

THE VANDEVEN EXCHANGE TRACT

A Cultural Resources Survey and Assessment
of the 40 Acre VanDeven Exchange Tract in the
Buffalo National River, Newton County, Arkansas

by

Timothy C. Klinger

Historic Preservation Associates
Fayetteville, Arkansas 72702

August 1982

Historic Preservation Associates Reports 82-3

Report submitted to the National Park Service, Southwest
Region, in accordance with Purchase Order No. PX7029-2-0429

ABSTRACT

The investigations described in this report focus on the survey and assessment of the VanDeven exchange tract in Newton County, Arkansas. No cultural resources of National Register status or potential were located during the survey or record review. No further cultural resources work is recommended.

TABLE OF CONTENTS

Abstract	ii
List of Tables and Figures	iv
Introduction	1
Background and Purpose of the Report	1
Project Location and Dates of Investigations	1
Project Sponsor and Participants	1
Natural Environmental Setting	3
Archeological Background	4
Research Objectives	6
Field Conditions in the Exchange Tract	6
Survey Methodology	6
Surface Reconnaissance	6
Shovel Tests	7
Survey Results	7
Site Absence and Nature of Possible Sites Present	7
Recommendations	10
References Cited	11
Appendix A Project Order for Services	13
Appendix B Project Participants	14
Appendix C Arkansas Archeological Survey records check dated 28 July 1982	15
Arkansas Historic Preservation Program records check dated 28 July 1982	16

LIST OF TABLES AND FIGURES

Table 1.	Subsurface Investigations in the Survey Area	9
Figure 1.	Location of the VanDeven Exchange Tract in Relation to the Buffalo River Area of Newton County, Arkansas	2
Figure 2.	Location of the VanDeven Exchange Tract as Depicted in 1845 on the General Land Office Map	5
Figure 3.	Local Setting and Location of Subsurface Test Excavations within the VanDeven Exchange Tract	8

INTRODUCTION

Background and Purpose of the Report

In July 1982, the Southwest Region of the National Park Service (NPS) asked Historic Preservation Associates (HPA) to submit a proposal for a cultural resources survey and assessment of an exchange tract situated within the boundaries of the Buffalo National River. On 23 July 1982 the HPA proposal was submitted to the NPS. Formal acceptance of the proposal and the Notice to Proceed were issued on 26 July 1982 and received by HPA on 29 July 1982.

The purpose of this report is to document the results and recommendations of the assessment program as required in the Order for Services (Appendix A). The structure and content of the report adhere to the guidelines contained in The Management of Archeological Resources: The Airlie House Report (McGimsey and Davis 1977).

Copies of all related records generated as a result of these investigations will be curated by the University of Arkansas Museum in Fayetteville, Arkansas.

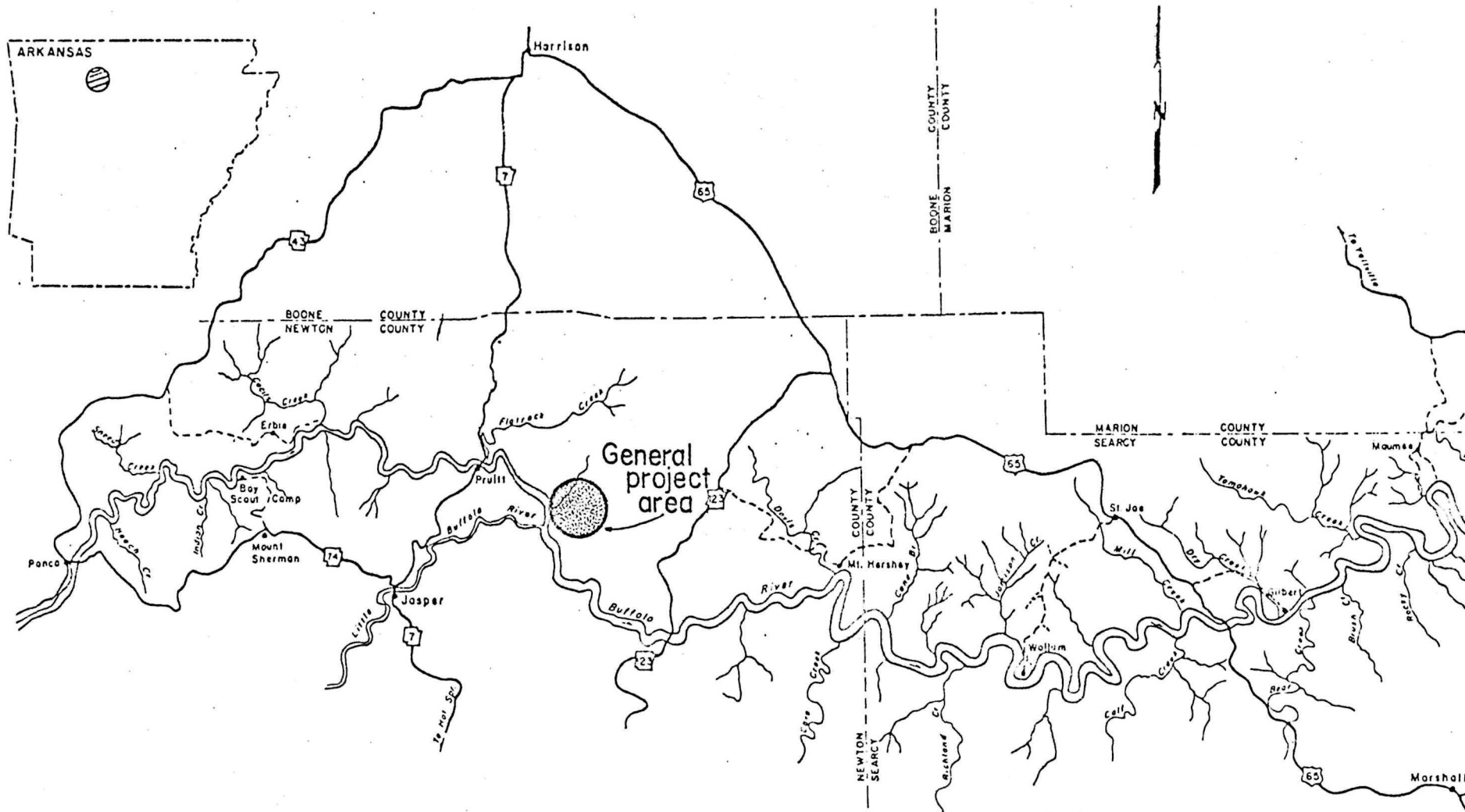
Project Location and Dates of Investigations

The VanDeven exchange tract is included within the boundaries of the Buffalo National River in Section 16 of Township 16 North Range 20 West, Newton County, Arkansas (Figure 1). The field survey was conducted on 30 July 1982.

Project Sponsor and Participants

The overall project sponsor is the Southwest Region of the National Park Service located in Santa Fe, New Mexico. The Contracting Officer for the program is Mr. Dave C. Wunder and the archeological liaisons are Mr. Ron Ice and Mr. Larry Nordby.

Historic Preservation Associates has carried out the work reported on here. Mr. Timothy C. Klinger served as Principal Investigator and conducted the fieldwork along with Mr. Ross A. Dinwiddie. Klinger wrote the report and was assisted in report preparation by Mr. Steven M. Imhoff (Appendix B).



REGIONAL SETTING

SCALE: As Shown

DATE: 6 Aug 1982

Order No. PX7029-2-0429

DRAWN BY

REVISED HPA

LOCATION OF THE VanDeven EXCHANGE TRACT IN RELATION TO THE BUFFALO RIVER AREA OF NEWTON COUNTY, ARKANSAS

Base map from Arkansas Game and Fish Comm.

Figure 1

NATURAL ENVIRONMENTAL SETTING

The VanDeven exchange tract is located in the heart of the Ozark region of north central Arkansas. Situated approximately $\frac{1}{4}$ mile east of the Buffalo River, the tract is wholly within the Boone geological formation. Of Mississippian age, the Boone formation is the dominant geological structure in the area and literally surrounds the Buffalo bottomlands for most of their length. One of the characteristics of the Boone deposits that has been long recognized by archeologists is the relatively high quality of its associated bedrock cherts. Less than $\frac{1}{4}$ mile to the north the stream flowing through the Boone deposits in Boomer Hollow joins the Buffalo, as does Wells Creek situated approximately $\frac{1}{2}$ mile to the south. Just to the southwest of the tract the Little Buffalo River enters the Buffalo and together they flow through the older St. Peter Sandstone and Everton formations (Middle Ordovician).

An extremely shallow soil development (ca 4 cm - 6 cm) and dense concentrations of angular chert characterize the VanDeven tract. Soil up to 10 cm deep is present along the western and north facing slopes bounded by the 1000 ft contour. Gently sloping gradients in these areas form narrow but nearly level terraces. Along the southern boundary of the tract limestone bedrock is exposed forming small and shallow overhangs. Toward the east and center of the tract (in the higher elevations) soils thin to approximately 4 cm in depth and the concentrations of angular cherts throughout the matrix increase in density. It is also in these areas that concentrations of the chert fragments are exposed in lenses which parallel the natural contours.

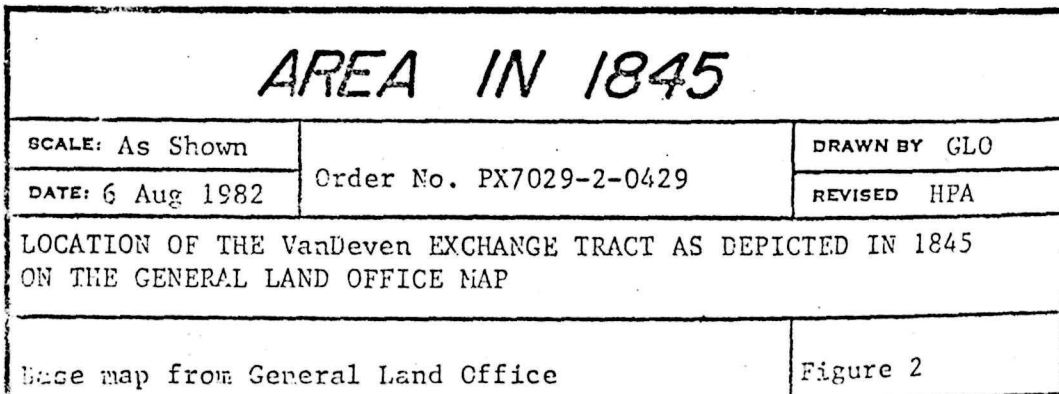
Vegetation in the tract is predominantly mixed hardwoods with scattered pines. While vegetation is generally dense in the area, only a few sapplings and very light undergrowth are present. No evidence of recent forestation was noted.

ARCHEOLOGICAL BACKGROUND

A synthesis of the known archeological data from the interior of the Ozarks has been presented by McGimsey (1963), Scholtz (1969), Wolfman (1979) and generally by Raab et al (1980). All of these agree that this area of north central Arkansas has been inhabited for at least 10,000 years beginning with the early Archaic and continuing through the prehistoric Mississippi period into the protohistoric and historic times. Evidence of these occupations is found throughout the Ozarks from archeological and historic sites located in the bottoms adjacent to the river, as well as from bluff shelters, caves and ridge tops.

No archeological sites were previously on record with the State Archeologist from within the exchange tract (Appendix C). Nor were any historic cultural resources on record with the State Historic Preservation Officer (Appendix C). Of the known archeological sites in Newton County along this part of the Buffalo River valley, very few are located east of the river itself. No sites are on record from the Boomer Hollow area to the north and none are known from the Wells Creek area. Six prehistoric sites are on record from west of the Buffalo and one (3NW255) is situated adjacent to the Little Buffalo River.

In 1845 when the General Land Office surveyed the area no historic structures, roads or other improvements were noted within this part of Section 16. A road along the west side of the Buffalo (then called "Buffalo Creek") crosses the river just north of its junction with the Little Buffalo River (then called "Hudson's fork of Buffalo Creek") for approximately $1\frac{1}{4}$ mile then crosses the Buffalo again (at this point called "Cecil's fork of Buffalo Creek") where it joins the "Road from Carrollton to Jasper". From this point the road continues north approximately $\frac{1}{2}$ mile where it stops at "Mrs. Rowland's field" (one of 2 fields in sections 6 and 7). With the exception of one other identified field between sections 17 and 20 along the Little Buffalo, no additional evidence of early historic activities are noted for this township on the 1845 map (Figure 2).



RESEARCH OBJECTIVES

The cultural resources investigations reported on here were oriented toward the goal of assessing whether prehistoric archeological, historic archeological, historic or architectural sites which have been or may be determined eligible for the National Register of Historic Places are present within the proposed exchange tract area. The identification of such sites was accomplished with both a review of extant literature and records and an in-field review of the tract. If sites were found, recommendations concerning how their National Register significance could be established would be presented in the report. Significance assessments were not, therefore, a goal of this program.

FIELD CONDITIONS IN THE EXCHANGE TRACT

Field conditions in the 40 acre VanDeven exchange tract were generally poor with less than 1% of the ground surface exposed. A consistent layer of leaf and pine needle mulch covered the entire area. Although vegetation was generally thick, a sparse understory allowed easy access throughout the tract. No evidence of other than natural disturbances was noted, these being limited to tree falls, erosion and animal burrowing activity.

SURVEY METHODOLOGY

Both surface reconnaissance and shovel tests were used during the field survey of the exchange tract. These methods were applied in an effort to efficiently and effectively investigate the 40 acres under consideration and to assure a reasonable assessment of the area.

Surface Reconnaissance

In this case, a surface reconnaissance was used to detect above ground features or remains that might be associated with historic activities. Prehistoric activities which may also be evidenced above the ground would generally be limited to pictographs or petroglyphs (Fritz 1978; Fritz and Ray 1982). With these few exceptions, simple surface reconnaissance would not be a useful way to detect cultural resources which might be present.

Shovel Tests

Thirty-one shovel tests were excavated during the exchange tract survey (Figure 3, Table 1). These subsurface investigations were generally placed along transect lines cross-cutting the project area or along natural features such as contours. The interval between the shovel tests varied but in no case exceeded 100 m (paced). The interval between the transects followed the same pattern. Areas along the north and west facing terraces were more intensively tested with intervals as small as 10 m. The shovel tests averaged 20 cm in diameter and 8 cm deep. We had originally intended to screen all of the excavated matrix but the shallow nature of the deposits coupled with the density of the naturally occurring chert suggested that screening would not be productive in this context. All fill was, however, gone through by hand for evidence of artifacts. Notes were compiled on each shovel test concerning Munsell color, matrix texture, inclusions observed and depth at which the test was terminated.

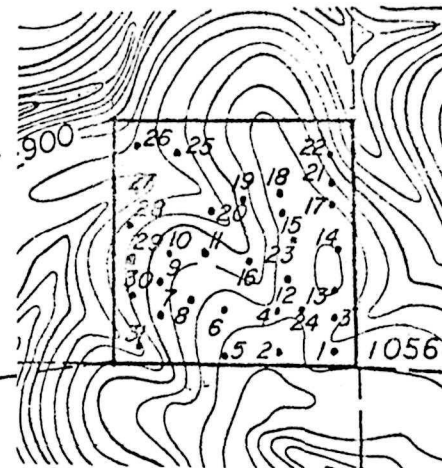
SURVEY RESULTS

The intensity and methods of investigations, in our opinion, were sufficient to determine whether cultural resources either on or eligible for the National Register of Historic Places are present within the VanDeven exchange tract. None have been found.

One intact machine made half gallon glass jug similar to the kind Welch's grape juice is sold in was found on the surface near shovel test 18 (Figure 3). No other evidence of archeological or historic resources was found as a result of the field survey, the records checks by the State Archeologist and the State Historic Preservation Officer, or from a review of the 1845 General Land Office map.

Site Absence and Nature of Possible Sites Present

Whenever we find no evidence of past activities (particularly prehistoric ones) the question always arises of why not. The easiest answer is that none are present. Other possibilities, however, deserve consideration. One concerns the uncertainty of the field methods.



SHOVEL
TESTS

LOCAL
SETTING

VanDeven EXCHANGE TRACT

SCALE: As Shown

DRAWN BY HPA

DATE: 6 Aug 1982

Order No. PX7029-2-0429

REVISED

LOCAL SETTING AND LOCATION OF SUBSURFACE TEST EXCAVATIONS WITHIN
THE VanDeven EXCHANGE TRACT

Base map from USGS Hasty, Ark. 7.5' (1967)

Figure 3

TABLE 1
SUBSURFACE INVESTIGATIONS IN THE SURVEY AREA

SHOVEL TEST	DEPTH BELOW SURFACE	MUNSELL COLOR	SOIL TEXTURE	COMMENTS
1	6 - 8 cm	10YR5/3	loam	medium chert content
2	6 - 8 cm	10YR5/3	loam	medium chert content
3	6 - 8 cm	10YR5/3	loam	medium chert content
4	6 - 8 cm	10YR5/3	loam	medium chert content
5	6 - 8 cm	10YR5/3	loam	medium chert content
6	6 - 8 cm	10YR5/3	loam	medium chert content
7	6 - 8 cm	10YR5/3	loam	medium chert content
8	6 - 8 cm	10YR5/3	loam	medium chert content
9	6 - 8 cm	10YR5/3	loam	medium chert content
10	6 - 8 cm	10YR5/3	loam	medium chert content
11	6 - 8 cm	10YR5/3	loam	medium chert content
12	4 - 6 cm	10YR6/2	loam	high chert content
13	4 - 6 cm	10YR6/2	loam	high chert content
14	4 - 6 cm	10YR6/2	loam	high chert content
15	4 - 6 cm	10YR6/2	loam	high chert content
16	4 - 6 cm	10YR6/2	loam	high chert content
17	4 - 6 cm	10YR6/2	loam	high chert content
18	4 - 6 cm	10YR6/2	loam	high chert content
19	4 - 6 cm	10YR6/2	loam	high chert content
20	4 - 6 cm	10YR6/2	loam	high chert content
21	8 - 10 cm	10YR6/2	loam	high chert content
22	8 - 10 cm	10YR6/2	loam	high chert content
23	6 - 8 cm	10YR6/2	loam	high chert content
24	6 - 8 cm	10YR6/2	loam	high chert content
25	8 - 10 cm	10YR6/2	loam	high chert content
26	8 - 10 cm	10YR6/2	loam	high chert content
27	8 - 10 cm	10YR6/2	loam	high chert content
28	8 - 10 cm	10YR6/2	loam	high chert content
29	8 - 10 cm	10YR6/2	loam	high chert content
30	8 - 10 cm	10YR6/2	loam	high chert content
31	8 - 10 cm	10YR6/2	loam	high chert content

Without looking at every square meter, it is possible that some remains may have been present yet went undetected. Above the ground features would have been found but small just below the leaf mulch lithic scatters could have been missed.

Another problem concerns the kind of sites we would expect to be located in such an environmental setting. Small specialized activity sites whose artifact assemblage consists mainly of lithic debitage, such as those described by Brooks (1977, 1978), could have easily been overlooked in this chert rich environment. The areas of exposed chert containing thousands of fragments noted earlier would in an archeological context fall into the "miscellaneous shatter" category. Without clear evidence of intentional modification, however, these are nothing more than debris produced by natural weathering conditions.

Site types which might be associated with this kind of topographic setting are almost surely limited to specialized activity sites whose occupants inhabited the spaces closer to the river on the bottomland first or second terraces. Although none are currently known, an excellent potential location for such a village site would be in the lowland area to the west and directly east from the confluence of the Buffalo and Little Buffalo rivers. Deeply buried and complex sites are known to occur in such settings (Imhoff 1978; Raab, Cande and Stahle 1979:173; but compare with Scholtz 1967:15).

RECOMMENDATIONS

No further cultural resources work is recommended at this time. If important archeological or historical resources are discovered during any future activities, however, the Southwest Region of the National Park Service and the Arkansas Historic Preservation Program should be notified. No future monitoring appears to be justified at this time and none is recommended.

REFERENCES CITED

- Brooks, Robert L.
 1977 A preliminary reconnaissance of the Carroll-Boone Water Supply and Transmission project. Report submitted to McGoodwin, Williams and Yates by the Arkansas Archeological Survey, Fayetteville.
- 1978 The Carroll-Boone testing program. Report submitted to McGoodwin, Williams and Yates by the Arkansas Archeological Survey, Fayetteville.
- Fritz, Gayle
 1978 Petroglyphs and pictographs in Arkansas. Arkansas Archeological Society Field Notes 160-161:3-4. Fayetteville.
- Fritz, Gayle and Robert H. Ray
 1982 Rock art sites in the southern Arkansas Ozarks and Arkansas River Valley. In Arkansas archeology in review. Arkansas Archeological Survey Research Series 15. Fayetteville.
- Imhoff, Steven M.
 1978 Test excavations at the proposed location of the Lakeview wastewater collection and treatment facility, Lakeview, Arkansas. Report submitted to Engineering Services, Inc., Springdale, Arkansas by the Arkansas Archeological Survey, Fayetteville.
- McGimsey, Charles R., III
 1963 Arkansas archeology, 1962 in review. In Arkansas Archeology 1962 edited by Charles R. McGimsey, III, pp.97-103. Arkansas Archeological Society, Fayetteville.
- McGimsey, Charles R., III and Hester A. Davis (editors)
 1977 The management of archeological resources, the Airlie House report. Special publication of the Society for American Archaeology.
- Raab, L. Mark, Robert F. Cande and David W. Stahle
 1979 Debitage graphs and Archaic settlement patterns in the Arkansas Ozarks. Midcontinental Journal of Archaeology 4(2):167-182.
- Raab, L. Mark, Gayle Fritz, Daniel Wolfman, Robert H. Ray and George Sabo, III
 1980 The Arkansas Ozarks. In DRAFT Arkansas State Plan, edited by Hester A. Davis. Arkansas Archeological Survey, Fayetteville.

Scholtz, James A.

1967 An archeological survey of the Beaver Reservoir area in northwest Arkansas. Unpublished Master's thesis, Department of Anthropology, University of Arkansas, Fayetteville.

1969 A summary of prehistory in northwest Arkansas. The Arkansas Archeologist 10(1-3):51-60. Fayetteville.

Wolfman, Daniel

1979 Archeological assessment of the Buffalo National River. Arkansas Archeological Survey Research Report 18. Fayetteville.

MARK ALL PACKAGES AND PAPERS WITH CONTRACT AND/OR ORDER NUMBERS

1. DATE OF ORDER July 26, 1982	2. CONTRACT NO. (if any) O.M.	3. ORDER NO. PX7029-2-0429	PAGE 1 OF
-----------------------------------	----------------------------------	-------------------------------	-----------

4. ISSUING OFFICE
National Park Service, Southwest Region, P.O. Box 728, Santa Fe, New Mexico 87501

5. ACCOUNTING AND APPROPRIATION DATA
7485-7003-402 N 2500 2 \$500.00 5DN

RECEIVED
7-29-82

6. SHIP TO (Consignee and Address, ZIP Code)
National Park Service, P. O. Box 728
Santa Fe, New Mexico 87501

VIA
Vendor Del.

7. TO: CONTRACTOR (Name, Address, ZIP Code)
Historic Preservation Associates
P. O. Box 1064
Fayetteville, AR 72701

8. TYPE OF ORDER
☒ (a) Purchase Reference your _____
Please furnish the following on the terms specified on both sides of this order and on the attached sheets, if any, including delivery as indicated. This purchase is negotiated under authority of:
41 USC 252(c)(3)
☐ (b) Delivery Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.

9. REQUISITION NO. / PURCHASE AUTHORITY
OFFICE PCA - Ice

10. REQUISITION NO. / PURCHASE AUTHORITY

11. F.O.B. POINT
Destination

12. GOVERNMENT B/L NO.
n/a

13. DELIVERY TO F.O.B. POINT OR BEFORE
see below

14. DISCOUNT TERMS
Net - 30

15. SCHEDULE * See reverse for repetitions

Item No. (a)	Supplies or Services (b)	Quantity Ordered (c)	Unit (d)	Unit Price (e)	Amount (f)	Quantity Accepted (g)
1.	Perform archeological survey of 40 acre tract of land located in Buffalo National River. Legal description for the tract is: T. 16 N., R. 20 W., 5th P.M., Newton County, Arkansas, Section 16, SE$\frac{1}{4}$SE$\frac{1}{4}$. Determine location, nature and condition of any archeological or historical sites in the tract. A written report to include a map illustrating the survey area, and any sites located in the tract, site descriptions and records, evaluations of any sites, and recommendations to be submitted by August 15, 1982. Payment will be made upon receipt of invoice detailing expenses.	1	job	NTE		

CLASSIFICATION: ☒ SMALL BUSINESS ☐ OTHER THAN SMALL BUSINESS ☐ MINORITY BUSINESS ENTERPRISE

15. (h) Total from continuation pages

15. (i) GRAND TOTAL

17. SHIPPING POINT

18. GROSS SHIPPING WEIGHT

19. INVOICE NO.

20. MAIL INVOICE TO (Include ZIP Code)
Same as #4

UNITED STATES OF AMERICA
BY (Signature)
22. NAME (Typed)
Dave C. Wunder 505/988-6846
TITLE: CONTRACTING/ORDERING OFFICER

Appendix B
PROJECT PARTICIPANTS

ROSS A. DINWIDDIE participated in the field survey program. He is working toward an M.A. in anthropology at the University of Arkansas, Fayetteville (anticipated completion December 1982).

STEVEN M. IMHOFF assisted in the report preparation. He received an M.A. in anthropology from the University of Arkansas in 1982.

TIMOTHY C. KLINGER served as the Principal Investigator and authored the report. He received an M.A. in anthropology in 1977 and a J.D. in 1982 from the University of Arkansas, Fayetteville.



ARKANSAS ARCHEOLOGICAL SURVEY

RECEIVED
28 July 1982

Office of State Archeologist

P.O. Box R
Fayetteville, AR 72701
Phone: 501-575-3558

July 28, 1982

Mr. Timothy C. Klinger
Historic Preservation Associates
P. O. Box 1064
Fayetteville, Arkansas 72702

Re: Archeological site search for a project area in the extreme
southeast corner of Section 16 T16N R20W Newton County

Dear Tim:

No archeological sites are on record for the project area
as outlined in your July 23, 1982 letter. We look forward to
hear of your results from this project.

Sincerely,

Jerry Hilliard
Jerry Hilliard

cc: State Historic Preservation Officer
Dan Wolfman



ARKANSAS HISTORIC PRESERVATION PROGRAM

e 500, Continental Building · Markhorn and Main · Little Rock, Arkansas 72201

Phone: (501) 371-2761

July 28, 1982

Mr. Ross A. Dinwiddle
Historic Preservation Associates
P. O. Box 1064
Fayetteville, AR 72702

Re: Buffalo National River
Cultural Resources Survey

Dear Mr. Dinwiddle:

Thank you for your inquiry of July 26 regarding the above captioned subject. The professional staff of the Arkansas Historic Preservation Program (AHPP) has checked our files for the 40 acre tract shown on the submitted map and reported that there are no historic structures within the described area. Our review deals only with historic structures. Archeological clearance must come from Ms. Hester Davis, State Archeologist, P. O. Box R, Fayetteville, Arkansas, 72701.

Please contact Eve Shackelford of my staff if you have any questions concerning this matter.

Sincerely,

Wilson Stiles
State Historic Preservation Officer

WS/ES/ss

cc: Hester Davis

