

NEWSLETTER
OF THE
HOUSTON ARCHEOLOGICAL SOCIETY
NUMBER 12
JANUARY, 1965

OFFICERS 1964 - 1965

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STATUS OF SITE SURVEYS IN THE LIVINGSTON RESERVOIR AREA

A. R. Duke

Survey teams are back in the field again after a lull in activity caused by the deer hunting season. There will be some reorganization of the teams to accomodate new members and to replace those who will not be able to participate because of the press of other affairs.

The field work will be coordinated by William Fullen, who succeeds Damon Dunn, coordinator for the 1964 season. Our thanks to Damon for a fine job.

Members who wish to participate on survey teams should contact Mr. Fullen (5610 Meadowcreek Lane, Houston, 17 - HU 6-9104). Site reports should be sent to our new coordinator. Also, reports on paleontological features discovered during the surveys should be relayed to Mr. Fullen, who in turn will advise Mr. Bob Slaughter, paleontologist at Southern Methodist University, so the site can be checked immediately.

Dr. Dee Ann Story, who is supervising the archeological work in the Livingston area for the Texas Archeological Survey Project will be our speaker at the February meeting and will provide us with additional information on the timing of the excavation program and other phases of the project. Meanwhile, search for those sites !!!

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We would like to suggest that all Society members make it a point to read the article "Texas Archeology Today" by Dr. E. Mott Davis. This excellent report on the current efforts to salvage Texas prehistory should be required reading for all archeologists. It was printed in the December, 1964 issue of The Mustang - published by the Texas Memorial Museum, Austin, Texas. Copies may be obtained by writing to the Museum.

A.R.D.

RECONNAISSANCE IN THE LOWER TRINITY RIVER ALLUVIAL PLAIN

L. E. Aten

In the course of three brief trips to the lower reaches of the Trinity River (the first with the Hartman family of Baytown), several shell midden sites were examined. These demonstrated, in the writer's estimation, significant potential for further work.

One site, tentatively designated Mayes March #1, was visited on the first trip. The site, a long, narrow, curving shell ridge some 900 feet long, at that time had been recently destroyed to obtain shell for road material. This destruction, however, exposed a large number of fire hearths, a few of which had large concentrations of pottery and animal bone near them. At this time a fairly large surface collection was made, keeping material found in concentrations segregated, in the hope of facilitating vessel reconstruction. A

later visit was made to this site with the intention of making a plan map and locating thereon, the positions of the fire hearths. Unfortunately, by this time the site interior had filled with water, so it was only possible to make a map of the outline of the site.

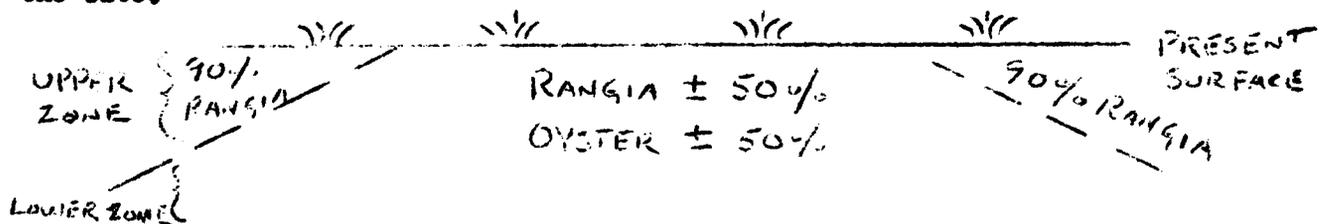
The artifact assemblage was not especially spectacular but interesting nonetheless. Dominant, of course, was the pottery. At least five vessels of Goose Creek Plain are represented. One of these is recognizable as a narrow, elongate jar. At least three vessels of Goose Creek Incised are also represented. The design elements of the incised pottery are straight lines and triangular punctations. One red-slipped sherd on Goose Creek paste was also found.

Non-ceramic artifacts include perforated Rangia shells, a small scraper made of petrified wood, an incised bone awl (found by Danny Hartman), and several pieces of very fine grained, calcareous sandstone. One of these pieces of sandstone may have been a weight of some sort, judging from its shape and markings.

The animal refuse includes deer and turtle bone, and a large quantity of fish bones. The dominant shellfish present is the Rangia clam, but an occasional oyster is found.

Another of the larger sites visited (tentatively designated Mayes Marsh #2) has also been destroyed by shell operations. It hasn't been accurately mapped yet, but generally it is also a long, narrow shell ridge, perhaps 600 feet long.

This site was especially interesting because of its structure. The central and lower zone of the site is composed of Rangia clam shells and oyster shells in roughly equal proportion. Above this zone, the proportion abruptly changes to roughly 90% Rangia with the balance composed of oyster. Below is a generalized sketch of what the situation appears to be, without actually digging the site.



No pottery was found where the lower zone appears at the surface, but four or five sherds were found at the surface over the upper zone. This is not by any means definitive, but it is an interesting suggestion of an ecologic change, or a hiatus in the occupation of the site, or perhaps both.

The third large site visited was also partially destroyed by shell operations. This site has the appearances of a shell field of some considerable extent, but its exact limits have not been sought. This site also produced a large quantity of Goose Creek pottery in both plain and incised flavors. This site is the

only one to date to produce a projectile point (Gary). Also found here (again by Danny Hartman), was a Busycon shell hammer.

Several other smaller sites which are generally devoid of artifacts at the surface, have been given a cursory examination. Some of these had been completely buried by alluvial deposits of the river and have been exposed by subsequent erosion and/or road construction.

Undoubtedly, future work will locate many more sites, but those already found present some problems worthy of attention. For instance, it seems clear that the first two sites discussed were originally founded upon the banks of now abandoned distributary streams of the Trinity River. Perhaps all the sites in the area studied are of this nature. Archaeological work here could provide invaluable clues, should someone be interested in the development of the delta of the Trinity River. This, in turn, would provide archaeology with an idea of the appearance of the land (the geomorphology) at the time the Indians were living at these sites.

Also of interest is the apparent change in frequency of certain types of shellfish as seen at Mayes Marsh #2. In addition to the significance of this change for the subsistence of the Indians, if this change can be found in other sites in this locality, it could prove to be a valuable time marker. As such it could aid in the more precise determination of the local chronology and the relative position therein of sites to be excavated in the future.

Last, and by no means whatsoever, least, the relative abundance of pottery in these sites would seem to make them ideal for a detailed analysis of the Goose Creek pottery type. As most workers in Galveston Bay archaeology are aware, the term Goose Creek pottery covers a multitude of types. Thus, it seems to me, Wheat's Addicks study notwithstanding, that a detailed analysis of a fairly large sample of pottery with good stratigraphic control (preferably three inch levels -- six inch levels appear to be too insensitive) is in order.

BERRY GULLY SITE - HARRIS COUNTY, TEXAS

W. L. Fullen

On October 11, 1964 Frank Brezik and the writer made a site survey of Berry Gully which is a stream located on the southeast side of Houston, Texas. The tree lined banks of this stream, from South Houston to where it empties into Sim's Bayou, had recently been cleared and graded by the Corps of Engineers.

One habitation site was located on the northwest bank of Berry Gully about 100 yards north of Allendale Road. This site is a flat topped mound that is six feet higher than the surrounding ground and is located on a bend in the stream.

The habitation level on the edge of this site was exposed by the grading of the bank of the stream. A number of artifacts were recovered by surface collecting on this graded strip. Most of the material was found in association with a dark brown layer of midden soil several feet thick. Test pits on top of the mound later revealed an 18 inch to 24 inch layer of dark soil with sterile clay beneath it. Flint chips were usually encountered from 9 inches to 14 inches below the surface.

The following is a list of material collected from this site:

- 5 projectile points
- 2 flint knives
- 2 flint scrapers
- 276 potsherds
- 100 flint chips
- 34 bone fragments

Unfortunately permission to continue work on this site by the Houston Archeological Society has been refused by the landowners.

HOUSTON ARCHEOLOGICAL SOCIETY MEMBERSHIP
Additional Members Since Newsletter No. 11 (June, 1964)

Mrs. Nile E. Ball	-	3803 Drake, Houston	MO 7-2645
Mrs. Judie Breeding	-	4625 Oakdale Drive, Bellaire	MO 8-2890
Mr. Jon E. Kalb	-	5580 Lynbrook, Houston	SU 2-6312
Admiral John Ranneft	-	5611 Jackson, Houston	JA 2-3239
Mrs. John Ranneft	-	" " "	" "
Mr. Jeff Storey	-	206 West Avenue, Pasadena	GR 3-3086
Mr. G.H. Watkins	-	6147 Wortham Way, Houston	MI 9-2673

The Society has 99 members as of January, 1965

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FINANCIAL STATEMENT

CALENDAR YEAR ENDING DECEMBER 31, 1964

ASSETS:

Cash (First State Bank of Bellaire	\$ 366.56
Library (In custody of Society Librarian)	48.50

LIABILITIES:

None

K. Elaine Burleigh
Secretary-Treasurer

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Additions to the HAS Library since July, 1964

Bulletin of the Texas Archaeological Society, Vol. 35, 1964

Texas Archaeological Society Newsletter, 1964, #3 and 4

Oklahoma Anthropological Society Newsletter
 Vol. 11, # 3, 4, 7, 8, 9 1963
 Vol. 12, # 1, 2, 3, 5, 6, 7 1964

E.H. Sellards, "Fossil Bison and Associated Artifacts from Milnesand, New Mexico" reprinted from American Antiquity, Vol. 20, #4, Part 1 April 1955

E.H. Sellards, "Some Early Stone Artifact Developments in North America" reprinted from Southwestern Journal of Anthropology, Vol. 16, #2, Summer 1960

E.H. Sellards, "Early Man in America: Index to Localities, and Selected Bibliography" reprinted from Bulletin of the Geological Society of America, Vol. 51, pp 373-432, 1940

Shirley Thompson
Librarian

CONSTITUTION OF THE HOUSTON ARCHEOLOGICAL SOCIETY

I. PURPOSE OF ORGANIZATION

The purpose of the Houston Archeological Society shall be

- A. To foster an active interest in the discovery and salvage of archeological sites and in recording and preserving archeological remains and data in harmony with scientific procedures
- B. To bring together persons with similar interests in the subject of archeology, thereby creating an atmosphere conducive to the exchange of information and ideas.

In the study of archeology, in the collection of materials and data, and in the publication of archeological information, this Society will endeavor, in every way practicable, to sponsor projects and promote investigations intended to inculcate a wider public understanding and appreciation of archeology and the related fields of science.

Activities of the Society shall be limited exclusively to the pursuit of these scientific and educational functions.

II. STRUCTURE OF ORGANIZATION

- A. The Society will be guided by a board of five Directors consisting of a Chairman, Secretary-Treasurer, and three other members.
- B. The Directors will be elected by popular vote annually and will serve for one year. Elections will be held at the first meeting in September. In the event that any of the Directors cannot serve after elections, he (or they) will be replaced by election if unexpired term of office is more than four months. If unexpired term of office is less than four months, the Board will appoint a Society member to serve the remaining term of office.
- C. The Directors will be empowered to handle all matters concerning policy and the Chairman will handle emergency decisions and matters of a routine nature.
- D. The Board of Directors will establish committees at such times that committees are deemed necessary.
- E. Dues will be payable on or before June 1. Dues for new members joining the Society will be based on the number of months remaining in our fiscal year which ends on June 1. These dues will be payable at a rate equivalent to 50¢ per month for the remaining months in the year.

Membership structure of the Society will be as follows:

Junior Membership (12-14)	Annual Dues	\$1.00
Student "	" "	1.00
Active "	" "	6.00
Institutional "	" "	1.00
Family (after initial \$6.00 Membership	1.00 for	
	each member of family	
Sustaining "		10.00
Contributing "		25.00

- F. The Chairman shall not authorize an expenditure in excess of \$20.00 without approval of the Board.
- G. In the event the Houston Archeological Society passes out of existence, any funds in the treasury will be contribute to the Publications Fund of the Texas Archeological Society - or in the event the Texas Archeological Society is unable or unwilling to accept its assets, they will be distributed upon dissolution for exclusively educational purposes specified in Section 501 (f)(3) of the Internal Revenue Code of 1954.

III. MEMBERSHIP

Membership application is extended to all persons who have an interest in the pre-history and history of man and who are in sympathy with the purposes and objectives of this society.

Each applicant must be sponsored by two members of the Society, and, optionally, by a third person, the latter preferably a person of reasonable prominence in civic or professional life in the applicant's community.

Recognizing that certain applicants will be unknown to the Society membership, it will be the duty of the Chairman to appoint two members to the sponsorship of each applicant.

The two member sponsors will be permitted a maximum period of one month to acquaint themselves with the applicant and to investigate his background insofar as this is possible. The sponsoring members will present a verbal report of findings to the Board Members who will decide upon the acceptability of the candidate. A majority approval of the Board will constitute membership.

IV. PLEDGE

All persons subject to becoming members, including charter members, shall be obliged to sign the following statement:

"I, _____, have read the Charter of this Society and understand the purposes and objectives of this organization. I pledge that I will not intentionally engage in any pursuit, which will lead to the destruction of Archeological sites, materials, and records, for purposes related to relic hunting or the commercial exploitation of Archeological artifacts."

V. AMENDMENT TO CONSTITUTION

Amendment to Constitution shall be made by a majority vote of members at any regular meeting, provided the proposed amendment shall have been filed with the Secretary-Treasurer and read to the membership no less than one month prior to the regular meeting at which the vote is called.

January 1965

THIN SECTIONING POTSDHERDS

Purpose: To give a better viewing surface in reflected light and to make a slice thin enough to be viewed in transmitted light. This allows better determination of details of construction and accurate determination of the constituent particles.

Final result desired: A slice, or section, of the sherd ground thin enough to study the constituents under a microscope. This thin section must be covered and protected at the top and bottom with well bonded glass slides and cover slips.

Procedure: Start with a sherd having a straight edge, or cut the sherd with a hack saw or coping saw. Grind this surface flat and smooth, using 400 grit carborundum and thin oil on a glass plate, taking care not to round the edges and corners. Oil is used as a lubricant since water will soften the clay and allow the sherd to crumble. Carefully remove all the 400 grit from the sherd with chlorothane or some other agent which does not contain water. Wash hands thoroughly to get rid of the 400 grit there. On a clean sheet of glass do a final grinding with 1000 grit or finer corborundum and oil. Clean sherd as before and heat to drive off all the oil.

Cement this flat, smooth surface to a glass slide by the following steps: Clean a 1 x 3 inch glass slide with methyl or denatured alcohol. Heat the surface of the sherd. Mix epoxy 220, or some other epoxy, on the glass slide as per instructions on the tubes with a toothpick. Hold sherd with the warm flat surface up and apply a little epoxy with the toothpick. The heat will make the epoxy more liquid and it will fill the pits in the surface. Now place the sherd face down on the epoxy on the slide and press down and move around to expel all bubbles. Leaving the sherd upright on the slide, cure the epoxy as directed on the container (let cure at least 4 hours).

When the epoxy has cured the excess sherd may be cut off with a coping saw, or hack saw, or better still a diamond saw if you have access to one. Again, working with the 400 grit and oil on glass, grind the remaining sherd down to where it is quite thin and somewhat transparent. Only practice will tell you exactly when to stop. Clean the 400 grit off the slide and hands as above, and do fine grinding with 1000 grit as above. Again, the stopping point can be determined only by practice, since each sherd will have different features of importance that you are cutting for specifically. In all grinding, examine the slide often, and take great care not to grind off the edge of the sherd faster than the middle.

All excess grit should now be wiped off the slide with a kleenex or paper towel, a little more oil poured on the slide to pick up the rest of the grit, and all that again wiped off. The oil and any remaining grit can be removed with acetone, chlorothane or type cleaner, taking care not to get too much of this material on the epoxy since it will dissolve the epoxy and could separate your thin section from the glass slide. When the oil has been removed and the slide allowed to dry thoroughly you are now ready to put on the cover slip. These thin cover slips should be cleaned to remove any surface stain and oil with the use of a little alcohol, and set aside to dry on a clean sheet of paper. Mix a small amount of castolite in a small paper ketchup cup, or some other similar disposable small container, stirring with a clean glass stirring rod. 2 to 4 drops of the mixed castolite are placed on the thin section, the cover slip layed on and then gently pressed down to squeeze out the excess castolite and to remove any bubbles. This slide is then set off to the side to cure. In 1 1/2 to 2 hours the castolite will be hard enough that you can take a razor blade and clean any excess off the surface of the cover slip. The finished covered thin section can then be rinsed in water to remove any flakes of the castolite, and the thin section is then ready to be examined.

For permanency the castolite should be cured, after cleaning, for 6-8 more hours to fully complete the hardening process.

PRODUCTS AND SOURCES OF SUPPLY

Carborundum grits: Lathrop's Lapidary, 119 No. 6th St., Bellaire
(has 400 grit on hand and can order finer grits)
American Optical, 603 McGowen, Houston
(Centriforce M 302 1/2 is 1000 grit)

Oil: We use Humble's Mentor 28, but any very thin oil will do.

Glass slides: Thick: Matheson Scientific, 6622 Supply Row, Houston
Gold Seal Microslides No. A-1454, thickness
1.3-1.6 mm.
Thin: Curtin & Co., 4220 Jefferson Ave., Houston
Microslide #14340A - 3 x 1 inch
or Fisher Scientific, 4102 Greenbriar, Houston
Microslide 12-551 or 12-550

Cover slips: Curtin & Co., 4220 Jefferson Ave., Houston
Micro cover glasses #14332D - 22 x 40 mm.
or Fisher Scientific Co., 4102 Greenbriar, Houston
Microcover glasses 12-530, 40 x 22 mm.

Epoxy 220: Lathrop's Lapidary, 119 No. 6th St., Bellaire
Probably many other sources, but Lathrop's epoxy
is always fresh.

Castolite: Castolite Co., Woodstock, Illinois.

Chlorothane: Dixie Chemical Co., 3635 W. Dallas, Houston.

R. P. Zingula

4-14-67