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FROM THE EDITOR

This will be my last issue as L. A. S. Newsletter Editor for the next two years, as I will be spending approximately 16 months in Port Lavaca, Texas, while excavating a Late Archaic shell midden for the Corps of Engineers. During that time, as noted in the previous newsletter, Chris Hays, LSU Station Archaeologist for the Louisiana Division of Archaeology, will serve as interim editor. Beginning in January 1997, all notes, news, letters, articles, etc., for the newsletter should be submitted to Chris at the following address:

Dr. Christopher Hays Museum of Natural Science Louisiana State University Baton Rouge, Louisiana 70803

Tel.: (504) 388-6739

I know the newsletter will be in capable hands once Chris takes over. I certainly will enjoy the break, especially after having served for the past 10 years as Newsletter Editor. Wow! Ten years! I can't believe it has been that long since Charlie Pearson resigned as Editor and I took over. They have been very rewarding years, don't get me wrong, and I've enjoyed being editor, but the "vacation" will be nice, nevertheless. Perhaps Chris will enjoy the editor's job so much that he will want to take over permanently even after I return.

In any case, this issue of the newsletter

contains important information about the upcoming 1997 annual meeting. Please see Nancy Affeltranger's notice below, plus the various registration forms and "Call for Papers" announcement at the back of the newsletter. So far, only one person has volunteered to present a paper. We obviously need a lot more to make this a successful meeting. So, please consider giving a paper, and providing Nancy with the necessary information on your subject.

BATON ROUGE, LOUISIANA 70802

My best to Chris Hays and the rest of the society over the next two years.

Rich Weinstein Newsletter Editor

1997 L. A. S. ANNUAL MEETING: FINAL CALL FOR PAPERS AND REGISTRATION INFORMATION

Well, it's almost time again to warm up for our next annual meeting, to be held in Alexandria, Louisiana, January 31 through February 2, 1997. In the last newsletter, I placed a call for papers and asked for volunteers to help with the meeting, but I only had one response. Come on, you guys—sign up!!! We need a great program to go with Barto Arnold's keynote speech.

Mr. Arnold will discuss the discovery and excavation of the Belle, one of La Salle's ships, that sank in Matagorda Bay, Texas, in 1686. Because of its relatively quick burial by the sands and clays in Matagorda Bay, most of the lower part of the ship and its cargo are extremely well preserved. Mr. Arnold and his crew have discovered some highly interesting and extremely rare and important artifacts. Included are a bronze cannon with dolphin handles, a belt buckle with an emperor's head on it, thousands of glass beads, numerous hawk's bells, pewter plates, and boxes filled with muskets and swords. The skeleton of a probable crew member also was found draped over an anchor chain.

Mr. Arnold's speech, plus lunch, for only \$20.00 is a great deal!! But the meeting needs the support of all L. A. S. members in order for it to be a truly excellent affair.

So, please respond to the various registration forms and the "Call for Papers" appearing at the end of this newsletter. Preregistration for the meeting is only \$20.00 for members before January 15, 1997. After that date, the registration cost goes up to \$30.00. As noted above, the registration price also includes a Saturday luncheon featuring Mr. Arnold's keynote address.

The meetings will be held at the new Hampton Inn in Alexandria, with a very reasonable, flat room rate of \$54.00. Reservations must be made before January 17, 1997, in order to assure a room at the hotel. See the hotel registration form for address and telephone numbers.

Nancy Affeltranger Meeting Coordinator

REDUCED COST FOR PURCHASE OF MULTIPLE COPIES OF PAST BULLETINS

The L. A. S. Executive Committee recently voted to reduce the cost of the society's bulletin, *Louisiana Archaeology*, if copies are purchased in bulk. Orders of 10 to 14 bulletins (either individual issues or numerous copies

of the same issue) will be discounted at 10%. Orders of 15 or more copies will be discounted at 15%. This is a good opportunity for people to obtain past bulletins to fill in gaps in their collections, or to acquire complete sets (minus those issues that are out of print) for schools and/or libraries.

NAMES OF CHAPTER OFFICERS AND REPRESENTATIVES REQUESTED

Maureen Downey, L. A. S. Secretary, requests that all chapters submit the names of their officers and L. A. S. representatives. It is particularly difficult to notify chapters of Executive Committee Meetings if neither the names of chapter officers nor their representatives are known. This is especially true of the Imperial Calcasieu, Southeast, and Acadiana chapters, who have not been heard from in over a year or more. In fact, do these chapters even still exist? Please let the Secretary know. Maureen's address can be found on the back cover of this newsletter.

MINUTES OF THE L. A. S. EXECUTIVE COMMITTEE MEETING

MORROW, LOUISIANA Saturday, October 12, 1996

Reported by Maureen Downey L.A.S. Secretary

The L.A.S. Executive Committee Meeting was held at the home of James Fogleman in Morrow, Louisiana, Saturday, October 12, 1996. Members present were:

James Fogleman — L. A. S. President, Morrow

Roger Saucier — L. A. S. Vice-President/President Elect, Vicksburg

David Jeane — L. A. S. Treasurer, Springhill

Maureen Downey — L. A. S. Secretary, Delta Chapter

Rich Weinstein — L. A. S. Newsletter
Editor, Baton Rouge Chapter
Harold Brice — Northwest Chapter
Representative
Mary Brice — Northwest Chapter
Nancy Affeltranger — Central Chapter
Representative
Charlie Affeltranger — Central Chapter
John Guy — L. A. S. At-Large Representative, Anacoco
Dan Shipman — L. A. S. At-Large
Representative, New Orleans

President Jim Fogleman called the meeting to order at 10:17 a.m. David Jeane took the minutes of the meeting until the arrival of the Secretary. The Committee approved the minutes of the previous meeting as published in the newsletter.

Reports

The Treasurer's report was given by David Jeane who reported that the L. A. S. bank balance totaled \$5,703.00. The Treasurer also reported that membership renewals will be sent out during the next week. Discussion was held concerning new membership flyers. Rich will give Jim Fogleman a copy of the one used in the past. David Jeane said that he knew a printer that he believed would give a good price to print the flyers. Rich suggested that the flyers be sent to people who receive information from the Louisiana Division of Archaeology and also to neighboring states' archaeological societies. Flyers could be taken to conferences that L. A. S. members attend and should, of course, be made available during Archaeology Week. President Jim Fogleman said that the local chapters must encourage their members to join the L. A. S. Next discussion was held on selling L. A. S. Bulletins at a reduced price for complete sets. Roger Saucier made a motion that 10 to 14 issues be sold for a 10% reduction and 15 or more issues be sold for a 15% reduction off the regular price. The motion was seconded by Nancy Affeltranger and passed by the Committee.

The Committee then discussed placing negatives of camera-ready bulletin material in the L. A. S. archives. Ray Fredlund, L. A. S. Archival Committee Chair, was unable to at-

tend the meeting. President Jim Fogleman said that he would check with Ray concerning the archives when he became available.

As reported in the last newsletter, Chris Haves will be editing the newsletter beginning in January, since Newsletter Editor Rich Weinstein will be unable to do so for approximately twenty months. Rich said that the next newsletter should be out around the first week of December. He stated that he had already received one article for that newsletter. There was some discussion of possible articles for the December newsletter. Information on the 1997 Annual Meeting will be included. Rich said that he was informed that some information regarding publications of the Texas Archeological Society, given in the last newsletter, was incorrect. Although the information was printed exactly as received, the correct price should have been \$35.00, plus \$2.00 for shipping and handling. Rich also asked if anyone had gone on any of the proposed L. A. S.-sponsored tours to the Southwest back in June. If so, he requested that individuals please send in a brief write-up about their tour.

The bulletin for 1994, No. 21, is presently at the printers and probably will be out by the end of the year. The 1995 bulletin, No. 22, will be the first bulletin for our new Bulletin Editor, T. R. Kidder, and it should be published sometime in 1997. Current plans also are to have the 1996 bulletin, No. 23, published by late next year. This will bring the bulletins up to date. Roger Saucier informed the Committee that a plaque honoring Bill Haag will be presented to Dr. Haag at the Annual Meeting in January.

Old Business

Nancy Affeltranger discussed with the Committee arrangements concerning the guest speaker for the Annual Meeting. Treasurer David Jeane presented to Nancy Affeltranger, president of Central Chapter, a check for \$500.00. The L. A. S. provides this amount to the chapter hosting the Annual Meeting to help fund the meeting. Nancy said that she would like to receive some papers to coordinate with the keynote speaker's subject matter. Rich suggested that she include a re-

quest for this in the call for papers.

Roger Saucier asked when the present president's term ended and when his term began. The next election of officers will be at the 1998 L. A. S. Annual Meeting. Roger will begin his term as President at the end of that meeting. This time table was enacted several years ago so the President might have enough time to accomplish his goals.

Rich requested that the Northwest Chapter give him the financial statement for the 1996 Annual Meeting so that it can be published in the next newsletter.

Again, it was requested that chapters please send the Secretary names and addresses of their officers and L. A. S. representatives.

New Business

The next Executive Committee meeting will be held during the 1997 Annual Meeting in Alexandria, Louisiana.

The meeting was adjourned by President James Fogleman at 11:30 a.m.

After the meeting, the Committee was treated to lunch at the home of the Jim Fogleman's mother. Jim then took the Committee on an enjoyable tour of several local archaeological sites. Thanks to Jim's mother and his wife for the delicious food and to all the Fogleman's for their wonderful hospitality!



RUMINATIONS OF A LITHIC TECHNOLOGIST: CONSIDERATIONS OF THE POVERTY POINT LITHIC RESOURCE STRUCTURE AND TECHNOLOGY

by
Timothy P. Phillips
Winn Ranger District,
Kisatchie National Forest¹

Abstract

As a basic technological resource, the distribution of lithic resources can have a variety of different effects on a settlement system. These effects range from the distribution of artifacts within the assemblages of sites to the distribution of sites across the landscape. This paper discusses the different effects of the Poverty Point lithic resource structure that are observable within it's lithic technology.

Introduction

Webb (1977) identified four different locational settings for Poverty Point sites. These different settings consist of sites that are located on:

- Terraces or old land masses overlooking relict or active rivers.
- 2) Levees of relict river channels at river-lake junctions.
- 3) Gulf Coastal Plain estuaries.
- 4) Old landforms within the Gulf Coastal Plain marshes.

The common characteristic of these settings is their location on or near the contact between two or more different environments (Gibson 1974). Poverty Point sites were situated to exploit different combinations of upland forest, swamp, riverine, lacustrine, and coastal marsh environments. The exploitation of these diverse environments, and their ability to provided a wide range of floral and faunal resources, has been called "primary forest ef-

Opinions and observations expressed herein are those of the author, and do not necessarily reflect those of the USDA Forest Service.

ficiency" (Caldwell 1958). The location of the sites in respect to different environmental settings is considered to be a primary factor in the size and stability of the Poverty Point settlement system (Webb 1977).

While these different locational settings provided a diverse range of floral and faunal resources, another important locational attribute of Poverty Point sites that has a direct bearing on the culture's exchange system has been overlooked. The overlooked locational attribute is related to lithic material resources. Since lithic materials are a basic technological resource, the relationship between the distribution of lithic material resources across an area, plus the sites within that area, is an important one that can be expressed within a settlement system in a variety of different ways. Phillips (n.d.) has identified several different effects that the lithic resource structure of an area has on a specific settlement system. These different effects range from the distribution of sites across the area, to the distribution of artifacts within the assemblages of individual sites.

Webb's (1977) discussion of the different locations of Poverty Point sites indicates that they can be classified, based upon their locational attributes, into two main categories: (1) those of the uplands and (2) those that are located on the lower Gulf Coastal Plain in association with estuaries and marshes. These two categories of Poverty Point sites identify a primary relationship between the location of the sites and the lithic resource structures of the areas where the sites are located. Both of these categories, due to different formational processes, result in the location of Poverty Point sites within areas that contain lithic resource structures that are either nonexistent or provide a meager amount of lithic materials. Thus, both upland and Gulf Coastal Plain Poverty Point sites are located within environmental settings that are classifiable as lithic-poor resource areas (Phillips n.d.).

In respect to lithic resources, upland Poverty Point sites exhibit a consistent locational attribute that appears to have contributed to the development of the culture's exchange system. This attribute is their location in association with streams and rivers (Gibson

1979). Gibson observed that this riverine orientation of the Poverty Point settlement system facilitated the flow of exchange materials into and through the Poverty Point exchange system. While this may well have been the case once the exchange system was up and running, it was a site's location within a lithic-poor area that also served as an initial factor in the development of the Poverty Point exchange network. Settlement systems that are located within riverine settings have to contend with poor to nonexistent lithic resource structures due to alluvial processes burying many of the lithic material deposits that would otherwise have been available to the occupants of the area. Gibson (1994) observed that the Macon Ridge lacks sources of usable lithic materials. Alluvial deposition of the Maçon Ridge by the Mississippi River during the Late Wisconsin buried the deposits of lithic materials that were suitable for the production of chipped stone tools (Saucier 1994). Subsequent human occupation of the Maçon Ridge resulted in settlement within an area that contained a lithicpoor resource structure. The poor condition of the lithic resource structure pre-established one of the conditions necessary for the establishment of the Poverty Point exchange system long before Poverty Point and its exchange network came into existence. Exchange of needed or desired resources is an economically viable alternative method of supplying the needs of a people that inhabit a resourcepoor area (Phillips n.d.). The poor to nonexistent condition of the lithic resource structure of the Maçon Ridge meant that the lithic material needs of the local populations of the area could not be supplied from the local lithic resource structure. This inability of the local area to supply a needed resource made it increasingly necessary, through time, for Poverty Point people to procure lithic materials from external sources to meet their local lithic resource needs.

Poverty Point sites within the lower Gulf Coastal Plain have different locational parameters and different environmental situations than upland Poverty Point sites, but the relationships between the sites and the lithic resource structures of the areas they are located within are the same. Alluvial processes within the lower Gulf Coastal Plain created a variety of different environmental settings that

lack adequate sources of exploitable lithic resources (Saucier 1974). Any gravel deposits present within these settings were deeply buried by thick alluvial soils, thus making them unavailable for human use. Prehistoric inhabitants located within these lower Gulf Coastal Plain environmental settings would, therefore, have to find other means of procuring lithic materials or other types of materials to meet their technological needs. In these environmental settings, the use of alternative materials, such as bone and wood, has an elevated probability (Phillips n.d.). The use of these alternative materials, along with the use of lithic materials imported into the area through the mechanisms of trade or exchange. has an increased probability of occurring within the assemblages of sites located within Coastal Plain settings (Phillips n.d.).

Technological Indications of Poverty Point's Location Within a Lithic-Poor Resource Area

Poverty Point's location within a lithicpoor resource environment is expressed in how the nonlocal lithic materials were utilized. Several researchers have observed that the extralocal materials were primarily used to make common, everyday tools, rather than just status items or religious icons (Gibson and Griffing 1994: Jeter and Jackson 1994). This evidence of the utilitarian use of the nonlocal lithic materials at Poverty Point, at first glance, appears not to make good sense from the perspective of economics. The high level of effort (cost) of importing the materials suggests that their use would be in ways that maximize the economic and social value of the materials. The principle of least cost makes it appear unlikely that the extralocally procured lithic materials would be used directly to produce utilitarian items due to the high transportation costs of the nonlocal materials (Zipf 1949). Lithic materials procured within the Poverty Point exchange network, or alternative materials that have considerably lower procurement costs, are more likely to be utilized, at least initially, for the direct production of utilitarian items long before the extralocal materials would be used for this purpose. The use of extralocal materials for the production of utilitarian items only makes good economic sense if the materials are initially used to produce

tools that increase the efficiency of the utilization of the lithic materials. The increased efficiency of lithic material utilization can be attained by both reducing the amount of lithic material used to produce the tools and by the production of tools that have a variety of differing functional roles within the technology.

Evidence of the increased efficiency of lithic material utilization is present within the Poverty Point lithic technology. Phillips (n.d.) identified the production of microlithic tools as one effect of the location of a settlement system within an area that contains a lithic-poor resource structure. The microlithic component of the Poverty Point lithic technology reflects the efficient utilization of the available lithic materials. Microlithic tools maximize the efficiency of lithic material utilization by producing the highest amount of usable edge per volume of lithic material used. This is the initial evidence of the efficiency of lithic material utilization that is the product of Poverty Point's location within a lithic-poor resource area.

The microlithic component of the Poverty Point lithic technology increases the efficiency of lithic material utilization in another way that is the product of the curation of the available lithic materials (Schiffer 1972). It increases the efficiency of lithic material utilization by reducing the amount of lithic material used to produce the tools needed to perform the necessary functions of the technology. It accomplishes this through the selection and use of the by-products of the production of other types of tools. These by-products of the production of other, larger types of tools are otherwise morphologically unsuitable for the production of other, smaller types of tools. This selection and use of morphologically unsuitable by-products for the production of small flake or microlithic tools is a curative behavior that increases the efficiency of the utilization of the available lithic materials by increasing the amount of lithic material utilized for the production of tools, while, at the same time, reducing the amount of material wasted during the production of the tools (Schiffer 1972).

The large number of crudely worked bifacial implements is another example of the maximization of the efficiency of the utilization

of lithic materials that is expressed within Poverty Point assemblages. These implements have been referred to as "hoes" (Ford and Webb 1956). From an economic perspective, these implements appear to have had an initial transportation function within the Poverty Point exchange system. It has been observed that these implements facilitated the transportation of the nonlocal materials into and through the Poverty Point exchange system (Gibson 1979). From the view of primitive economics, it is a lot easier to transport bifacial implements long distances than it is to transport unmodified cobbles of the same materi-These implements accomplish this increase in the ease of importing lithic materials into the Poverty Point exchange system by reducing the volume of the material that had to be imported into the system.

The implements identified as "hoes" appear to have other secondary functional roles within Poverty Point lithic technology. Besides the use of "hoes" as a means of reducing the weight and, therefore, the cost of transporting the materials into the Poverty Point exchange system, the use of the "hoes" as tools in their own right increases the efficiency of the use of lithic materials (Webb 1982). This increased efficiency of lithic material utilization is the product of increasing the functional roles of the tools produced from the available lithic materials within the Poverty Point lithic technology. This multifunctional use of the hoes increased the efficiency of the utilization of the materials by extending the use-lives of the implements, and by expanding the different functional roles of the the tools produced from the materials (Schiffer 1972). The more functions that a tool can perform per specific volume of lithic material used, and the longer it can be used to perform these functions, the greater the efficiency of the use of the available lithic materials.

The reduction of the amount of lithic material wasted during the production of chipped stone tools, once the materials were brought to Poverty Point, is another aspect of the level of the efficiency of lithic material utilization within the Poverty Point lithic technology. The reduction of the amount of lithic material wasted during the production of the chipped stone tools is the result of the utiliza-

tion of the "hoes" as both tools in their own right and as sources of uniformly shaped flakes that were reduced into various types of flake and microlithic tools (Jackson 1986). The use of the "hoes" as sources of material that could be utilized to produce other flake or microlithic tools further increased the efficiency of lithic material utilization within Poverty Point lithic assemblages by further increasing the functional utility of these implements within the technology. The use of the "hoes" as tools and as sources of a large number of uniform-sized flakes that could be further reduced into various types of flake or microtools that have a variety of different functions within the technology, increases the efficiency of the utilization of the lithic materials. It increases the efficiency of the utilization of the lithic materials by maximizing the functional roles that the materials are used to perform within the technology, and by reducing the amount of lithic material that is wasted during the production of the tools that are needed to carry out the necessary functions of the technology.

One aspect of Poverty Point lithic assemblages that is interesting in respect to its implications for the local Poverty Point exchange network, is the high proportion of firiished tools, particularly projectile points, within the assemblages. The proportion of projectile points within the assemblages are higher than that of reduction residue (debitage and debris), in contrast to what should be expected under normal reduction methods and processes. The high-tool to low-debitage-anddebris proportions within Poverty Point assemblages indicates that the curation and conservation of lithic materials is expressed within the Poverty Point assemblages (Schiffer 1972). This same artifact distributional relationship was identified in the assemblages of sites on the southern Winn Ranger District of the Kisatchie National Forest (Johnson et al. 1986; Phillips 1988). Phillips (n.d.) identified curation and conservation of lithic materials as one of the effects that will be observable within the assemblages of sites that are located within an area that contains a lithic-poor resource structure. In the Poverty Point case, the mechanism of curation and conservation of lithic materials is through the selection of the by-products of the production of the projectile points as the material for the production of various types of flake and microlithic tools. This selection and use of debitage and debris resulting from the reduction of projectile points increases the efficiency of lithic material utilization by producing the highest possible proportion of tools with the least amount of wasted material.

Sites situated within lower Gulf Coastal Plain settings provide additional evidence of their location within lithic-poor environments that is directly observable within their assemblages. This is the utilization of bone as an alternative technological resource for the lithic materials that are in short supply. Bone technologies have been identified within a number of different sites on the lower Gulf Coastal Plain (Byrd 1994; Duhe 1977; Ford and Quimby 1945; Kidder and Barondess 1981; Jennings 1952). The use of bone as an alternative resource for the production of tools increases the efficiency of lithic material utilization within these environmental settings by reducing the use of lithic materials to the production of those types of tools that, due to their specialized functions, have to be produced from the limited supply of lithic materials available.

Another type or evidence indicating the location of lower Gulf Coastal Plain sites within environments that lack adequate sources of lithic materials, is the curation and conservation of the limited lithic resources that are observable within the lithic assemblages of the sites. This is reflected in lithic technologies that contain high portions of small, multifunctional bifaces, flake and microlithic tools, and high-tool to lithic-debris ratios. These different portions of the lithic technology within lower Gulf Coastal Plain sites reflect some of the same technological expressions of site location within an area that lacked local sources of lithic materials (Phillips n.d.).

Implications of the Relationship Between the Poverty Point Lithic Resource Structure and Poverty Point Cultural Development

Poverty Point's location within an area that contained a lithic resource structure that was inadequate to meet the needs of the

people who lived within the area, has important diachronic implications for the development of Poverty Point culture and its exchange network. The culture's location within an area that lacked adequate sources of lithic materials necessary to meet local demands required that some other means of procuring the needed resources had to be attained. Phillips (n.d.) identified the trade and exchange of lithic materials as one potential response for supplying lithic materials to people who inhabit areas that contain lithic resource structures that are inadequate to meet their needs. Thus, Poverty Point's location within areas that lacked adequate sources of lithic materials pre-established a condition of lithic resource deficiency that increased the probability of the development of an exchange network that focussed on supplying the needed lithic materials. This pre-established condition of lithic resource deficiency now also is viewed in respect to the existence of Late Archaic exchange networks within regions in proximity to the later Poverty Point culture area (Jeter and Jackson 1994). The pre-existence of these exchange networks, combined with a lithic resource structure that was inadequate to meet the lithic resource needs of the Poverty Point inhabitants of the Macon Ridge, established conditions favorable for the eventual florescence of Poverty Point culture and the expansion of the existing Late Archaic exchange network into the Poverty Point exchange network: the latter known to have imported lithic materials from such geographically dispersed areas as the Ohio River valley, Arkansas, Michigan, and Missouri.

Summary and Conclusions

Poverty Point's location on the eastern edge of the Maçon Ridge of northeast Louisiana is within an area that lacks sources of lithic materials that are available for human use. This lack of locally available lithic resources is expressed within the Poverty Point lithic technology in several different ways. These reflect the different methods used by the Poverty Point people to maximize the efficiency of the utilization of the limited supply of lithic materials brought to them through the exchange network.

The microlithic component of the

Poverty Point lithic technology is the initial example of that culture's effort to maximize the efficiency of the utilization of lithic materials. The production of microlithic tools increases the efficiency of lithic material utilization in two different ways. First, it produces the largest amount of usable edges in respect to the volume of lithic material employed to produce tools. Second, it reduces the overall amount of lithic material that is wasted (lithic debris) during the production of the Poverty Point tool kit. This reduction in the amount lithic debris is a curative behavior that is the product of the selection and use of by-products resulting from the reduction of other types of tools for the production of microlithic tools (Schiffer 1972).

Bifacial implements that have been referred to as "hoes" have been identified within Poverty Point assemblages (Ford and Webb 1956). These implements probably performed several different functions. They appear to have initially been used to reduce the level of effort required to transport lithic materials into and through the Poverty Point exchange system; they could have been used as tools in their own right, or as sources of flakes suitable for reduction into various types of flake and microlithic tools. The production of multifunctional tools, such as these "hoes," increased the efficiency of the utilization of the available lithic materials. It accomplished this by reducing the number of different types of tools that were needed to perform the necessary functions of the technology. This reduction in the different types of lithic materials produced, therefore, also reduced the amount of lithic material used to produce the tools necessary to perform the required functions of the technology.

References

Byrd, Kathleen M.

1994 Tchefuncte Subsistence Practices at the Morton Shell Mound, Iberia Parish, Louisiana. Louisiana Archaeology 16:1-128.

Caldwell, J. R.

1958 Trend and Tradition in the Prehistory of the Eastern United States.
Scientific Papers Vol. 10, Illinois

State Museum, Springfield, and Memoir No. 88, American Anthropological Association, Menasha, Wisconsin

Duhe, Brian J.

1977 Preliminary Evidence of Seasonal Fishing Activity at Bayou Jasmine. Louisiana Archaeology 3:33-74.

Ford, James A., and George I. Quimby, Jr. 1945 The Tchefuncte Culture, an Early Occupation of the Lower Mississippi Valley. Memoir No. 2. Society for American Archaeology, Menasha, Wisconsin.

Ford, James A., and Clarence H. Webb 1956 Poverty Point, a Late Archaic Site in Louisiana. Anthropological Papers No. 46, Pt. 1. American Museum of Natural History, New York.

Gibson, Jon L.

1974 The Rise and Decline of Poverty Point. Louisiana Archaeology 1:8-36.

1979 Poverty Point Trade in South Central Louisiana: An Illustration from Beau Rivage. Louisiana Archaeology 4:91-116.

1994 Lower Mississippi Valley Exchange at 1100 B.C. In Exchange in the Lower Mississippi Valley and Contiguous Areas in 1100 B.C., edited by Jon L. Gibson, pp. 1-11. Louisiana Archaeology No. 17. Louisiana Archaeological Society, Lafayette.

Gibson, Jon L., and David L. Griffing 1994 Only a Stone's Throw A

Only a Stone's Throw Away: Exchange in the Poverty Point Hinterland. In Exchange in the Lower Mississippi Valley and Contiguous Areas at 1100 B.C., edited by Jon L. Gibson, pp. 207-250. Louisiana Archaeology No. 17. Louisiana Archaeological Society, Lafayette.

Jackson, H. Edwin

1986 Sedentism and Hunter-Gatherer Adaptations in the Lower Mississippi Valley: Subsistence Strategies During the Poverty Point Period. Ph.D. dissertation, University of Michigan. University Microfilms, Ann Arbor.

Jennings, Jesse D.

1952 Prehistory of the Lower Mississippi Valley. In Archeology of Eastern United States, edited by James B. Griffin, pp. 256-271. University of Chicago Press, Chicago.

Jeter, Marvin D., and H. Edwin Jackson

1994 Poverty Point Extraction and Exchange: The Arkansas Lithic Connection. In Exchange in the Lower Mississippi Valley and Contiguous Areas at 1100 B.C., edited by Jon L. Gibson, pp. 133-206. Louisiana Archaeology No. 17. Louisiana Archaeological Society, Lafayette.

Johnson, David W., James R. Morehead,
Timothy P. Phillips, and James P. Whelan
1986 The Winnfield Tornado: Cultural
Resources Survey and Predictive
Modelling in the Kisatchie National
Forest, Winn Parish, Louisiana.
Kisatchie National Forest, USDA
Forest Service, Pineville,
Louisiana.

Kidder, Tristram R., and David Barondess
1986 A Proposed Bone Tool Classification: A Case Study from Southeast Louisiana. Louisiana Archaeology 8:89-108.

Phillips, Timothy P.

1988 A Study of the Spatial Distribution of Upland Aboriginal Sites in East-Central Louisiana. Paper presented at the 45th Southeastern Archeological Conference, New Orleans.

n.d. To Have and Have Not: The Affects [sic] of the Distribution of Lithic Resources on Settlement Systems.

Ms. on file, Kisatchie National Forest Supervisor's Office, USDA Forest Service, Pineville, Louisiana.

Saucier, Roger T.

1974 Quaternary Geology of the Lower Mississippi Valley. Research Series No. 6. Arkansas Archeological Survey, Fayetteville.

The Paleoenvironmental Setting of Northeast Louisiana During the Paleo-Indian Period. Louisiana Archaeology 16:129-146.

Schiffer, Michael B.

1972 Archaeological Context and Systemic Context. *American Antiquity* 37:156-165.

Webb, Clarence H.

1977 The Poverty Point Culture. Geoscience and Man Vol. 17. School of Geoscience, Louisiana State University, Baton Rouge.

1982 The Poverty Point Culture. 2nd rev. ed. Geoscience and Man Vol. 17. School of Geoscience, Louisiana State University, Baton Rouge.

Zipf, George Kingsley

1949 Human Behavior and the Principle of Least Effort: An Introduction to Human Behavior. Addison-Wesley Press, Cambridge.

UPCOMING MEETINGS

Mississippi Archaeological Association Annual Meeting

The 1997 annual meeting of the Mississippi Archaeological Association will be held March 21-22 in Biloxi, Mississippi. Friday evening, March 21, will feature a reception at the Maritime and Seafood Industry Museum. The main meeting will take place on Saturday, March 22, at the J. L. Scott Research Center, and will feature one of the best sets of papers

yet presented at an MAA meeting.

The Sleep Inn in nearby Ocean Springs will serve as the hotel for the meeting. Room rates are \$53.10 for Friday night and \$59.10 for Saturday night if people wish to stay over after the meeting. Registration for the meeting will be \$2.00 per person, with an additional \$1.00 charge for entry to the J. L. Scott Research Center. The extra \$1.00 entry fee will cover the cost of viewing the research facility.

For more information, contact either Edmond Boudreaux, Jr., at (601) 865-6008 (pager) or (601) 392-3137 (home), or Sam Brookes at (601) 965-5518.

PRICE CORRECTION

The Publications Editor of the Texas Archeological Society apologizes for providing inaccurate information on the cost of the 1995 Bulletin of the Texas Archeological Society, as advertised in the previous issue of the L. A. S. Newsletter. The correct cost of this bulletin (Vol. 66) is \$35.00 per copy, plus \$2.00 postage for the first copy and \$.50 for each additional copy. The Publication Editor regrets any inconvenience this may cause.

Tim Perttula TAS Publications Editor

PASSPORT IN TIME (PIT) PROJECTS

Passport in Time (PIT) provides opportunities for individuals and families to work with professional archaeologists and historians on historic preservation projects across the United States. Four of these projects will take place relatively near Louisiana, in Mississippi and Texas. L. A. S. members may wish to take part in one or more of these projects. There is no registration fee or cost for participating. However, prospective participants will be required to fill out the application form at the end of this newsletter. Each of the four nearby projects is described briefly below.

DeSoto National Forest Projects, Mississippi

Camp Danzler Excavation—May 5-9 or May 12-16, 1997. Must commit to one full session.

At the turn of the century, nearly 60 percent of all Mississippians worked in the timber business, either directly or indirectly. Scattered along the Illinois Central Gulf Railroad were dozens of logging mill towns. When the large stands of virgin timber disappeared along the railroad, narrow-guage railroads, called dummylines or tramlines, extended out into the woods to reach more timber. Now buried under nearly a century of debris and soil, these towns, railroads, and tramlines are archaeological sites holding clues to the past and possible advice for the future. Camp Danzler was one of these early logging mill towns. Currently, Camp Danzler is at the trailhead of the Tuxachanie Hiking Trail, which incorporates more than a 4-mile section of one of the dummylines. PIT volunteers will help archaeologists excavate test units around the old mill town. Volunteers will work side by side with Dr. Amy Young, historical archaeologist at the University of Southern Mississippi. Preliminary survey and excavation have revealed the possible locations of the mill, the turpentine-processing station, and the town where the loggers lived.

Number of openings: 5-10

Special skills: None

Age requirements: Must be at least 18

years old.

Facilities: Big Biloxi Campground (water, electricity), approximately 6 miles to the south; primitive camping along the Tuxachanie Hiking Trail; motels and restaurants in Wiggins, Gulfport/Biloxi, and Hattiesburg.

Nearest towns: Gulfport/Biloxi, 17 miles; Hattiesburg, 40 miles; McHenry, 2 miles; Wiggins, 12 miles.

Applications due: February 15, 1997

Harrison Experimental Forest Restoration-March 24-28, 1997. Must commit to at least 3 consecutive days.

"Roosevelt's Army," the Civilian Conservation Corps (CCC), built many administrative compounds for the Forest Service in the 1930s, including the Harrison Experimental Forest Headquarters near Saucier. Mississippi. Like many of the Forest Service's CCCera compounds, the Harrison Experimental Forest Headquarters is eligible to be listed in the National Register of Historic Places. And, like many historic sites, it is in need of restoration and repair. In addition, old records stored at the facility, including maps, photographs, and research data, are in dire need of care and better curation facilities. PIT volunteers will work with Richard Cawthon, architectural historian from the State Historic Preservation Office, and Dr. Amy Young, historical archaeologist at the University of Southern Mississippi, to document and begin to restore the CCC-era buildings and prepare the valuable old records for permanent archival storage.

Number of openings: 5-10

Special skills: None

Age requirements: Must be at least 18

years old.

Facilities: Big Biloxi Campground (water, electricity), approximately 7 miles away; primitive camping in DeSoto Ranger District, surrounding the compound; motels and restaurants in Wiggins, Gulfport/Biloxi, and Hattiesburg.

Nearest towns: Gulfport/Biloxi, 15 miles; Hattiesburg, 35 miles; Saucier, 5 miles; Wiggins, 10 miles.

Applications due: December 15, 1996

Piave Logging Town Historical Project-May 5-9 and May 12-16, 1997. Must commit to 5 days.

Volunteers will work with Forest Service archaeologists researching the history of Piave, a self-sufficient logging town that operated in the forest at the turn of the century. Research will include examining historicalperiod documents and photographs, and recording interviews with the descendants of Piave employees for the publication of a small booklet for public distribution. This project also will include the creation of a display on the history of Mississippi logging for a portable "magic screen" to be used at county fairs and local wood expositions. Volunteers will also spend a day visiting the PIT project excavations at the logging town of Danzler in the DeSoto Ranger District.

Number of openings: 5

Special skills: Patience; good people skills; ability to communicate well with elderly people; basic knowledge of setup and operation of video and audio equipment; good writing skills.

Age requirements: Must be at least 12 years old; under 18 must be accompanied by a responsible adult.

Facilities: Turkey Fork Recreation Area has 20 RV slots with water and electric hookups: hotels in Laurel, Waynesboro, and Hattiesburg.

Nearest towns: Forest Service Ranger District office located in Laurel; if base of operations moves to the work center in Wayne County, Laurel is 30 miles away, Richton is 20 miles away, and Hattiesburg is 40 miles away.

Applications due: February 15, 1997

Davy Crockett National Forest Project, Texas

Archaeological Excavations at the Hargrove Lake Site, a Caddoan Camp-April 1-8, 1997. Must commit to 5 days.

The Hargrove Lake site is located on a point-bar deposit within the Neches River floodplain on the northern boundary of the Davy Crockett National Forest. It lies within the bottomland hardwoods of the predominantly loblolly pine forest of eastern Texas. The site was a temporary camp for Caddoan hunters and gatherers from villages associated with the area now encompassed by Caddoan Mounds State Park. This site is in an area where there have been no previous archaeological excavations, and it may tell us a great deal about the lifeways of Caddoan peoples. The project will also provide information on the geomorphology of the Neches River. Hardwood trees on the bluffs overlooking the site may yield information on long-term climatic trends and fire history.

Volunteers will be treated to field trips to the Caddoan Mounds State Park (location of the famous George C. Davis site), where the Forest Service is aiding Texas Parks and Wildlife in the reconstruction of a Caddoan house. Lectures and field collections of treerings and tree pollen also are planned. A full-time crew will operate the field laboratory and be responsible for cleaning, labeling, cataloguing, sorting, and preliminary analysis of the artifacts recovered from the excavations.

Number of openings: 30

Special skills: None required; experience in archaeological fieldwork, survey, photography, and laboratory methods desirable.

Age requirements: Must be at least 14 years old; under 18 must be accompanied by a responsible adult.

Facilities: Primitive camping will be permitted at the site; however, no facilities are available, and campfires and vehicles are not permitted. Ample camping area is provided in the adjacent Mission Tejas State Park, operated by the Texas Parks and Wildlife Department, cosponsors of the project, and Mission Tejas has developed tent sites and locations for recreational vehicles up to 24 feet in length. Each site is equipped with a picnic table, level pad, and a campfire ring or cooking grill. The nearby town of Alto has a full range of services; the nearby Big Slough Wilderness area provides primitive hiking and camping opportunities (within a 5- to 10minute drive); and full-service hotels and motels are available in Crockett and Nacogdoches.

Nearest towns: Alto, 10 miles; Crockett, 25 miles; Nacogdoches, 37 miles.

Applications due: February 15, 1997



Application for Winter 1996–Spring 1997 PIT Opportunities

If you are applying with family members or with a friend, please list all names of those who will be volunteering. If they are at the same address, you may list them on the same application. If they are at different addresses, please fill out individual forms, indicating all coapplicants' names so that we can consider your applications together. This form may be reproduced!

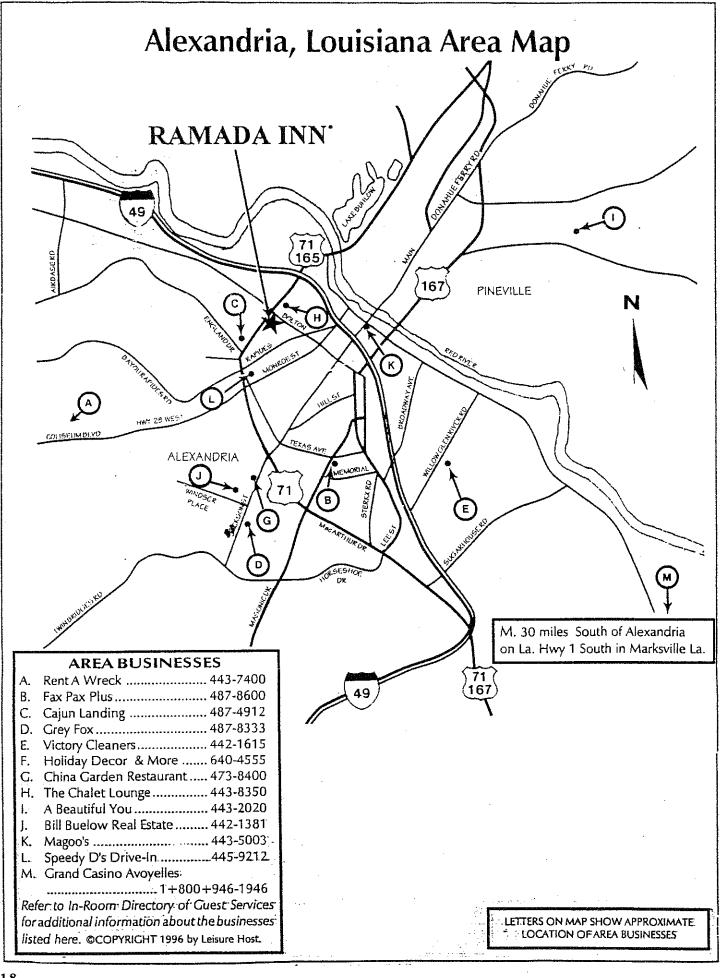
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Return to: Passport in Time Clearinghouse, P.O. 31 (520) 722-2716, (800) 281-9176 voice,		15

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wsletter of the Louisiana Archaeological Society is published three times a year for the society by Coastal Environ-, Inc., Baton Rouge. Subscription is by membership in the Louisiana Archaeological Society. Annual membership are \$15.00 for individuals, libraries, and institutions, \$2.00 for associates (relatives of individual members), and .00 for students. Life membership dues are \$150.00 for individuals. Sustaining membership dues for individuals or stitutions are \$300.00. In addition to the newsletter, members receive one issue per year of the bulletin Louisiana Archaeology. Membership requests, subscription dues, changes of address, and back issue orders should be directed to the Treasurer. Unless otherwise indicated, opinions stated herein are those of the Newsletter Editor and do not necessarily reflect society policy.

Information for Contributors

Send all notes, news, and other communications to: Christopher Hays, Museum of Natural Science, Louisiana State University, Baton Rouge, Louisiana 70803. If possible, articles should be submitted on computer disk, preferably in Microsoft Word 4.0 or Word Perfect 5.1 or 6.0, although most other word processing programs can be translated. Style should conform to the guidelines published in American Antiquity, Vol. 57, No. 4 (Oct. 1992).

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