flakes representing various stages of the reduction sequence and a dart point (Figure 15a). The point most closely resembles the Gary type (Perino 1984:144) which dates between 1200 B.C. and A.D. 1700. Two interior flakes were recovered from stripback 6 near the location where the possible mano was recovered in collection area F. Artifacts recovered from stripback 7 included flakes from all steps of the reduction sequence, including 1 core, 1 primary decortication flake, 1 secondary decortication flake, 3 interior flakes and 1 retouch flake. No artifacts were recovered from stripbacks 1, 2 or 4.

The floor of each stripback was carefully investigated for evidence of features at the time of excavation. On some stripbacks, a Hudson sprayer was used to remoisten the surface after it had dried. No features or other evidence of undisturbed cultural deposits were discovered.

Backhoe Trench Results

Backhoe Trench 1: The 3 strata identified in backhoe trench 1 (Figures 7 and 16) contained no artifacts or evidence of undisturbed cultural deposits. Stratum 1 was composed of a dark brown sandy loam (10YR4/3) extending to 22 cm to 28 cm below the surface. A fine line 15 cm below the surface in stratum 1 could indicate the base of the plowzone. Stratum 2 was a brown sandy loam (7.5YR4/4) with an average thickness of 75 cm which put the base of stratum 2 at ca 1 m below the surface where it graded into a brown clay loam (10YR4/4; stratum 3) that continued to the base of the trench ca 1.6 m below the surface.

Backhoe Trench 2: Backhoe trench 2 (Figures 7 and 16) also contained 3 strata with no artifacts or other evidence of undisturbed cultural deposits. Stratum 1 was composed of a brown sandy loam (10YR4/3) that extended to a depth of 28 cm to 30 cm. No indication of a plowzone could be identified. Stratum 2 was also a brown sandy loam (7.5YR4/4) that extended from the base of stratum 1 to about 60 cm below the surface. Stratum 3 was unlike the clay loam of trench 1 and was composed of a brown sandy loam (10YR4/4). This stratum extended from the base of stratum 2 to the base of the trench at 1.9 m below the surface.

Auger Test Results

Eight (9%) of the 92 auger tests excavated at 3SE64 were positive (Figure 8 and Table 4). Recovered artifacts included 3 interior flakes, 1 retouch flake, 2 pieces of shatter, 1 very small fragment of a biface, and 1 fragment of a probable dart point. All positive tests were grouped in the northeast corner of the site except for the dart point fragment which was found in the southwest corner (E-23 in Figure 8). No evidence of features or other undisturbed cultural contexts were discovered during the auger testing.

Assessment of 3SE64

Prehistoric artifacts are generally restricted to an area measuring ca 480 m NW/SE x 120 m 120 m NE/SW (57,600 m^2). All available data confirm that the cultural deposits at 3SE64 are restricted to surface and near surface plowzone contexts. No features or other evidence of undisturbed cultural deposits have been discovered. The probable Gary point suggests Archaic or Woodland Period activities. Other artifacts in the assemblage (including the

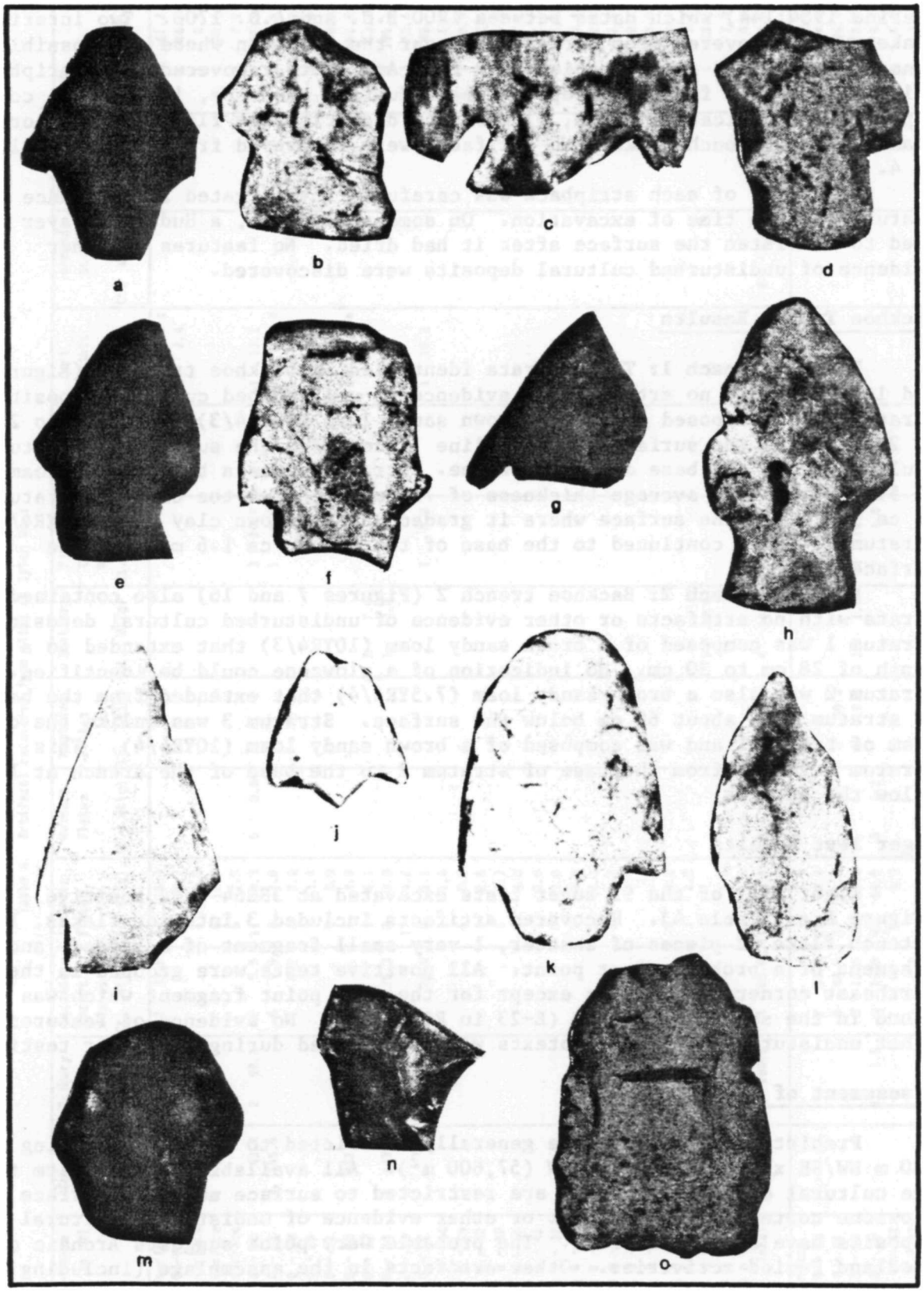


Figure 15. Artifacts recovered from the Tyler Bend area.

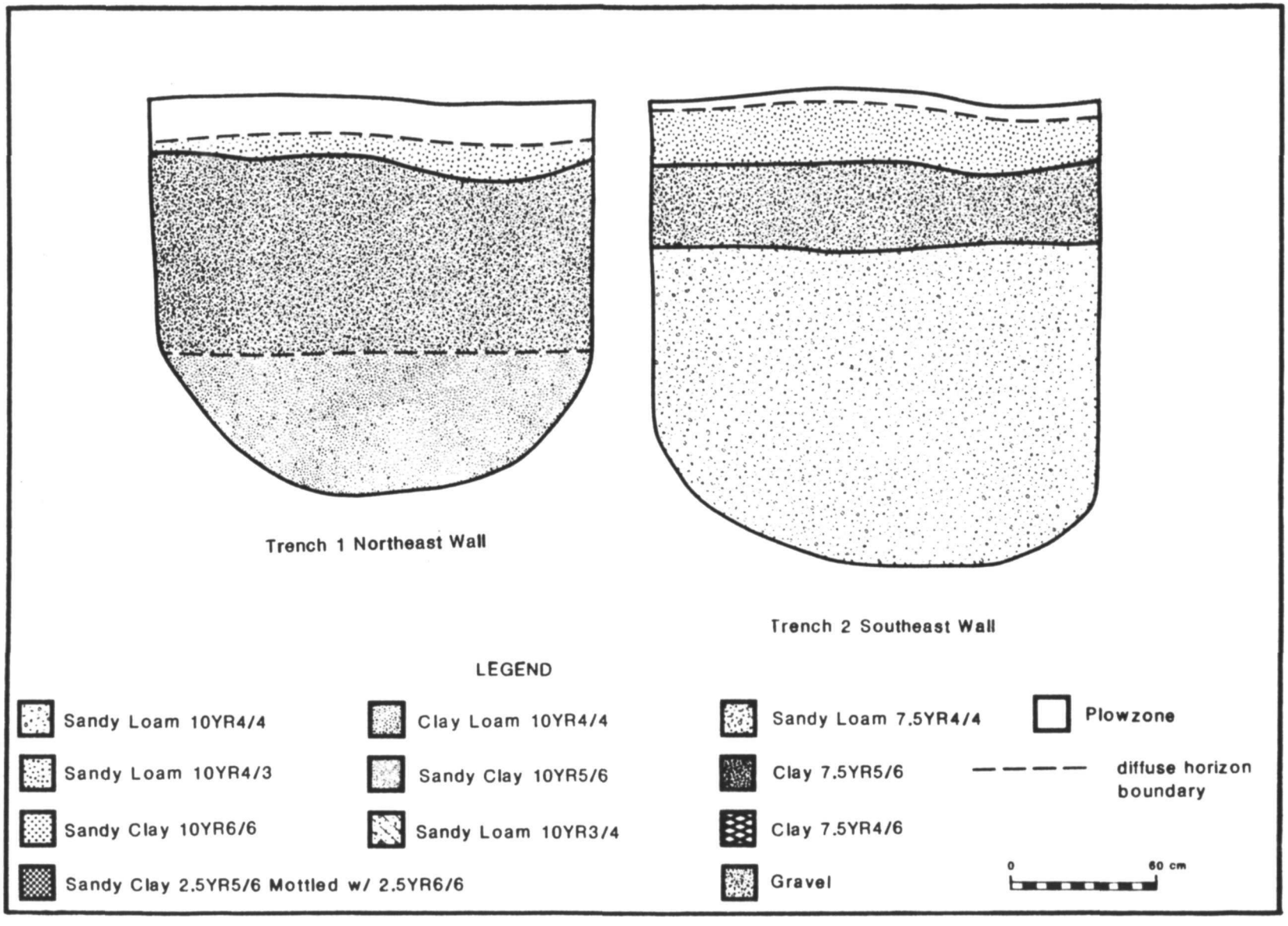


Figure 16. Profiles of excavations at 3SE64.

mano) suggest that the site was used for at least short term habitation activities.

3SE95 (HARV GRINDER SITE)

Surface and Transect Results

No artifacts were observed on the surface prior to disking the transects at 3SE95 because of the thick cover of grass. Once the soil in the transects had dried out and the dust had blown away it was evident that (in comparison to the other sites) 3SE95 had a much denser scatter of artifacts which tended to be concentrated along a ridge in the eastern part of the terrace (Figure 5 and Table 4).

The 399 artifacts recovered from the disked transects included 12 (3.0%) cores, 4 (1.0%) primary decortication flakes, 31 (7.8%) secondary decortication flakes, 269 (67.4%) interior flakes, 45 (11.2%) retouch flakes, 2 (0.5%) pieces of shatter, 16 (4.0%) pieces of fire-cracked rock, 9 (2.3%) bifaces and biface fragments, 9 (2.3%) dart points and dart point fragments, 1 (0.25%) mano and 1 (0.25%) hammerstone. Nearly 64% (255) of these came from collection area D. Artifacts from the two screened 50 cm x 50 cm x 8 cm blocks in collection area D are included with the surface material. Artifacts were found in all of the collection areas at 3SE95 except area C.

Six of the dart points found at 3SE95 were complete enough to warrant description and illustration. A dart point fragment collected from area D (Figure 15b) was manufactured from white chert and measures 28 mm x 7 mm (width x thickness). The stem has incurvate sides with a straight base. This point could not be assigned to any known type. Another dart point fragment was recovered from area D (Figure 15c) that was manufactured from a mottled light brown or tan chert that measures 49 mm x 7 mm. The blade is parallel with a simple barbed corner notched base. This point most closely resembles the Afton type (Perino 1984:4) which dates between 3000 B.C. and 1000 B.C.

Area E produced a dart point fragment (Figure 15d) which was manufactured from a whitish chert and measures 9 mm thick. What remains of the shoulders appears to be horizontal while the stem edges are straight. The base may have been rounded. This point could not be assigned to any known type. A dart point recovered from collection area G (Figure 15e) was manufactured from a black or very dark gray chert measuring 43 mm x 22 mm x 8 mm (length x width x thickness). The point has a biconvex, straight blade, rounded shoulders and an expanded to rounded corner notched straight base. In spite of its relatively intact condition we could not correlate this specimen with any known type. A dart point recovered from area H (Figure 15f) was manufactured from a grayish-white chert and measures 31 mm x 8 mm. This point has a biconvex cross section on a straight blade and horizontal to rounded shoulders. The base has a straight stem with a possible incurvate basal edge. The point does not exhibit the characteristics of a known type.

Stripback Results

Each of the 5 stripbacks excavated at 3SE95 produced prehistoric artifacts (Figure 9 and Table 4) ranging from 1 artifact in stripback 1 to 87 artifacts in stripback 3. The 189 recovered artifacts included 3 (1.6%) cores, 2 (1.1%) primary decortication flakes, 20 (10.6%) secondary decortication flakes, 122 (64.6%) interior flakes, 26 (13.8%) retouch flakes, 1 (0.5%) modified flake, 8 (4.2%) pieces of shatter, 4 (2.1%) pieces of fire-

cracked rock, 9 (4.8%) bifaces and biface fragments, 3 (1.6%) dart points and dart point fragments and 1 (0.5%) hammerstone fragment.

The dart point fragment recovered from stripback 3 was too fragmented to describe. One of the stripback 2 points (Figure 15g) has a flattened cross section on a straight, triangular blade with a mucronate distal end. One barb remains but the other barb and base are missing. The point was manufactured from a gray chert and measures 6 mm in thickness. It is not a known type. The other stripback 2 specimen (Figure 15h) was manufactured from a whitish gray chert and measures 53 mm x 8 mm. It has a biconvex cross section on an excurvate blade, though the shoulders are broken. It has a straight stem with a straight to excurvate basal edge. It was not possible to assign this point to a known type.

The floor of each stripback was observed for any potential features during excavation. In spite of remoistening and rechecking each of the stripbacks, no features or other evidence of undisturbed cultural deposits were discovered.

Backhoe Trench Results

Backhoe Trench 1: No artifacts or other evidence of undisturbed cultural deposits were discovered in the 4 strata identified in backhoe trench 1 (Figures 9 and 17). Stratum 1 was a dark yellowish brown sandy loam (10YR4/4). This stratum extended to about 25 cm below the surface but a line suggesting the base of the plowzone was noticeable about 14 cm below the surface. Immediately below this was a layer of gravel ca 25 cm thick (stratum 2). Stratum 3 was another layer of dark yellowish brown sandy loam (10YR4/4) ca 65 cm thick that extended from 50 cm to 115 cm below the surface. Careful review of the exposed profile found no evidence of cultural deposits. Stratum 4 was a strong brown (7.5YR4/6) lightly red and yellow mottled clay with scattered small manganese concretions. The depth of this stratum extended from 1.15 m to the base of the trench at 1.85 m below the surface.

Backhoe Trench 2: The 3 strata identified in trench 2 at 3SE95 (Figures 9 and 17) produced no artifacts or other evidence of undisturbed cultural deposits. Stratum 1 was a dark yellowish brown sandy loam (10YR4/4) that extended from just below the sod to a depth of almost 40 cm. A plowzone was observed extending to 15 cm below the surface. Stratum 2 was a 10 cm thick layer of gravel between 40 cm and 50 cm below the surface. Stratum 3 was immediately below the gravel and was composed of a yellowish brown sandy clay (10YR5/6) which graded from more sandy near the top of the stratum to less sandy at the bottom. Stratum 3 extended from 50 cm to 1.95 m below the surface at the base of the trench.

Auger Test Results

Fourteen (30%) of the 46 auger tests excavated at 3SE95 contained artifacts (Figure 10 and Table 4). The 37 artifacts found included 2 (5.4%) exhausted cores, 2 (5.4%) secondary decortication flakes, 31 (83.8%) interior flakes and 2 (5.4%) retouch flakes. The majority of the positive tests were located along the same ridge where the concentration was noted in the disked transects.

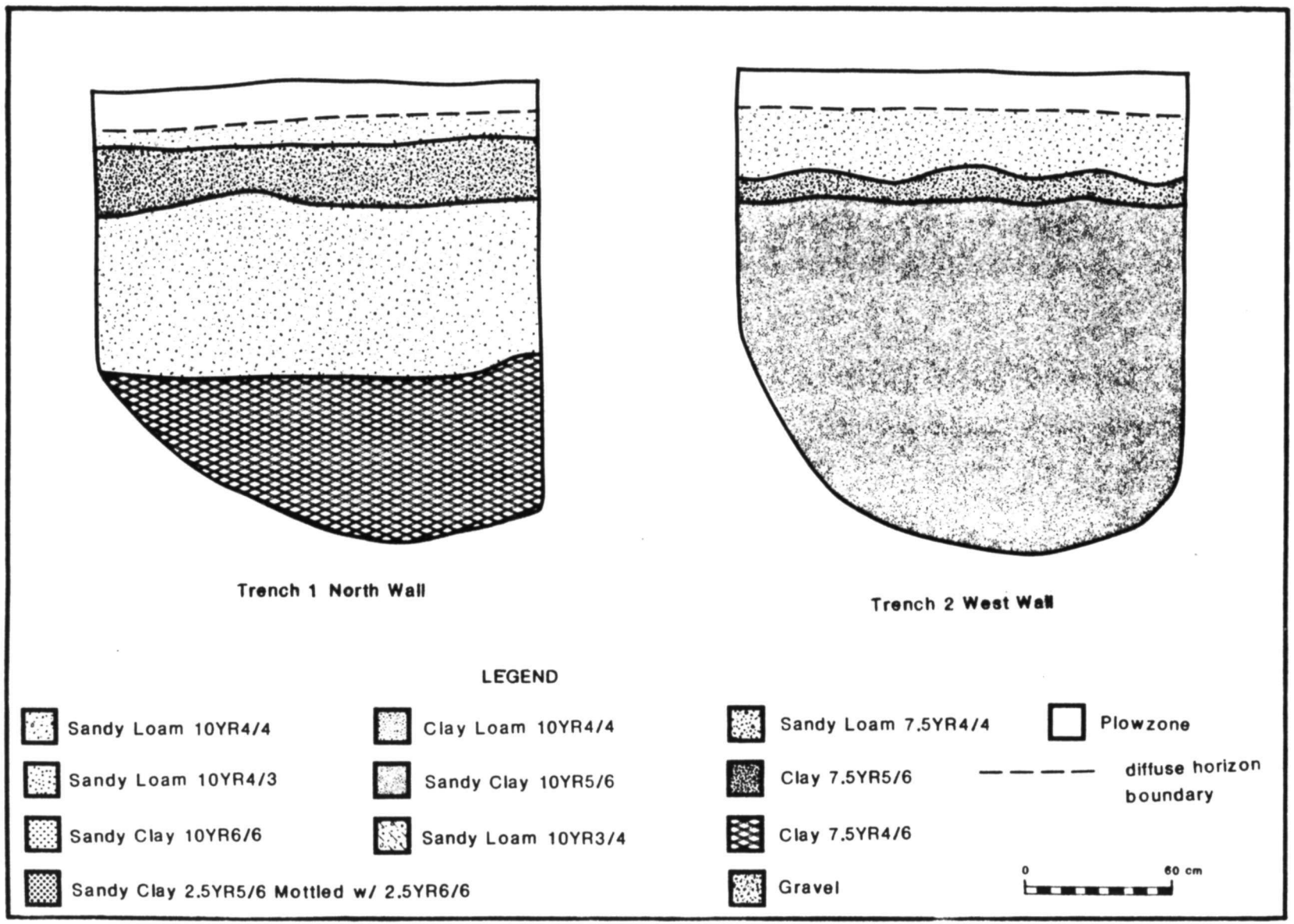


Figure 17. Profiles of excavations at 3SE95.

Assessment of 3SE95

Prehistoric artifacts are generally restricted to an area measuring ca 80 m N/S x 280 m E/W (22,400 m^2). All available data confirm that the cultural deposits at 3SE95 are restricted to surface and near surface plowzone contexts. No features or other evidence of undisturbed cultural deposits have been discovered. The Afton point suggests Archaic Period activities. Other artifacts in the assemblage suggest that the site was used for habitation purposes.

SITE 3SE150

Surface and Transect Results

3SE150 was covered in standing hay at least 2 m high prior to disking. With the exception of the surface of the dirt road crossing the site, no exposed ground surfaces were available for inspection. No artifacts were found in the road bed.

Disking revealed only a very light scatter of artifacts with no true concentrations (Figure 6 and Table 4). Thirty-four artifacts were recovered from the transects including 1 (5.9%) core, 1 (5.9%) secondary decortication flake, 28 (82.2%) interior flakes and 2 (5.9%) dart points.

The dart point (Figure 15i) found in collection area A has a plano-convex cross section and inversely tapered shoulders on a straight triangular blade with a slightly expanding stem and incurvate base. The point measures 56 mm x 30 mm x 6 (length x width x thickness). It most closely resembles the Kings Corner Notched type (Perino 1984:205) which dates from the Middle Archaic through the Woodland periods. The point found in area C (Figure 15j) was manufactured from light colored chert that exhibits a tan or reddish tint and measures 23 mm x 4 mm (width x thickness). Due to the missing tip and base, this has been classified as an unidentified small dart point or large arrow point with a plano-convex to biconvex cross section with barbs on a straight triangular blade.

Stripback Results

With the exception of stripback 1, all of the 11 stripback areas at 3SE150 produced at least 1 artifact each (Figure 11 and Table 4). The 10 positive stripbacks contained 97 artifacts including 6 (6.2%) cores, 4 (4.1%) primary decortication flakes, 12 (12.4%) secondary decortication flakes, 55 (56.7%) interior flakes, 5 (5.2%) retouch flakes, 3 (3.1%) pieces of shatter, 5 (5.2%) pieces of fire-cracked rock, 3 (3.1%) bifaces or biface fragments and 4 (4.1%) dart points or dart point fragments.

A dart point manufactured from a whitish chert and measures 53 mm x 34 mm x 8 mm (length x width x thickness) was found in stripback 2 (Figure 15k). This stemmed point has a flattened cross section with inversely tapered shoulders on a straight to excurvate blade. The stem has been formed by corner notching and has a rounded base. It is not assignable to any known type.

Stripback 3 produced a probable preform that was manufactured from a whitish to light tan chert (Figure 15l). It measures 50 mm x 24 mm x 9 mm (length x width x thickness) and still retains small portions of cortex on its roughly flaked surface near the proximal end. We could not assign it to any known type. Another dart point from stripback 3 was manufactured from a

speckled black chert (Figure 15m). It appears to have been reworked into a hafted end scraper. The point measures 38 mm x 31 mm x 9 mm (length x width x thickness) and has a biconvex cross section with tapered shoulders and a straight base on a contracting stem. Tnis specimen most closely resembles the Langtry type (Perino 1984:220) which dates between 2250 B.C. and 650 B.C. Only the base and one shoulder from a dart point manufactured from a dark gray chert was found in stripback 7 (Figure 15n). The straight base and contracting stem most closely resemble the Langtry type (Perino 1984:220).

The floor of each stripback was observed for any potential features during excavation. After rechecking each of the stripbacks no features or other evidence of undisturbed cultural deposits were discovered.

Backhoe Trench Results

Backhoe Trench 1: No artifacts or other evidence of undisturbed cultural deposits were discovered during examination of the 3 strata identified in backhoe trench 1 (Figure 18). Stratum 1 was composed of a brown sandy loam (10YR4/3). The base of a possible plowzone was noted 16 cm below the surface while the stratum itself extended to approximately 60 cm below the surface dipping to 80 cm at the eastern end of the trench. Stratum 2 was a lightly mottled brown sandy loam (10YR4/3) that was only slightly different from the matrix of stratum 1. The base of this stratum extended to a depth of ca 1 m. The dark yellowish brown sandy loam (10YR4/4) of stratum 3 extended from 1 m to the base of the trench ca 1.9 m below the surface.

Backhoe Trench 2: No artifacts or other evidence of undisturbed cultural deposits were discovered during examination of the 2 strata identified in backhoe trench 2 (Figure 18). Stratum 1 was composed of a dark yellowish brown sandy loam (10YR4/4). The base of a plowzone appeared to be located about 18 cm below the surface while the base of the stratum extended to a depth of 1.0 m. Stratum 2 was a dark yellowish brown sandy loam (10YR3/4) that extended to the base of the excavation at 2.1 m below the surface.

Backhoe Trench 3: No artifacts or other evidence of undisturbed cultural deposits were discovered during examination of the 3 strata identified in backhoe trench 3 (Figure 18). The soil matrix of stratum 1 was a dark yellowish brown sandy loam (10YR4/4). This strata extended from just below the sod to a depth of 1.5 m below the surface. The base of a plowzone was observed at 15 cm below the surface. Stratum 2 was composed of a brown sandy clay (7.5YR4/4) that extended from 1.5 m to 1.75 m below the surface. The third stratum had a strong brown clay (7.5YR5/6) matrix that extended from 1.75 m to the base of the trench at 2.54 m below the surface.

Backhoe Trench 4: No artifacts or other evidence of undisturbed cultural deposits were discovered during examination of the 3 strata identified in backhoe trench 4 (Figure 18). Stratum 1 was a layer of dark yellowish brown sandy loam (10YR4/4) that extended from just below the sod to 50 cm below the surface. The base of the possible plowzone appeared evident about 20 cm below the surface. Stratum 2 was a slightly mottled brownish yellow sandy clay (10YR6/6). This stratum was 45 cm thick, extending from 50 cm to 95 cm below the surface. The matrix of stratum 3 was a red sandy clay (2.5YR5/6) mottled with streaks of light red (2.5YR6/6). While the matrix was still sandy, there was noticeably less sand than in the stratum above. Stratum 3 extended from 95 cm to 1.65 m below the surface.

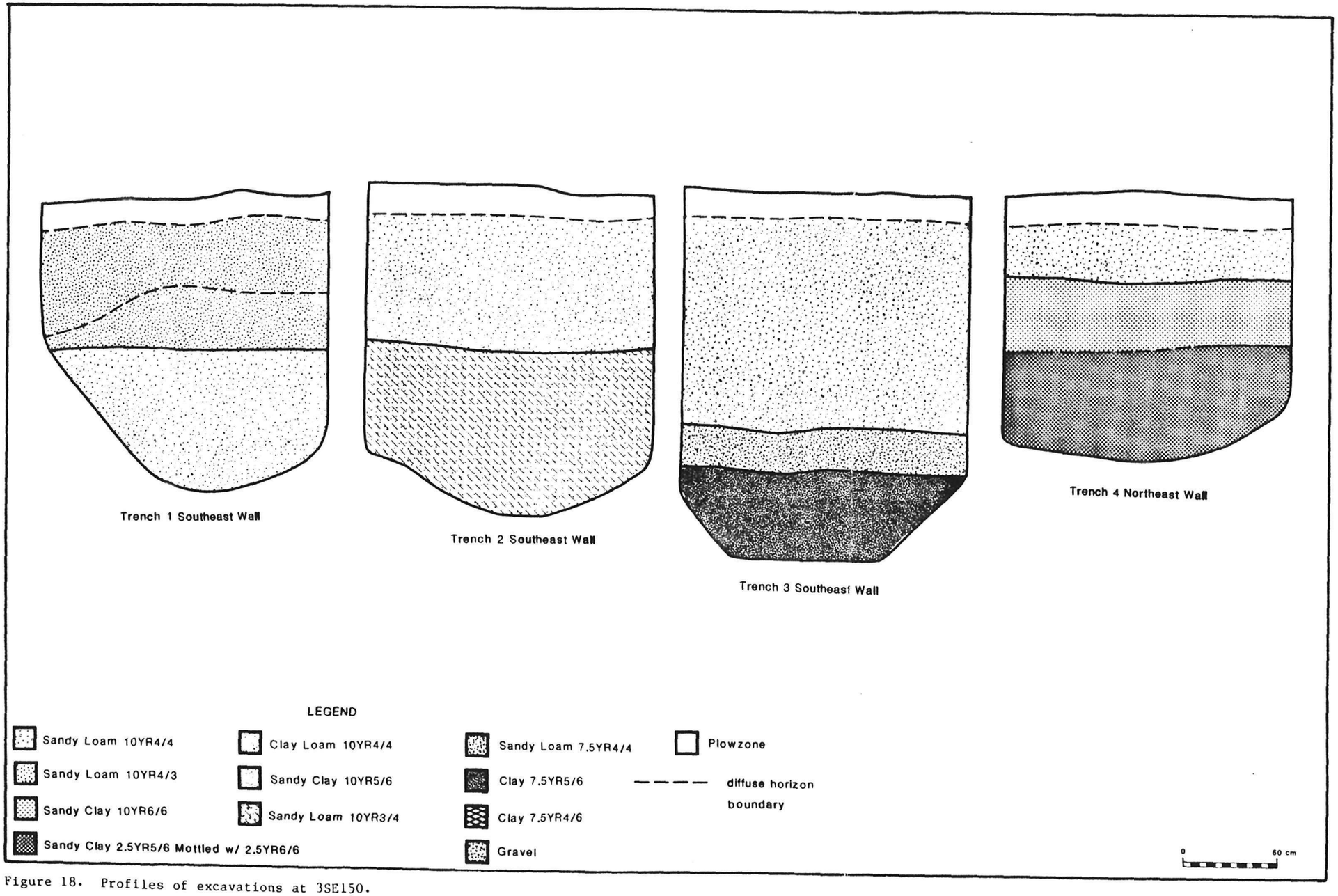


Figure 18. Profiles of excavations at 3SE150.

Auger Test Results

Seventeen (10%) of the 171 auger tests excavated at 3SE150 were positive (Figure 12 and Table 4). Included in the assemblage were 2 (7.7%) exhausted cores or core fragments, 1 (3.8%) primary decortication flake, 21 (80.8%) interior flakes, 1 (3.8%) piece of shatter and 1 (3.8%) biface fragment. These positive tests did not indicate any single concentration within the site but supported a general scatter across it when combined with the evidence from the other investigations. No evidence of features or other undisturbed cultural deposits was discovered during the auger testing at 3SE150.

Assessment of 3SE150

Prehistoric artifacts are distributed over an L shaped area measuring ca 120 m N/S x 640 m E/W and 680 N/S m x 230 m E/W (233,200 m^2). All available data confirm that the cultural deposits at 3SE150 are restricted to surface and near surface plowzone contexts. No features or other evidence of undisturbed cultural deposits have been discovered. The Kings Corner Notched point suggests Archaic or Woodland Period activities. Artifacts in the assemblage are very limited considering the size of the dispersion. Multiple episodes of limited and perhaps habitation activities have taken place at tnis site.

Although no evidence of preserved bone material was discovered during the HPA investigations, an isolated human burial was reported to NPS archeologist Bradford as having been discovered during plowing near Sierzchula's 90S 91E (Sierzchula 1984:56). Our investigations on and around the small rise in the northern part of 3SE150 failed to substantiate the buried cultural deposits as reported by Sierzchula [1984:56; but these buried deposits were represented by only 8 artifacts in 40 cm (50 cm to 90 cm) in his 48S 26W with 2% or 8 of 217 artifacts found below 50 cm and by 33 artifacts in 30 cm (50 cm to 80 cm) in his 48S 23E with 19% or 33 of 167 artifacts found below 50 cm - see our Table 3 for a review of the Sierzchula data].

3SE188 (TYLER BEND BENCH 1 AND 2)

Surface Results

No disking or backhoe trenching was conducted at 3SE188 under the directions of the Scope of Work. An interior flake and 1 biface were recovered from the surface of the dirt road crossing the site. The biface is a probable preform 37 mm x 12 mm (width x thickness) missing the proximal end (Figure 15o).

Stripback Results

Prehistoric artifacts were recovered from each of the 4 stripbacks excavated at 3SE188 (Figure 13 and Table 4). These stripbacks produced 193 artifacts including 1 (0.5%) primary decortication flake, 19 (9.8%) secondary decortication flakes, 147 (76.2%) interior flakes, 8 (4.1%) retouch flakes, 2 (1.0%) modified flakes, 1 (0.5%) piece of shatter, 11 (5.7%) fragments of fire-cracked rock and 4 (2.1%) miscellaneous bifaces and biface fragments.

Auger Test Results

Two (17%) of the 12 auger tests excavated at 3SE188 contained artifacts. Only 1 secondary decortication flake and 1 interior flake were found.

Assessment of 3SE188

Prehistoric artifacts at 3SE188 are distributed over an area measuring at least ca 40 m N/S x 160 m E/W (6,400 m^2). All available data confirm that the cultural deposits at 3SE150 are restricted to surface and near surface plowzone contexts. No features or other evidence of undisturbed cultural deposits have been discovered. No artifacts were discovered on which a cultural affiliation can be based. Other artifacts in the assemblage suggest only limited activities.

SIGNIFICANCE AND RECOMMENDATIONS

Each of the sites investigated exhibits a series of characteristics that seriously limit their potential to produce significant new archeological information. These characteristics include:

1. No evidence of intact features in large areas of exposed subplowzone deposits;

2. No evidence of undisturbed below plowzone cultural deposits;

3. No evidence of preserved floral remains in any context;

4. No evidence of preserved faunal remains in any context*, and;

5. With the exception of a small area at 3SE95, no evidence of artifact concentrations were found in the disturbed plowzone contexts.

The Tyler Bend area lies within the Upland Forest region of the Arkansas Ozarks as defined by Raab et al (1982:NW1, NW11) in Arkansas' State Plan. In her review of the Operating Plan for the Arkansas Ozark Archaic Period, Davis (1982:OP22) identifies the critical characteristics for evaluations of significance in the Arkansas Ozarks as including "any evidence that can aid in refining the adaptations and nature of changes in lifeways. . . . Excellent and complete samples of tools [including those from disturbed contexts]. . . .[and] Good undisturbed deposits, particularly ones with good faunal and floral preservation. . ."

The Tyler Bend sites have none of these characteristics and the combined investigations of HPA and the Park Service have resulted in no data which would suggest the potential for significant deposits or assemblages of artifacts. None of the sites have produced data which when viewed from the most favorable perspective would make them eligible for the National Register of Historic Places.

No further cultural resources work is necessary at the Tyler Bend sites. No monitoring during project development is recommended. If intact cultural deposits are discovered during construction, work should stop and the Park Superintendent and State Historic Preservation Officer should be contacted immediately.

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APPENDIX A

Project Participants

LAWRENCE L. AYRES supervised the fieldwork and wrote portions of the technical report. Mr. Ayres received a B.A. in antiquities from Southwest Missouri State University in 1980 and is ABT toward an M.A. in anthropology form the University of Arkansas. Mr. Ayres is also pursuing a degree in secondary education at the University of Arkansas.

STEVEN M. IMHOFF assisted in the preparation of the technical report. Mr. Imhoff received a B.S. in sociology from the University of Tulsa in 1974 and an M.A. in anthropology from the University of Arkansas in 1982. He is a member of the Society of Professional Archeologists.

TIMOTHY C. KLINGER served as Principal Investigator and assisted in the preparation of the report. Mr. Klinger received an M.A. degree in anthropology from the University of Arkansas in 1977 and a J.D. from the University of Arkansas School of Law in 1982. Mr. Klinger is a member of the Society of Professional Archeologists and is a licensed attorney in the State of Arkansas.

WALTER G. UNGLAUB, III prepared the graphic illustrations for the technical report. Mr. Unglaub received a B.A. in the history of art and architecture/Latin American Studies from Tulane University in 1978 and was a Fulbright Scholar in architecture in Ecuador.

SCOPE OF WORK FOR THE ARCHEOLOGICAL SURVEY AND TESTING OF SITES 3SE64, 3SE95, 3SE150 AND 3SE188 WITHIN THE PROPOSED TYLER BEND DEVELOPMENT AREA BUFFALO NATIONAL RIVER SEARCY COUNTY, ARKANSAS

INTRODUCTION

The National Park Service (NPS), acting through the Southwest Regional Office, is proposing to have archeological survey and testing conducted at the Tyler Bend Development Area near the intersection of Highway 65 with the Buffalo River. This work is to be accomplished prior to further planning of the development area with its numerous proposed facilities. Four known archeological sites occur within the proposed development area, but adequate information on their size, depth, nature and significance is not available. The purpose of this work is to acquire sufficient information about the sites in order to make a determination of significance relative to the criteria for the National Register of Historic Places.

The fieldwork will consist of a combination of controlled excavation units, prudent use of mechanized equipment for disking, trenching and stripping larger areas, as well as shovel tests and/or auger holes in order to determine the size, depth, character of deposits, and disturbances to the various sites involved.

The fieldwork will be followed immediately by a letter report describing the preliminary field results and recommendations concerning the significance and future management of the archeological resources involved. This letter will then be followed by analysis of the recovered materials, samples and documentation and presented in a draft report for review. A final report on the work will be provided following review and comment on the draft report.

The work defined herein is to be performed in accordance with this scope of work under the authorities of the Antiquities Act of 1906, the Historic Sites Act of 1935, the National Historic Preservation Act of 1966 (as amended in 1980), P.L. 94-422, and in conformance with approved policies and standards of the National Park Service and the State Plan for the Conservation of Archeological Resources in Arkansas.

Location

The project area is located in Searcy County, Arkansas, in the vicinity of the intersection of the Highway 65 bridge and the Buffalo River (Fig. 1.). The

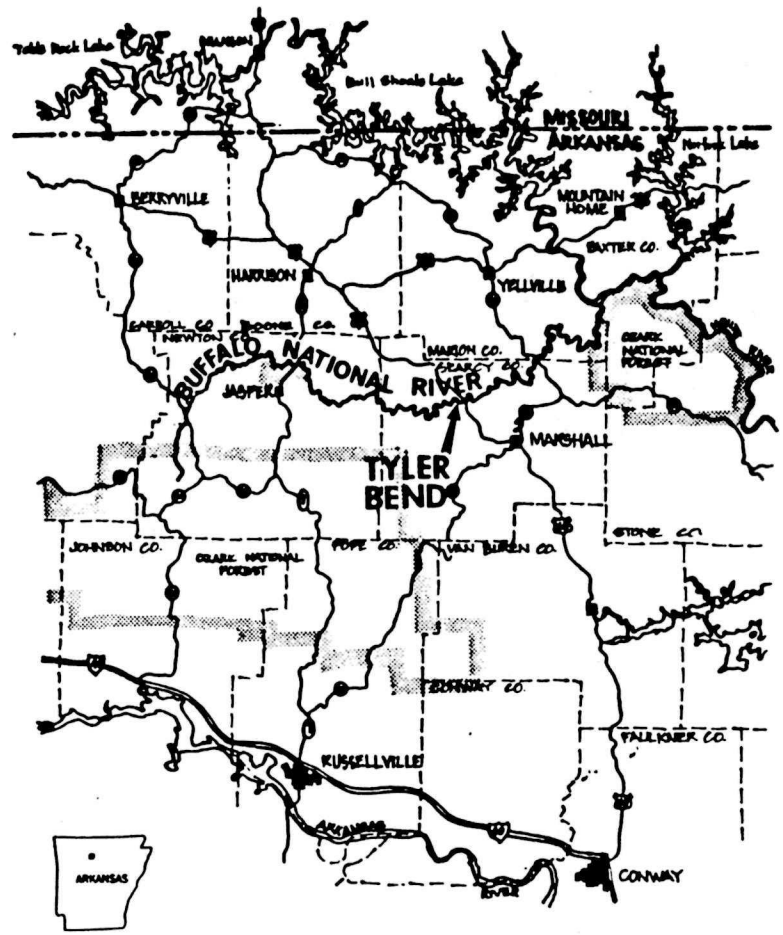


Figure 1: Map showing the general location of Tyler Bend northern Arkansas.

Tyler Bend Development Area is situated on the south side of the river with facilities planned both upstream and downstream of the Highway 65 bridge (Fig. 2). Sites 3SF64, 3SF150 and 3SF180 are located from 0.5-1.5 mile upstream from the bridge in T15N, R17W, Section 35, S1/2 and S1/2 of NW1/4 (U.S.G.S. Snowball, Ark. 15 minute quadrangle). Site 3SF95 is located just downstream from the Highway 65 bridge in T15N, R17W, Section 36, SW1/4 of NW1/4 of SW1/4 (U.S.G.S. Marshall, Ark. 7.5 minute quadrangle). Access to the site areas is over maintained dirt roads on which vehicles and heavy equipment can be taken. Inquiries regarding access should be made at the Silver Hill District Ranger Station, Buffalo National River.

Objectives

The objective of this project is to adequately survey the site areas in order to determine the horizontal and vertical extent of each site and areas of artifact concentrations within each site boundary. In addition, a limited amount of testing is necessary in order to further discern the nature of the site deposits, their relationships to one another and acquire enough information on each site to make a determination of significance for each. All recovered archeological materials (including nonartifactual samples) will be analyzed and incorporated into a final report on the investigations. The report will be prepared according to current professional standards.

Background

As part of a continuing program to provide adequate and safe facilities for public use and enjoyment of Buffalo National River, the NPS proposes to construct several facilities within the Tyler Bend area. Tyler Bend Development Area will be one of three major development areas along the river which will be designed for intensive public use. At Tyler Bend the NPS proposes to construct the following facilities: two, 20-car campground/picnic areas with parking lots; a district headquarters/interpretive center with parking lot; an amphitheater; a 50-site campground with parking; overlooks, roads, and trails; landscaping; and a primary river access area for canoe launch and pick-up. The primary river access has, since the publication of the Tyler Bend Development Concept Plan in 1981, been relocated from the north river bank near the Highway 65 bridge to the south river bank just downstream from the bridge. Further design and planning for this development area is on hold until a better understanding of the archeological resources of the vicinity can be obtained.

Two of the four archeological site areas involved in this work were recorded by the Arkansas Archeological Survey prior to establishment of the national park area in 1972 and include 3SF64 and 3SF95. In March 1979, a reconnaissance

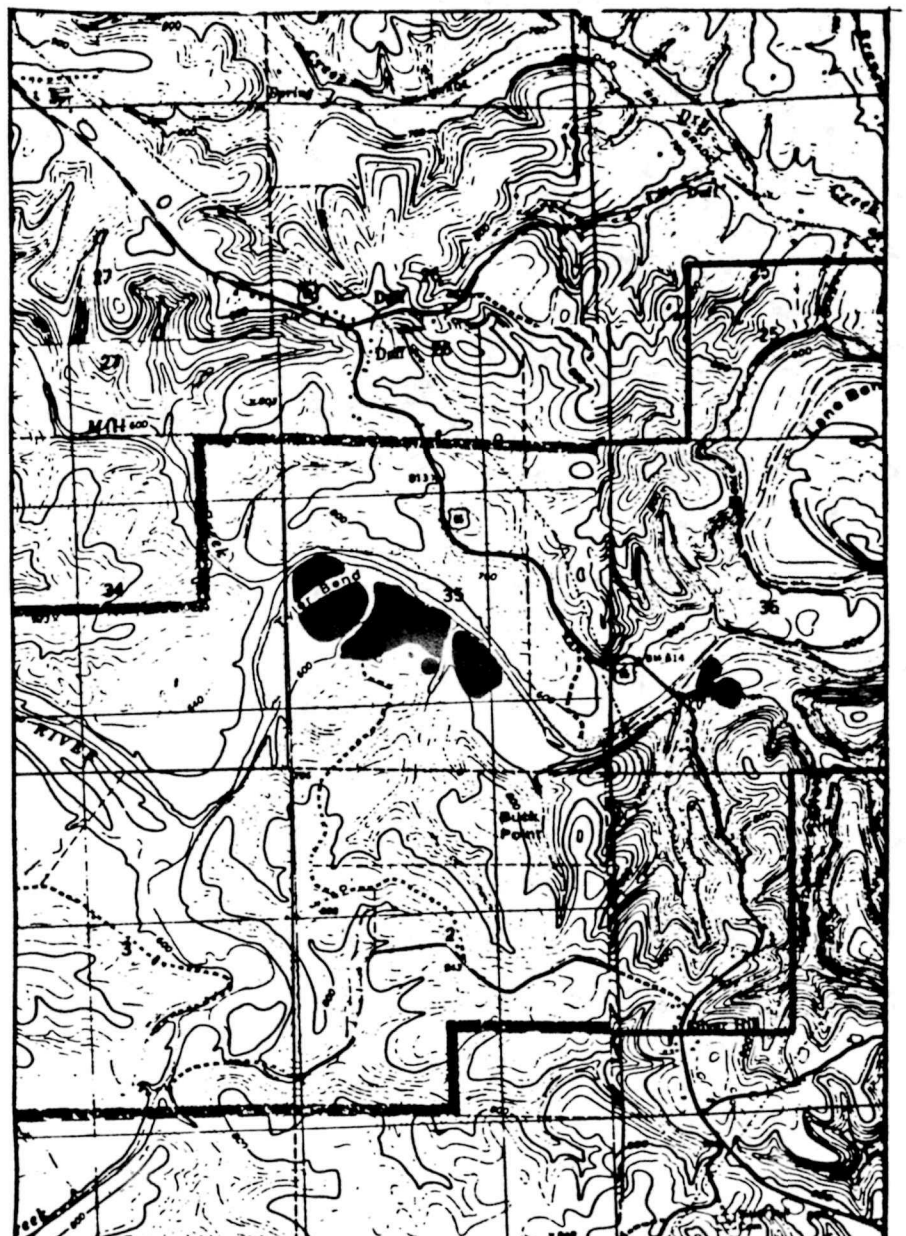


Figure 2: Location of major proposed development areas at Tyler Bend

survey of the area added another site (3SP150) which was tested by NPS in 1980 along with sites 3SP64 and 3SP188 (Fig. 3).

Only three test pits were excavated into the eastern area of site 3SP64 (Fig. 4), of which only one yielded cultural material. Stone flakes were very light in density, although a grinding stone was collected from the site.

At site 3SP150, eight test pits were excavated in 10 cm levels to depths ranging from 20-90 cm (Fig. 5). In addition, three backhoe trenches were also excavated into the site with the deepest reaching 3.2 m in depth. The site is characteristic of many such sites along the river in that they appear to be light scatters of lithic materials extending over large areas with smaller concentrations of lithic materials occurring within the larger site boundaries. This is probably the case with site 3SP64 also. Plowing has taken place on both sites and has disturbed the archeological deposits to a depth of 30-40 cm. Although no formal features were encountered, one area tested indicates that intact cultural deposits still occur below the plowzone.

Archeological site 3SP188 was also tested by excavating six test pits across the site (Fig. 6). The site is situated on a gravel ridge above, and south of site 3SP150. Deposits exposed in these tests ranged from 20-61 cm deep. One Woodland and several Archaic style projectile points were recovered from this site, as was one nutting and one grinding stone. This site contained a farmstead prior to purchase by the NPS and disturbance from this former historic occupation is evident across the site.

Site 3SP95 covers an area of about 15 acres and is situated in a forest field area overlooking the Buffalo River (Fig. 3). No previous professional archeological investigations are known to have been performed at this site. The site area has been plowed in years past and Goodhue Hollow has eroded into the site deposits on the east boundary. The current archeological investigations proposed for these sites should follow the guidelines set forth in the Statement of Work following.

Statement of Work

The purpose of these investigations are four-fold: 1) to better define the horizontal and vertical boundaries of the archeological site areas contained within the development area, (2 to acquire sufficient information on the nature, age and depositional context of these site areas in order to arrive at a determination of significance for each of the four archeological sites, 3) to provide an appropriate mitigation plan for each of the four sites if further investigations are warranted, and 4) offer recommendations on future management needs of these site areas, as appropriate.



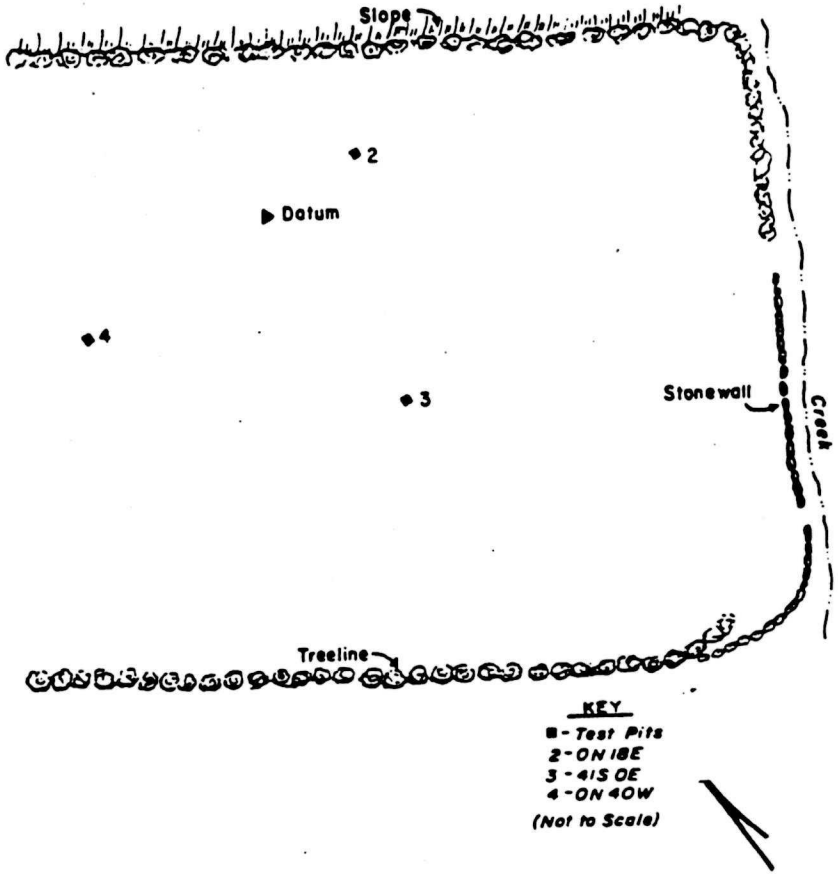


Figure 4: Map showing the location of test pits excavated at site 3SE64.

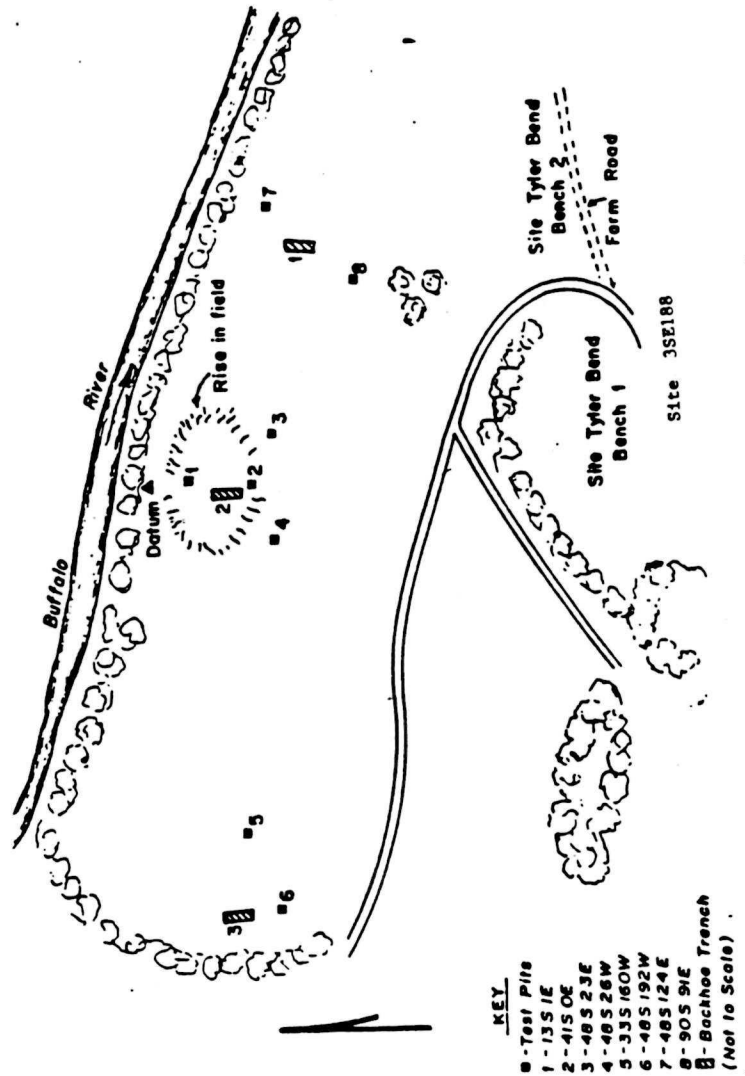


Figure 5: Map showing the location of test pits and backhoe trenches excavated at site 3SE150.

Figure 6: Map showing the location of test pits excavated at site 3SE188.

Fieldwork

Sites 3SF64, 3SF95 and 3SF150. Item 1 above should be achieved through a combination of shovel tests, auger holes and limited plowing or disking of the site areas. The shovel tests and auger holes, placed in patterned grids across the site areas at 30 m intervals, should allow for the delineation of site boundaries. In addition, small backhoe trenches and disking can be used to supplement this procedure. Exposure of subsoil deposits across the site by plowing, disking or a tractor-mounted rototiller would provide an initial idea of where concentrations of artifacts occur. A pattern of one primary ditched transect with ancillary transects perpendicular to the base transect, and spaced according to those drawn on the attached map for sites 3SF150, 3SF64 (Fig. 7), and 3SF95 is to be incorporated into these investigations.

According to patterns of artifact concentrations derived from the above process, particular areas that promise higher informational return should then be selected for further, more intense, investigation. These areas should be exposed using backhoe trenches and "strip back" areas in order to study the archeological and geological deposits. Such an approach should result in the necessary data to achieve Item 2 above. Backhoe trenches should be placed so as to derive information on the geomorphology of the site, the cultural depositions contained within the site, and be sufficiently deep to determine depth and character of the cultural deposits. A minimum of six backhoe trenches would be necessary for investigation at sites 3SF150 and 3SF64. At least two such trenches would be necessary at site 3SF95. "Strip back" areas should be a minimum of 5 m on a side and as deep as necessary to expose any intact cultural deposits below the plowzones. At least 10 such "strip back" areas should be placed in strategic areas across sites 3SF150 and 3SF64. A minimum of five "strip back" areas should be placed in appropriate places across site 3SF95.

Site 3SF188. Previous testing at Site 3SF188 resulted in a determination that the site possesses little research value as a result of extensive disturbance from reoccupation of the site area in this century. However, additional testing is necessary in order to define the site limits, confirm the conclusions of little or no research value, and to meet the needs of this scope of work. Thus, a series of test pits, shovel tests and/or auger holes should be placed over the bench area in 30 m intervals in order to define the site boundaries. Four "strip back" areas should be placed across this site in order to assess the possibility of any intact prehistoric features within the site area and to determine the amount of damage to the cultural deposits due to plowing. Backhoe trenches are not necessary at this site due to the shallow soil cover characteristic of the ridge top. Using information from these testing activities, Items 1-4 above should be addressed for purposes of this site.

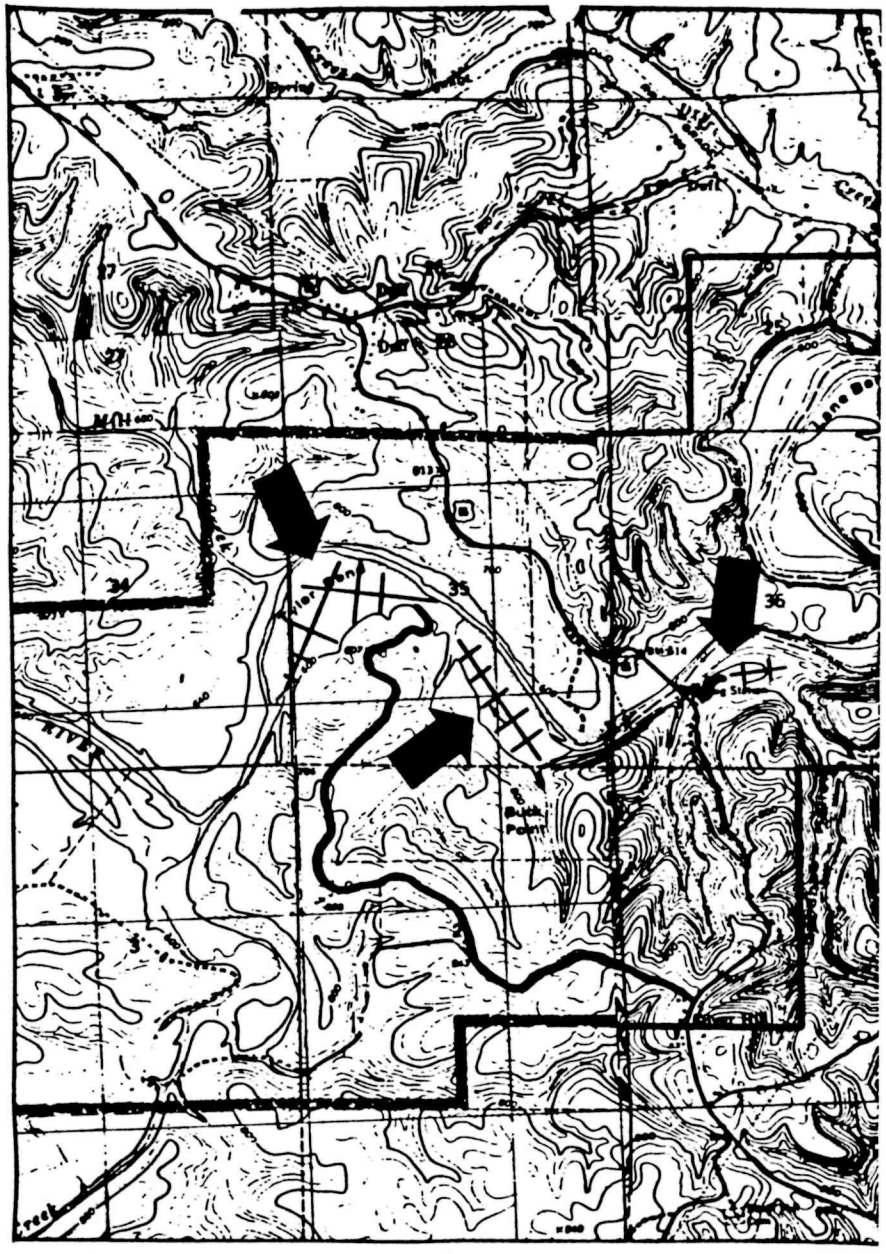


Figure 7: Recommended pattern of tilling/plowing at sites 3SE150, 3SE64 and 3SE95.

Analysis and Write-up

Immediately following the fieldwork, a letter report describing the results of the testing phase should be submitted to NPS. The letter report should contain preliminary interpretations of the sites, recommendations on the significance of the individual site areas, and suggested avenues for future management of these sites.

Analysis of all collected materials, samples and documentation should follow immediately upon completion of the fieldwork. These studies will result in the production of a draft report for review which will contain all pertinent information derived from the fieldwork and analyses, and the interpretation of all of these data. This information will include a section on methodologies used in the field and laboratory work; a cultural history of the area; environment of the area; description of the site features, artifacts and deposits; interpretation of these materials; and a discussion of conclusions drawn from this work. In addition, if more investigations are recommended, a mitigation plan for the scientific removal of these materials from each site involved is to be included. Following review and comment on the draft report by the NPS, a final report of publishable quality will be submitted by the contractor.

The contractor is expected to furnish all personnel, equipment, supplies and machinery necessary to conduct the fieldwork and report preparation. All fieldwork, laboratory analyses and report preparation should be conducted according to current professional standards and guidelines.

Basic References

Following is a list of references pertinent to the archeological sites at Tyler Bend and to the Buffalo River region in general. Copies of those reports by Bradford, and Sierzchula can be obtained from the NPS, Southwest Cultural Resources Center in Santa Fe, NM. Copies of all other documents are available from the various agencies and institutions which conducted the work.

Bradford, James F.
1979 Archeological Investigations of the Proposed Pruitt and Tyler Bend Development Areas, Buffalo National River, Arkansas. Southwest Cultural Resources Center, Southwest Region, National Park Service, Santa Fe.

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Sierzchula, Michael
1984 Archeological Investigations of Selected Areas of Buffalo National River. National Park Service, Southwest Cultural Resources Center, Santa Fe.

Wolfman, Daniel
1979 Archeological Assessment of the Buffalo National River. Arkansas Archeological Survey Research Report 18.

Deliverables

The contractor will deliver two copies of a draft report for review to the National Park Service. Following review of these documents, the contractor will submit five copies of a final report of publishable quality as a final product. Report format will follow guidelines set forth in the "State Plan" for Arkansas as described in Appendix B of that plan.

Collections

All collections (defined as including all artifacts, specimens, material samples plus all documentation in the form of notes, photographs, maps, plans, diagrams, computer tapes, disks, etc.) remain the property of the Federal Government. Upon the commencement of fieldwork that will produce collections, the field supervisor should obtain an accession number from the Park Curator and all containers of specimens should be labeled with that number. When leaving the field, all collections taken from the park should be placed on loan by the park. The archeologist in charge should provide the park with at least a simple box inventory, or a more complete inventory of materials if possible. After the materials are processed, a detailed inventory should be provided to the park.

Collection materials must be kept in secure conditions in space that meets National Park Service standards (as described in Special Directive 80-1, revised), during the period of analysis. Once study has been completed, they must be placed in a permanent repository that meets National Park Service standards and to which the Park Superintendent agrees. Methods of storage, cataloging and inventory must also meet National Park Service standards.

All conservation work of specimens that goes beyond standard archeological cleaning should be approved by the National Park Service Regional Office, as is true of any destructive or consumptive methods of analysis that are not routine or already called for in the scope of work, contract or research design.

Work Schedule

The work for this project shall begin on or before July 7, 1986 and completion of the fieldwork shall be accomplished by July 18, 1986. A letter report describing the preliminary field results shall be due on July 25, 1986 and two copies of the draft final report for review shall be delivered by September 1, 1986. The NPS will require 15 days for review from receipt of this report. Five copies of the final report shall be delivered by October 15, 1986, following review completion.

Budget

A firm fixed price contract is anticipated. The estimated price range is $8,000 to $10,000.

Contractor Obligations

The Principal Investigator will be responsible for the validity of the material presented in the report of investigations. In the event of controversy or court challenge other than a dispute involving this contract, the Principal Investigator may be called upon to testify on behalf of the Government in support of his work at further Government expense.

All reports, artifactual materials and samples, documentation, computer programs and other products resulting from these investigations will become the property of the United States Government.

Contract Requirements

Progress Reports. The contractor will be required to submit to the National Park Service a monthly report on the progress of the work under this contract by the first day of each month beginning on August 1, 1986.

Final Reports. Two copies of a draft report for review discussing the findings of the investigations will be submitted to the Contracting Officer's Technical Representative by September 1, 1986. The National Park Service will review the draft report within 15 days of receipt and request any changes. Upon acceptance of the report, five copies of the final report will be provided to the National Park Service by October 15, 1986.

1. If the report was authored by someone other than the contract principal investigator, the cover and title page must bear the inscription "Prepared Under the Supervision of (Name), Principal Investigator." The Principal Investigator is required to sign the original copy of the report.

2. If the report was authored by someone other than the contract principal investigator, the Principal Investigatory must at least prepare a foreword describing the overall research context of the report, and any other background circumstances relating to the manner in which the work was undertaken.

3. The title page of the report must bear an appropriate inscription indicating the source of funds used to conduct the work.

4. An abstract must be prepared consisting of a brief summary useful for informing the popularly oriented nonprofessional public of what the author considers to be the contribution of the work.

5. A completed National Technical Information Service (NTIS) report documentation form (Optional Form 272) will be submitted with the final report.

Payments

Partial payments may be authorized.

APPENDIX C

Artifact Definitions

Unmodified Chippable Stone. This is a raw material category and includes fragments of chert suitable for the manufacture of flaked stone tools that exhibits no evidence of modification. Specimens from which flakes have been removed are classified as cores or tested cobbles.

Tested Cobble. This is another raw material category that includes whole or nearly whole chert or quartzite cobbles that have no more than two flakes removed and that exhibit no further intentional modification. These are normally composed of poor grades of raw material.

Core. This is also a raw material category that includes cobbles or tabular pieces of good quality chert or quartzite from which more than two flakes have been removed and which show no modification for other uses. Cores recycled for use as hammerstones, choppers, etc. are classified under those categories.

Shatter. This category includes angular fragments of chert or quartzite resulting from various reduction processes. Some shatter may be confused with cobble fragments and fire-cracked rock, however, most of the latter are readily recognized.

Primary Decortication Flake. This category includes unmodified flakes in which ninety percent or more of the dorsal surface is covered with cortex. These are by-products of the initial stage of core preparation, core reduction and biface manufacture and are most likely to be found at quarry sites, workshop sites and base settlements. Specimens exhibiting use wear or intentional modification are classified as modified flakes.

Secondary Decortication Flake. This category includes unmodified flakes in which cortex covers less than ninety percent of the dorsal surface and that exhibit clear evidence of the removal of previous flakes. These are by-products of various stages of core preparation and biface manufacture and usually occur at quarry sites, workshop sites and base settlements. Flakes exhibiting cortex only on the striking platform are classified as interior flakes. Those exhibiting use wear or intentional modification are classified as modified flakes.

Preform. This category includes unstemmed bifacial artifacts and fragments thereof that do not appear to represent finished bifacial tools. Distinguishing characteristics include generally crude flaking (usually percussion) and a lack of use wear. Many occur as fragments that were broken during manufacture and discarded. These items represent the final stage of initial biface reduction, before being worked into finished tools.

Interior Flake. These flakes are normally produced during the latter stages of bifacial reduction. Distinguishing characteristics include a lack of cortex, steep platform angles, deep flake scars on the dorsal surface and a thick cross section. They may intergrade with some retouch flakes and may also be confused with decortication flakes struck from raw materials lacking cortex. Specimens exhibiting use wear or intentional modification are classified as modified flakes.

Retouch Flake. These flakes are produced during the final stages of bifacial reduction and tool sharpening or modification. Distinguishing characteristics include acute platform angles, shallow and wide scars on the dorsal surface and a thin cross section. Some specimens may be difficult to distinguish from interior flakes. Those exhibiting use wear or intentional modification are classified as modified flakes.

Broken Flake. These are incomplete flakes that cannot be assigned to any other flake category with confidence. Most are small, thin fragments that are probably fragments of retouch flakes but lack a striking platform or other distinguishing attributes.

Biface. These are complete or fragmentary, unstemmed bifacial tools. Tip and midsection fragments of projectile points are normally included in this category but stemmed fragments are included in the projectile point category. Arrow point fragments are not included.

Dart Point. Any relatively large, symmetrical, bifacially worked artifact that has been modified for hafting, or any fragment that shows evidence of a hafting element is classified as a dart point. Tip and midsection fragments are normally assigned to the biface category.

Arrow Point. This category includes small, thin, symmetrical, pointed bifaces or any fragment thereof. A hafting element is often present but may be unobtrusive in some specimens.

Drill/Reamer. These specimens exhibit rotating wear on a pointed tip. We have classified long, thin, bifacially worked specimens as drills. These are probably reworked projectile points. Reamers include tools with a similar function that are made of fragments of chert or flakes that are not bifacially worked or modified for hafting.

Modified Flake. These are flakes that exhibit use wear or intentional modification for use as cutting or scraping tools. Working edges may be concave, straight or convex. Specimens exhibiting unifacial wear (shear chipping) are classified as flake scrapers while those exhibiting bifacial wear (wear chipping) are classified as flake knives.

Hammerstone. These are generally large chunks of chert or other hard stone that exhibit well defined zones of battering on prominent corners or edges. Some are rounded in appearance.

Flat Abraders. These are characterized by the presence of a flat or slightly convex areas on the face of a cobble on which the patination has been worn away and/or a greater degree of smoothness is present than is typical of the natural cobble surface. In the case of sandstone or quartzite close inspection will show that individual grains on the abraded surface are worn.

Edge-Ground Cobble. These tools are characterized by the presence of a well defined ground or abraded facet, shallow groove or wide indentation on the edge of a cobble. Some weathered cobbles may be mistaken for edge-ground cobbles but individual grains should be worn and there should be a difference in the amount of patination when compared with the remainder of the cobble.

Grinding Basin. These tools exhibit a shallow, smooth basin on the face of a cobble or slab of stone. These are usually made of a coarse grained stone and used for plant food processing.

Pitted Cobble. These cobbles have one or more pits that are U or V shaped in cross section. Those with V shaped pits may have been used in bipolar flaking as hard anvils while U shaped pits may have resulted from nut cracking.

These artifacts can be grouped into larger categories including raw materials (unmodified chippable stone, tested cobbles and cores), primary flintknapping debris (shatter, primary and secondary decortication flakes and preforms), maintenance debris (interior, retouch and broken flakes), bifacial and flake tools (modified flakes, bifaces, dart and arrow points, drills and reamers), ground and pecked stone (hammerstones, flat abraders, edge-ground cobbles and grinding basins), ceramics, fire-cracked rock and minerals and miscellaneous lithics. No analysis of raw material types or possible heat alteration was conducted on the collections from the 4 Tyler Bend sites.