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**EXCAVATIONS AT THE
JAMISON SITE (41 LB 2),
LIBERTY CO., TEXAS**

by

Lawrence E. Aten

Report Number 1

Houston Archeological Society

Houston, Texas

October, 1967

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ABSTRACT

The Jamison site (41 LB 2), an earth midden located near Dayton, Texas, was excavated from 1959 to 1961 by members of the Houston Archeological Society. Approximately 1,600 artifacts were recovered from thirteen five-foot squares. Of these, nearly 1,400 were potsherds, 135 were projectile points, and the remaining 100 were other chipped stone artifacts.

It was possible to group the material into a series of four assemblages: the first (and earliest) is characterized by relatively more expanding stem dart points than are found in subsequent assemblages, a preference for the use of chert over sili-cified fossil wood, and is preceramic; the second is similar to the first assemblage but has slightly different proportions of dart point stem forms and preferences of stone material, and is separated from the first assemblage by artifactually sterile levels; the third is characterized by plain and red-filmed sandy paste ceramics, by relatively more contracting stem dart points than were encountered in previous assemblages, and by more or less equal proportions of expanding, straight, and contracting stem arrow points; the fourth (and youngest) is characterized by plain, incised, and red-filmed sandy paste ceramics, plain and incised clay-tempered ceramics, very few contracting stem dart points, and relatively more contracting stem arrow points than were encountered in the previous assemblage.

Due to the paucity of comparative information, specific conclusions on the relation of this site to others in the Galveston Bay area are not feasible; however, in concluding this report, a number of questions and suggestions are posed.

CONTENTS

	<u>Page</u>
Abstract	ii
Introduction	1
Location and natural setting	2
Ethnohistorical background	2
Archaeological background	3
Site description	4
Method of Excavation	4
Physical stratigraphy	5
Specimen descriptions	8
Food remains	42
Cultural analysis	42
Summary and conclusions	47
References cited	51
 Tables:	
1. Distribution of pottery rim and base forms and lip notching	54
2. Provenience of all excavated material by excavation unit	55
3. Provenience of artifacts by stratigraphic analysis unit	68
4. R(report)-numbers and corresponding proveniences	70
 Figures:	
1. Physiography of the Jamison site vicinity. following page	2
2. Topography and plan of excavations at the Jamison site. following page	4

Figures: (continued)

3. Selected pottery rim and base profiles.
following page 15
4. Analysis unit correlations at the Jamison site.
following page 42
5. a) Relative popularity of pottery types by
analysis unit.
b) Relative popularity of design styles on
Goose Creek Incised in analysis unit III.
following page 45
6. a) Relative popularity of stem forms of arrow
and dart points by analysis unit.
b) Relative popularity of stone materials by
analysis unit. following page 46

Plates:

- 1 - 6 Artifact illustrations. following page 71

INTRODUCTION

In early 1959, the Houston Archeological Society took steps to sponsor the excavation of an earth midden in the vicinity of Harris County, and to analyze the artifacts recovered. In May of that year, W. R. Atwood of Baytown suggested a site situated on the Jamison Ranch, located some three and one-half miles northeast of Dayton, Texas. Projectile points, pottery, and the fragmentary remains of a human skeleton were known from the site and from an adjacent pit which had been dug in an attempt to recover a cache of gold reputed to have been secreted in the area (Jamison, 1959).

J. R. Jamison, son of the landowner, W. T. Jamison, readily gave permission to investigate the site. The results of a small test pit indicated that there was an accumulation of midden debris and it was decided to begin excavations as soon as possible.

Excavation continued from Spring, 1959 through the early summer of 1961. In 1960, a preliminary site report was issued (Houston Archeological Society, 1960) and presented at the annual meeting of the Texas Archeological Society. The material was housed for a time at the Shell Development Company in Houston, and later at Rice University. From time to time, laboratory sessions were held at which artifacts were washed, labeled, photographed, and tabulated with respect to broad functional categories.

In February, 1965, the present writer undertook the task of analysis of the site materials and compilation of this final report, and assumes complete responsibility for all opinions and conclusions contained herein.

I would like to acknowledge the advice and assistance of the following persons during various phases of the project: J. Richard Ambler (Texas Archeological Salvage Project); C. N. Bollich; Alan R. Duke; Robert Hukill (Esso Production Research Center, Houston); Donald R. Lewis (Shell Development Company, Houston); Anna O. Shepard (Ceramic Technology Laboratory, Carnegie Institution of Washington); Bob H. Slaughter (Shuler Museum of Paleontology, Southern Methodist University); Dee Ann Story (Texas Archeological Research Laboratory); R. B. Worthington; Richard P. Zingula (Humble Oil and Refining Company, Houston); and, on behalf of the Houston Archeological Society, express once again our appreciation to the Jamison family for their cooperation.

LOCATION AND NATURAL SETTING

The Jamison site (41 LB 2) is located on the west side of the Trinity River alluvial valley, approximately 3.5 miles northeast of Dayton, Texas and 1.4 miles due west of the Trinity River, at 30° 04' 40" North latitude and 94° 50' 46" West longitude (figures 1, 2). Bowie Creek, an intermittent tributary of French Bayou, flows adjacent to the site through an area known as Bowie Creek Swamp. (Swamp)

The gross physiography of the area has remained more or less unchanged over the last three thousand years or so. Gently rolling uplands and flat floodplain bottomlands presented no natural barriers to the prehistoric inhabitants of the area. Terrace correlations (Aten, 1960) suggest that the terrace remnant upon which the Jamison site is located is the younger Deweyville surface of latest Pleistocene age.

Today, the site vicinity is located within the Austro-riparian Biotic province of the Southeastern United States (Blair, 1950: 98), one characterized by pine and hardwood forests on the uplands, swamps and marshes along the stream valleys, and an abundant and varied fauna. Situated literally halfway between the uplands and the modern floodplain, occupants of the Jamison site could always have taken advantage of both an uplands forest and an alluvial valley biota of some sort (Fig. 1). Indeed, the meager faunal remains excavated from the Jamison site indicate that the inhabitants did in fact hunt animal life on both the floodplain and in the forests.

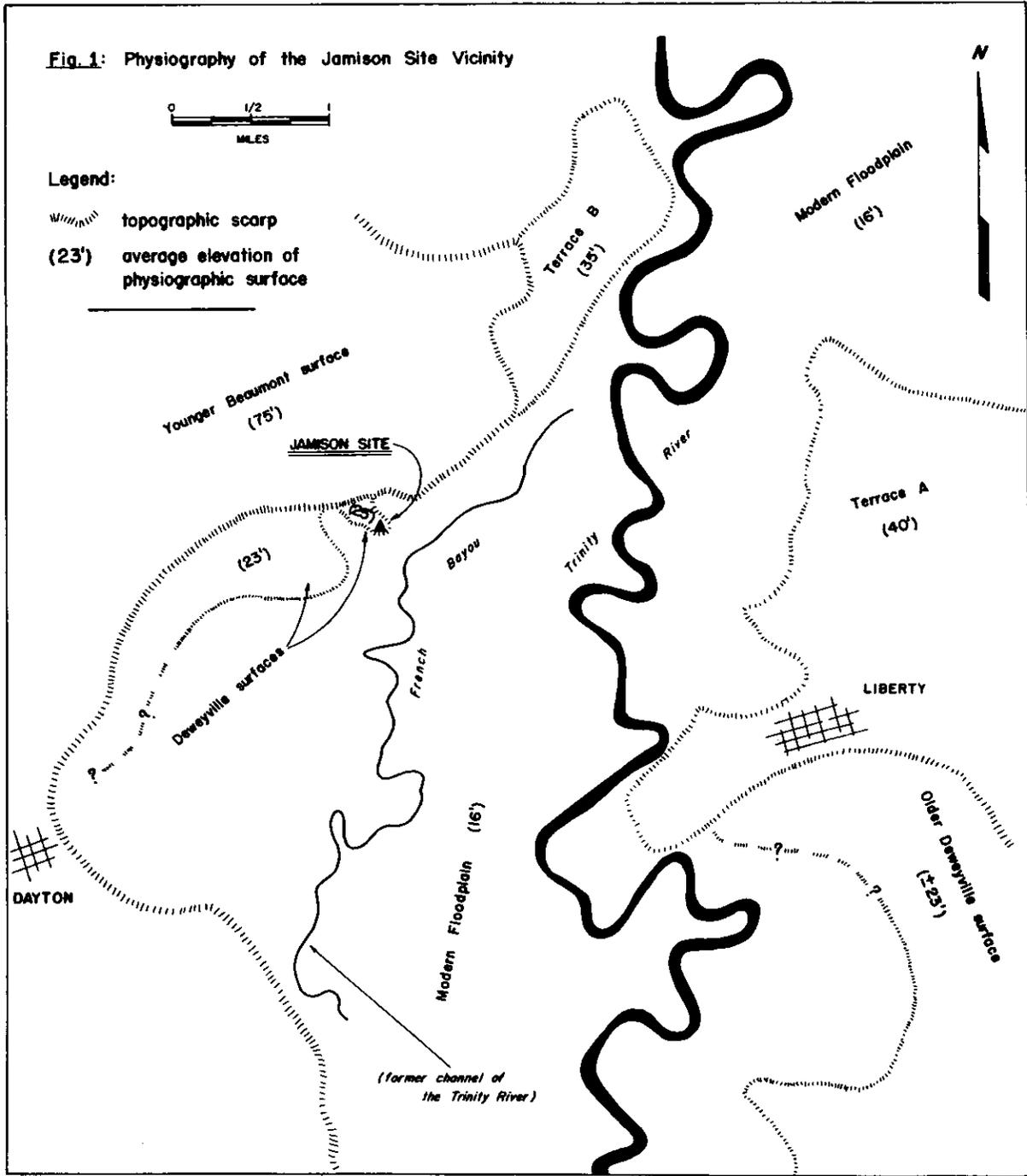
ETHNOHISTORICAL BACKGROUND

The ethnohistory of the southeast Texas area has been recounted in the literature several times (e.g., Swanton, 1946; Jelks, 1965: 7-14; Newcomb, 1961: 315-29; Wheat, 1953: 157-62) and it is not necessary to review this in detail here other than to present the salient features with respect to the lower Trinity River area.

Swanton

The Indians living in coastal southeast Texas in historic times were generally known as the Atakapa. Centered about the lower Trinity River and the eastern shores of Galveston Bay were a subgroup called the Akokisa; above them along the Trinity lived the Patiris, the Bidais, and the Deadoses. The Jamison site apparently is situated within the area occupied in historic time by the Akokisa (Swanton, 1946: Map 1). The Akokisa seem to have been non-agricultural and to have subsisted by hunting and gathering, however, virtually no ethnographic information is known dealing with specific cultural traits of this group.

Fig. 1: Physiography of the Jamison Site Vicinity



ARCHAEOLOGICAL BACKGROUND

Published archaeological reports pertinent to the Galveston Bay area and the lower Trinity River are few in number. The major work was performed by Wheat (1953) in the Addicks Dam Basin west of Houston. Other limited information is presented by Campbell (1957), Houston-Harris County Senior Girl Scouts (n.d.), Ring (1960, 1963), and Walley (1955). Numerous useful notes on the area may be found in issues of the Newsletter of the Houston Archeological Society. (Chandler, 1967).

The only excavations to be carried out in recent years (other than at the Jamison site) have been those sponsored by the Houston Museum of Natural Science at the Jamaica Beach site (41 GV 5) during the winter of 1962-63; and salvage archaeology by the Texas Archeological Salvage Project in the proposed Wallisville Reservoir, at sites located on lower Cedar Bayou, and at sites in the proposed Honea Reservoir (Lake Conroe), which has been supplemented by testing at one site by members of the Houston Archeological Society.

The Jamaica Beach excavation has, as of this time, only resulted in the publication of a very generalized preliminary report (Ring, 1963), and a detailed report on a few of the excavated crania (Aten, 1965). The Texas Archeological Salvage Project operations in the general area are currently underway.

Although it is not pertinent to recount all of the information revealed by past archaeological efforts, a few general observations on the emerging historical framework are in order.

The archaeological sequence can be broadly subdivided into preceramic and ceramic phases. The preceramic phase can presumably be further subdivided into a paleo-Indian stage, based on a few isolated surface finds, and an archaic stage, characterized mainly by certain dart points and a rather undistinguished assortment of tools. The dart points have been shown to change from expanding stem forms to straight stem forms to contracting stem forms at the Addicks Basin sites (Wheat, 1953) and on this basis the Addicks archaic zone has been grouped with some other East Texas sites into the La Harpe Aspect (Johnson, 1962). It is not yet possible to organize this preceramic material from the Galveston Bay area into distinct assemblages which would be characteristic of a particular area or time.

The ceramic phase can be subdivided into historic and prehistoric stages. The entire prehistoric subdivision of the ceramic phase has been referred to as the Galveston Bay Focus (Suhm, Krieger, and Jelks, 1954: 128-30), but seems fairly clear now that the Galveston Bay Focus concept as presently defined, is unable to reflect changes in distribution through time and space of certain local artifact assemblages, and that this concept should receive either extensive redefinition, or be abandoned.

The historic stage of the ceramic phase is also poorly known. Although two glass beads were excavated with an Indian burial at the Caplen site (Campbell, 1957: 453), there were no other associated diagnostic Indian artifacts. It is difficult then to attribute the few potsherds found on the surface with an historic association.

At the Presidio San Agustin de Ahumada near Wallisville, the excavators concluded that Indian pottery at the site was probably used by Europeans and not by Indians (Tunnell and Ambler, 1967: 75-6). Thus one could not say with any assurance that the Europeans did not select only certain kinds of local pottery for their own use. If the pottery from the Caplen site and the Presidio should be found to represent that which was in use by indigenous Indians during historic occupations of the respective sites, we would then be faced with resolving the relatively extreme differences in the two assemblages. It seems most likely that either one or both of these collections is not representative of ceramics manufactured and used by local Indians during historic times.

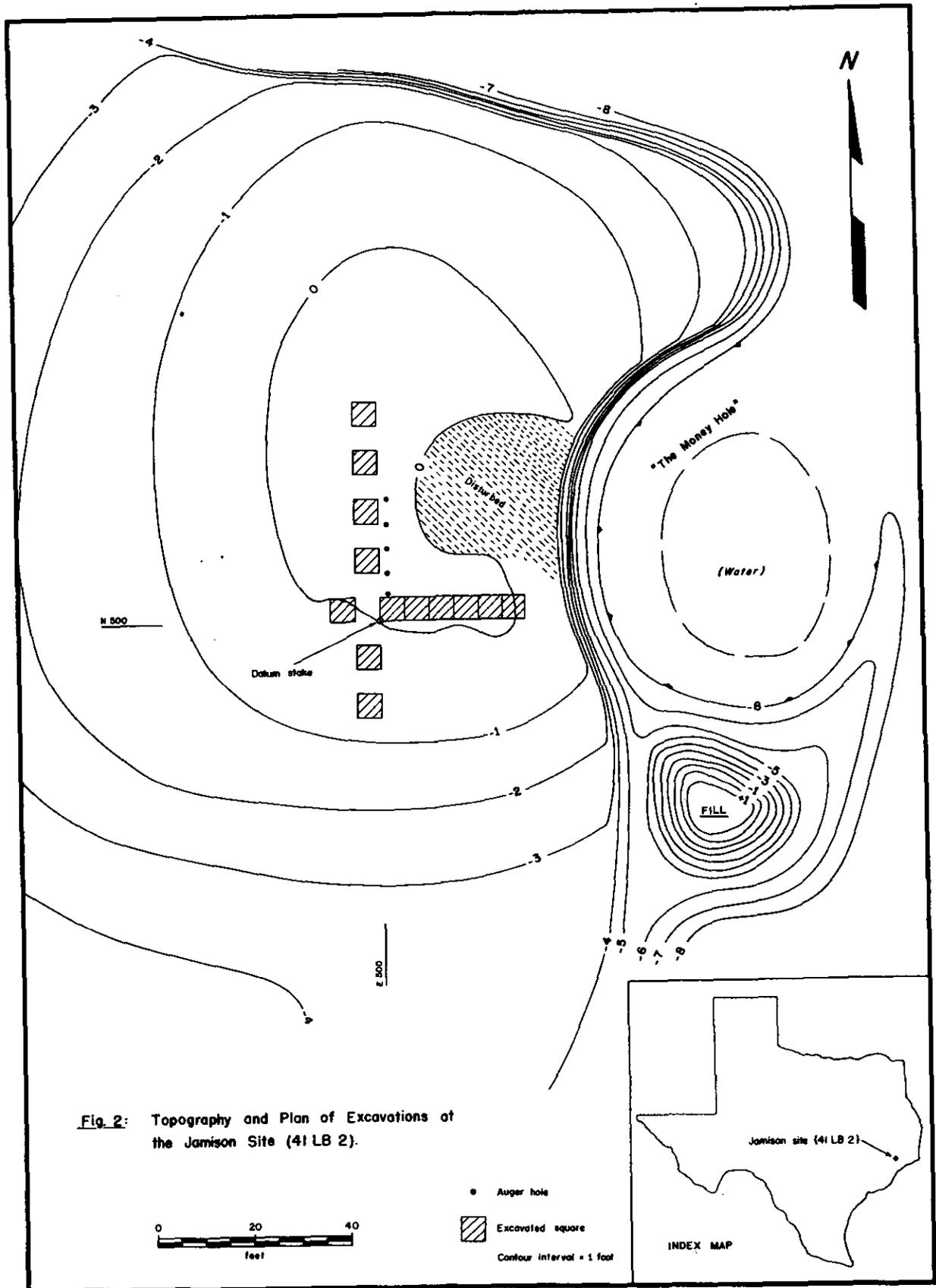
SITE DESCRIPTION

The Jamison site is^a roughly dome-shaped earth midden (Fig. 2) situated atop the late Pleistocene Deweyville terrace, overlooking Bowie Creek Swamp and the Trinity River valley. The site thickness in the area excavated ranges from 15 inches to 60 inches and excavations have indicated that the midden deposit was thickening north and east of the datum stake. The total extent of the midden deposit is unknown, but artifacts were collected from the surface over a very great area. Some disturbance of the surface took place when the land was formerly under cultivation, and also when heavy equipment was ... introduced to assist in the search for the cache of treasure (Jamison, 1959).

METHOD OF EXCAVATION

Initial testing of the site for evaluation involved the excavation of a pit, three feet square, that was dug in 7-inch levels to a depth of 21 inches. A quantity of pottery and chipped stone artifacts were found. Preparatory to serious excavation, an arbitrary datum point was established on the top of a length of steel pipe that had been driven into the ground. A topographic map of the site was constructed showing the site proper and its relation to what became known as the "money hole" (Fig. 2).

A grid system was adopted with the datum stake designated N500/E500. All squares were then identified by the coordinates of their northeast corner. Lines north of the datum



point increase numerically by five-foot increments, . . . N500, N505, N510, etc. Lines south of the datum decrease numerically by five-foot increments, . . . N500, N495, N490, etc. Lines east of datum increase, and lines west of datum decrease by the same relationship (Fig. 2).

Two fifty-foot long rows of five-foot squares were staked out, although not all of these squares were excavated. All squares were excavated by 6-inch levels, parallel to an imaginary horizontal plane passing through the datum point (as opposed to being parallel to the surface topography). Because of this, most of the first levels excavated did not consist of a full 6 inches (Fig. 4). All squares except N505/E530 were excavated entirely through the midden deposit and into the underlying yellowish bedrock clay. Excavation was terminated in N505/E530 when it was thought to be in a disturbed area.

All excavated midden detritus was initially sifted through a $\frac{1}{4}$ -inch mesh screen. Soon it became apparent that very little cultural material was present below approximately 30 inches, therefore a $\frac{1}{2}$ -inch mesh screen was used for the deeper parts of the excavation. This was also a necessary practical expedient due to the great difficulty encountered in screening the hard, clayey soil.

Standard documentation forms such as level reports, feature reports, and photographic logs were maintained. Artifacts were bagged according to excavation units (levels of squares) and the provenience data were written on the bags. A system of R(report)-numbers was employed by which each report and corresponding artifact bag was given its own R-number. It was then possible to identify artifacts from a particular level by the R-number for that level, as well as to provide an index to all the record forms.

PHYSICAL STRATIGRAPHY

The single major methodological error made during the excavation of this site was the failure to pay due attention to the physical structure of the midden. Although some observations were recorded on the level reports concerning color and textural changes, these were not made systematically and wall profiles were drawn for only three squares. Our ideas then, of the physical stratigraphy of the excavated areas are of an indirect and somewhat inferential nature.

Analysis began with plotting on profiles of the excavated squares all observations made at the time of excavation. These included the following features: clayball, charcoal, bone, and river pebble concentrations; matrix color; and observations on soil texture. Although textural and matrix color observations permitted reconstruction of the limits of zones such as surface weathering and the underlying bedrock clay of the

Deweyville terrace, attempts to relate meaningfully all of the features to themselves and to the cultural stratigraphy were generally unsuccessful, except for river pebble frequencies which will be discussed later. The profiles did indicate substantially greater relief on the terrace in the past than exists today and it seems reasonable to consider that leveling of terrace depositional topography by erosion processes is responsible for the accumulation of the bulk of the deposit into which the cultural materials are incorporated.

In the summer of 1965, the site was revisited and forty soil samples were obtained from five auger borings. The borings were spaced over a lateral extent of twenty feet and paralleled several squares in the E500 row (Fig. 2). If these initial soil samples had provided promising results, it was planned to explore the site more extensively with some thirty-five additional strategically located borings. Details of the analysis of the samples are not presented here but may be obtained from the writer if desired.

The objectives of the soil studies were:

1. to obtain additional data on the elevation of the bedrock clay and the thickness of the midden, in order to obtain a better idea of the extent of the site and the configuration of the surface upon which it was founded.
2. to determine soil pH values at the various sample locations and construct therefrom, a profile which might reflect the natural stratification of the site.
3. to provide samples to be examined for the preservation of pollen, to construct a pollen profile, and to gain some insight into stratification and floral ecology.
4. to provide reference material to be used in the X-ray diffraction studies of the clayballs.

The first objective did provide additional mapping data, but in this portion of the site, only duplicated the data available from the excavated squares. Borings remain an unquestioned aid, however, in delimiting site areas.

Soil pH analysis has been used by several workers in various ways, but the work that interests us the most is that of Deetz and Dethlefsen (1963). Briefly, their study involved obtaining soil samples in one foot horizontal and vertical increments, from a site physically very similar to the Jamison site. They determined pH values electrometrically, plotted the results on a site profile, and contoured the pH values in terms of 0.1 pH unit. This profiling of "phantom horizons" as it were, paralleled closely the few physical features that were recorded during excavation, and continued these zones throughout the extent of the profile. These results were sufficiently promising that it was decided to make a similar attempt at the Jamison site even though it would not be possible to obtain as many samples with as good control as would have been desired. The samples were obtained generally in five-foot intervals laterally, and in one-foot intervals verti-

cally, except for the first boring in which samples were taken every four inches.

The results of this effort were not very inspiring. After plotting all of the pH values on a profile of the borings, it was not possible to organize them in any rational manner. The reason for this failure is difficult to assess. The procedures employed were not strictly comparable to those used by Deetz and Dethlefsen in that a) not as many samples were taken; b) mixing of soils could have occurred during the sampling when reintroducing the auger into the borehold (although efforts were taken to minimize this factor); and c) the pH determination procedure was not exactly the same. This last factor should not have greatly affected the results because our procedure was internally consistent, the results were reproducible, and because the object was to determine the relative differences between the tested samples. Whether or not our methods produced the true pH value is not particularly relevant.

Color determinations in terms of Munsell soil color numbers did give a consistent gradational series from top to bottom of each hole.

Portions of selected soil samples from the upper, middle, and lower areas of the midden deposit and from the underlying bedrock clay were processed for pollen and other microscopic forms of life such as insect remains. The results were totally negative, the only specimens present being a few late Paleozoic pollen grains that presumably were residue from digested chert grains. The site is quite well drained and chemical oxidation not the least inhibited. Since pollen is highly susceptible to destruction by oxidation (Gutjahr, 1960), it is not difficult to see why this approach was unsuccessful.

Finally, several soil specimens were used for comparison during the X-ray diffraction study of clayball mineralogy. This is discussed in detail in the description of the clayballs.

Aside from providing data on the extent of the site, and a general idea of the major soil zones present, the soil samples were not providing very much culturally meaningful information and plans for digging additional boreholes were cancelled.

SPECIMEN DESCRIPTIONS

The separation of the excavated specimens proceeded in the usual manner; i.e., they were first separated into broad groups such as bone, clay, and stone; then into functional categories such as ceramics, dart points, knives, etc. These functional categories were subdivided into descriptive categories, some of which could then be associated with previously defined types.

A functional category as used in this analysis is one which exists on the basis of presumed usage of the artifact. These, however, cannot be rigidly adhered to, especially in the case of categories such as knives and scrapers, which likely are terms more descriptive in nature than functional; i.e., certain specimens called knives because of their form, may actually have functioned as scrapers, and vice versa. Each functional category heading in this section is followed by a brief statement of definition.

A descriptive category is taken to be a group of artifacts which share certain specified physical attributes, but which has not as yet been shown to possess a meaningful distribution through time and space.

Some descriptive categories have assumed the status of a type, which is likewise a group of artifacts which share certain specified physical attributes, but also has been demonstrated to possess meaningful time and space dimensions in its distribution. A type constituted in this manner does not necessarily identify with categories of manufacture recognized by the prehistoric craftsman.

In the following descriptions, discussion of each group of specimens is limited to those aspects most pertinent to the interpretation of the site and to the identification of the specimens.

In the interest of space economy, the following notations are employed throughout the specimen descriptions:

- R-no. - R or report number identifies the excavation unit from which the specimen was removed; these units may be identified by referring to Table 4.
- L - maximum length
- W - maximum width
- T - thickness
- S.L. - stem length
- S.W. - stem width
- * - indicates the measurement is a close estimate (used on broken artifacts whose form could be reasonably estimated).
- mm. - all dimensions are given in millimeters.
- A.U. - Analysis Unit; determined by correlation of excavation units.
- Illus. - illustration; plate and number in which the specific artifact is illustrated.

Mat. - material; this data (for chipped stone artifacts) is presented only in terms of broad groups; detailed lithologic descriptions are available from the writer upon request. The following conventions are adopted: C - chert (includes flint); S - silicified (or petrified) fossil wood; Q - quartzite.

POTTERY

This functional category includes approximately 1,400 specimens of fired clay, which, judging from their form and textural features, are fragments of pottery vessels.

Fresh breaks on each specimen were examined by binocular microscope and/or hand lens. Paste categories constituted the first order of separation; subsequent divisions were in terms of the kind of decoration (or lack of decoration).

If the ceramics from the Galveston Bay area were being studied for the very first time, we would undoubtedly prefer to confine ourselves to the use of descriptive categories rather than to propose types. Unfortunately we are already burdened with a ceramic typological framework; an unsatisfactory one to be sure, but one that has formally existed for 14 years and that has been referred to extensively in the archaeological literature.

One approach open to us would be to ignore these previously defined types (Goose Creek Plain and Goose Creek Incised) and begin anew to develop descriptive categories that could ultimately be developed into a new typological framework. Another approach, and the one that I prefer, is that the existing typology should be accepted for what it is, and modified whenever necessary to make it more amenable to present needs. Thus I have undertaken in this section, some modification of the definitions of Goose Creek Plain and Incised and have tentatively presented three new types - Goose Creek Red-Filmed, San Jacinto Plain, and San Jacinto Incised.¹ It may very well be that future work will suggest further modifications based on differences in vessel form and design styles, particularly for Goose Creek Plain. Careful archaeological reporting then, will be essential to the integration of present descriptive data into any future modifications of the typological framework.

1. San Jacinto Plain and Incised were originally proposed in 1959 by R.B. Worthington at the Houston Archeological Society's Pottery Symposium, but were never formally described in the literature. The descriptions presented in this paper are the first to be published and do differ somewhat from Worthington's original proposal.

GOOSE CREEK PLAIN: (revised definition).

Number of specimens: 1165, approximately twenty of which were reconstructed to give small fragments of vessels.

Method of manufacture: coiled; the majority of the sherds which retain evidence of the manner in which coils were welded together indicate that this was done with a shearing motion - down on the exterior, up on the interior. The coils were not well joined as shown by the large number of sherds that have been fractured along coil surfaces.

Paste: aplastic material consists of quartz grains and ranges widely in size from silts (1/256 mm. to 1/16 mm.) to occasional granules (2 mm. to 4 mm.) with the vast majority in the fine (1/8 mm. to 1/4 mm.) to medium 1/4mm. to 1/2 mm.) range. In terms of Munsell color numbers, the sherd color ranges widely from light yellowish brown (10YR 6/4) to very dark gray (10YR 3/1). There seems to be a disproportionately frequent occurrence of iron oxide concretions (usually not larger than 0.5 mm. in diameter) in lighter colored sherds, suggesting the possibility that this reflects raw material sources in the older late Pleistocene sediments. These deposits are light colored and commonly contain iron oxide concretions in abundance as opposed to the darker Recent floodplain sediments.

Generally speaking, for sherds whose surfaces have not been eroded, the finishing techniques have been rubbing with some pliant or yielding material (i.e., leather or hands), and scraping. Occasionally a sherd will exhibit relatively deep striations or scoring perhaps resulting from brushing. Commonly, sherds whose surfaces have been eroded are highly friable.

Form: it was not possible to reconstruct a significant portion of any vessels and thus we cannot be sure of all the vessel forms present; however, we can say that jars and more or less spherical bowls were used. Rims can be generally grouped into four categories; direct with interior thinning of the lips (Fig. 3: a-c); direct and rolled to the exterior (Fig. 3: d,e); direct with lips flattened (Fig. 3: f, g); and direct with rounded or sharp lips (Fig. 3: h,i). Bases are of three kinds: noded (Fig. 3: j,k); circular flattened (Fig. 3: l); and rounded (or spherical) (Fig. 3: m). No significant changes could be seen in the relative proportions of rims and bases occurring in the two analysis units containing ceramics (Table 1).

Decoration: lips are frequently decorated with lip notching (Table 1).

Discussion: the quartz and silt particles which are present in this pottery certainly function as temper, but the question of its having been intentionally added to the clay by the native potter is completely open. One cannot casually toss about the term "temper" in this case, for the question at stake is of substantial importance to an understanding of the technique of the inhabitants of the Jamison site - did they or did they not understand that it was necessary to compound aplastic materials with clay in order to make satisfactory pottery?

It seems more accurate at the present state of our knowledge, to follow the suggestion of Nunley (1963: 53) to refer to these ceramics as sandy paste wares rather than sand-tempered wares. In this writer's opinion, it seems more likely that the indigenous sandy paste ceramics are composed of materials utilized in their natural associations, and that the native potter (at least at the Jamison site) knew only from experience that sediments possessing a certain "stickiness" and granularity would make adequate pottery.

It may very well be that further subdivisions of sandy paste ceramics can be made in the Galveston Bay area on the basis of vessel form. For instance, at the Jamison site only flattened, rounded (or spherical), and noded bases occur; in the Adick's Basin, rounded bases are dominant, but flattened, noded, and true conical bases occur (Wheat, 1953: 185; fig. 20, 21); and at the Galena site (collection housed at the Texas Archeological Research Laboratory, Austin) the forms are true conical bases and truncated conical bases. Data are insufficient as yet to evaluate the distribution of these vessel form traits, but the implication is that time and/or space distinctions can be made.

GOOSE CREEK INCISED

Number of specimens: 30

Method of manufacture, paste, and form: same as Goose Creek Plain.

Decoration: lip notching; incising. Incised design styles are (in order of popularity): sets of horizontal lines; horizontal lines with punctations; horizontal lines with diagonal lines; cross-hatched diagonals; horizontal and vertical cross-hatched lines; horizontal lines with diagonal lines and punctations; and horizontal lines with a sine wave line below (Fig. 5b; Pl.1).

Discussion: this type is restricted essentially to Analysis Unit III, with sets of horizontal lines, and horizontal lines combined with punctations being the most popular design styles (Fig. 5b).

GOOSE CREEK RED-FILMED (new type).

Number of specimens: 36

Method of manufacture and paste: same as Goose Creek Plain.

Form: although only eight rim sherds are present, the vessel forms appear similar to those of Goose Creek Plain except that almost all of the rims are direct with rounded or sharp lips (Fig. 3, h, i; Table 1). One large body (possibly a base) sherd is suggestive of a spherical bowl. The rim sherds are not large enough to estimate vessel mouth diameter. One sherd has been well burnished on both interior and exterior surfaces.

Decoration: finely powdered red mineral pigment has been applied to the exterior of both plain and incised sandy paste vessels, although exterior and interior filming has been

414R61-70

reported from other sites (Wheat, 1953: 185; Wayne Neyland, personal communication). One red-filmed sherd from the Jamison site, and one partially restored red-filmed vessel from Cedar Bayou (J.R. Ambler, personal communication) indicate that the red-film in some instances at least, was applied to the entire vessel exterior.

In terms of Munsell color numbers, the red-film ranges from red to dusky and dark red (7.5R 3/4, 3/6, 4/6; 5R 3/6). There is a proportionately greater occurrence of orange colored sherd exteriors on this type than on the other sandy paste wares and these often render detection of the red-film difficult. This has prompted some workers to suggest that the red-film may in some cases, be a phenomenon of firing. However, examination and testing of some of these sherds from the Jamison site shows that they have had a thin red film applied to their surface (A. O. Shepard, personal communication).

Other kinds of decoration found on red-filmed sherds are lip notching (Table 1) and incising similar to that found on Goose Creek Incised.

Distribution: collections from the Galveston Bay region in general indicate that red-filmed pottery is a numerically minor, but geographically widespread type, and has thus far been reported from the following sites and areas in the Galveston Bay vicinity:

Chambers County;

41 CH 7 (Aten, 1955: 2)
 41 CH 20 (J.R. Ambler, personal communication)
 41 CH 26 (Shafer, 1966: 14)
 41 CH 32 (J.R. Ambler, personal communication)
 Lake Stevenson area (A.R. Duke, personal communication)

Galveston County;

Caplen site (Campbell, 1957: 465)

Harris County;

Addicks Reservoir (Wheat, 1953: 185)
 Cedar Bayou area (J.R. Ambler, personal communication)
 Clear Lake area (Wayne Neyland, personal communication)
 Peggy Lake Area (A.R. Duke, personal communication)

Liberty County;

Jamison site (41 LB 2) (this paper)

Although the typological relationships are not known at this time, sandy paste red-filmed sherds from 41 MQ 5 in Montgomery County were recently excavated (Harry J. Shafer, personal communication).

Discussion: the technique of red-filming is widespread in the southeastern United States (Ford, 1952: 366-68). The limits of the spatial distribution of the technique as employed on Goose

Creek ceramics are not known, but we have demonstrated that it is widespread. The limits of the temporal distribution likewise are unknown, but 30% of all red-filmed sherds at the Jamison site are found in Analysis Unit II, with a relative popularity of 2.1% (red-filming seldom occurs anywhere in the southeastern United States with a relative popularity greater than 5%). In contrast to this, only 6% of all Goose Creek Incised and less than 2% of all San Jacinto Plain occur in Analysis Unit II, and probably represent mixing. Thus it seems likely that red-filming appeared prior to, but continued in use following the introduction of incised decoration and clay (grog)-tempering.

The principal value of this type at present, is that it permits the quantification of the red-film technique through a previously unknown part of its range in time and space.

SAN JACINTO PLAIN (new type)

Number of specimens: 117; no reconstruction was possible.

Method of Manufacture: probably coiling as most sherds have broken into rectangular fragments.

Paste: two aplastic media are present; 1) fragments of fired clay (or grog) which themselves usually contain quartz grains (fine-grained to silt size); and 2) quartz grains in the matrix which is otherwise identical to that described for Goose Creek Plain. The fired clay (grog) fragments range widely in size from about 0.5mm to 2.5 mm. in diameter; these may be fragments of sherds, as they are themselves very sandy and commonly have at least one flat surface. Sherd exteriors and interiors vary widely in color from black (10YR 2/1) to a light yellowish brown (10YR 6/4). Cores are rarely distinct, rather the sherd exteriors are usually a light color and grade continuously to a darker color on the sherd interior. For any given sherd color, the color of the clay (grog) fragments is nearly always markedly lighter.

Generally, sherd surfaces have been finished by rubbing with some pliant or yielding material (i.e., leather or hands), or by scraping. Surfaces are commonly bumpy or fractured around clay (grog) fragments.

Form: one rim sherd each of the following styles was found: direct with interior thinning of the lip; direct with rounded lip; and direct with flattened lip. One sherd shows a very sharp angle which may be from a flat base (Table 1).

Decoration: lip notching is known (R.B. Worthington, personal communication), but none was seen on the Jamison site sherds.

Discussion: This type was first suggested by R.B. Worthington in 1959 at the Pottery Symposium of the Houston Archeological Society, but has never been published. Worthington, who provided the writer with a transcript of his remarks, originally included bone-tempered sherds in this type, but it seems inadvisable to do this at the present time.

Sherds of this type have been recognized widely throughout the Galveston Bay area, but for some reason, have rarely been investigated for any chronological significance. Some sites at which the type is known to occur are:

Chambers County;

Wallisville Reservoir area (numerous sites) - (J.R. Ambler, personal communication; R.B. Worthington, personal communication; Shafer, 1966).

Cedar Bayou area - (J.R. Ambler, personal communication).

Harris County;

Addicks Basin - (Wheat, 1953: 134).

Berry Gully site - (F.J. Brezik, Jr. and W.L. Fullen, personal communication).

Peggy Lake area - (R.B. Worthington, personal communication).

Galena site - (R.B. Worthington, personal communication).

41 HR 71,72,73 - (A.R. Duke, personal communication).

Liberty County;

Jamison site (41 LB 2) - (this paper).

The San Jacinto wares do have definite chronological significance at the Jamison site, at the lower Cedar Bayou sites (J.R. Ambler, personal communication), and apparently at the Addicks Basin sites (Wheat, 1953: 134). At these sites, clay-tempered wares are introduced following an unknown length of time when only sandy paste ceramics were manufactured. Also significant is the fact that no clay-tempered sherds were encountered in the native ceramics excavated from an historic site at Wallisville (Tunnell and Ambler, 1967: 90), thus suggesting that these ceramics were no longer manufactured in historic times.

SAN JACINTO INCISED (new type)

Number of specimens: 11, no reconstruction was possible. 11

Method of manufacture, paste, and form: same as San Jacinto Plain except that no base sherds were found and the only rim sherds found were direct with interior thinning of the lip, and direct with the lip flattened (Table 1).

Decoration: lip notching and incising. The only design style found was the set of horizontal, parallel lines ranging in number from one to more than ten.

Discussion: this type was also originally suggested by R.B. Worthington, and is simply the incised equivalent of San Jacinto Plain. So far as is known, it has the same distribution through time and space as the plain ware. Although only one design style was found at the Jamison site, sherds recently excavated at Cedar Bayou exhibit a variety of incised design styles (J.R. Ambler, personal communication).

BONE-TEMPERED PLAIN (descriptive category)

Number of specimens: 10 body sherds; no reconstruction was possible.

Method of manufacture: coiled; most of the sherds have broken along coil surfaces.

Paste: sandy and silty - very similar to that described for Goose Creek Plain except for the inclusion of charred, angular bone fragments ranging in diameter from less than 1/16mm. (silt size) to about 3.0 mm. (granule size). These fragments are generally characterized by a white to grayish color and spongy texture.

Form and decoration: unknown.

Discussion: sherds containing bone fragments have been found in a prehistoric context at other sites in the Galveston Bay area (e.g. Wheat, 1953: 184) but always in extremely small quantities. At a recently excavated historic site (Tunnell and Ambler, 1967) bone-tempered sherds constituted more than 1/3 of the native ceramics recovered, and it may be that this category is of much greater importance during historic times.

ROCKPORT(?) INCISED

Number of specimens: 5 sherds from a single vessel, several of which reconstructed to give an incised rim sherd about 50 mm. long and extending 30mm. below the lip.

Method of manufacture: coiled; coils are well wedged.

Paste: silty clay, tempered with clay (grog) fragments; fine textured, hard, very compact (few large pore spaces); freshly broken cross-section is uniformly black in color; exterior is weathered to a dark gray; surface is fairly well smoothed, although lumpy.

Form: average wall thickness is 7 mm.; rim is direct with a rounded lip (Fig. 3:) The original vessel apparently was either a bowl or a jar with a vertical rim and mouth diameter estimated to be 130 mm.

Decoration: exterior incision of a simple geometric design consisting of two lines drawn parallel to the rim and joined by diagonals alternating in direction, to form a band of more or less equilateral triangles. The two parallel lines are broad (2 mm.) and very shallow; the diagonals are narrow (0.5 mm.) and are deeper. The incisions have been applied in a careless manner (Pl. 1).

Discussion: the basis for considering these sherds to be Rockport Incised is the incised design. This kind of incision has not yet been seen on Goose Creek vessels, while very similar ones are known for Rockport incised (Potter, 1930: pl. 7, 1-2; Suhm and Jelks, 1962: pl. 67, H).

UNCLASSIFIED INCISED

Number of specimens: 6 sherds from a single vessel, several of which have reconstructed to give one large, partly incised

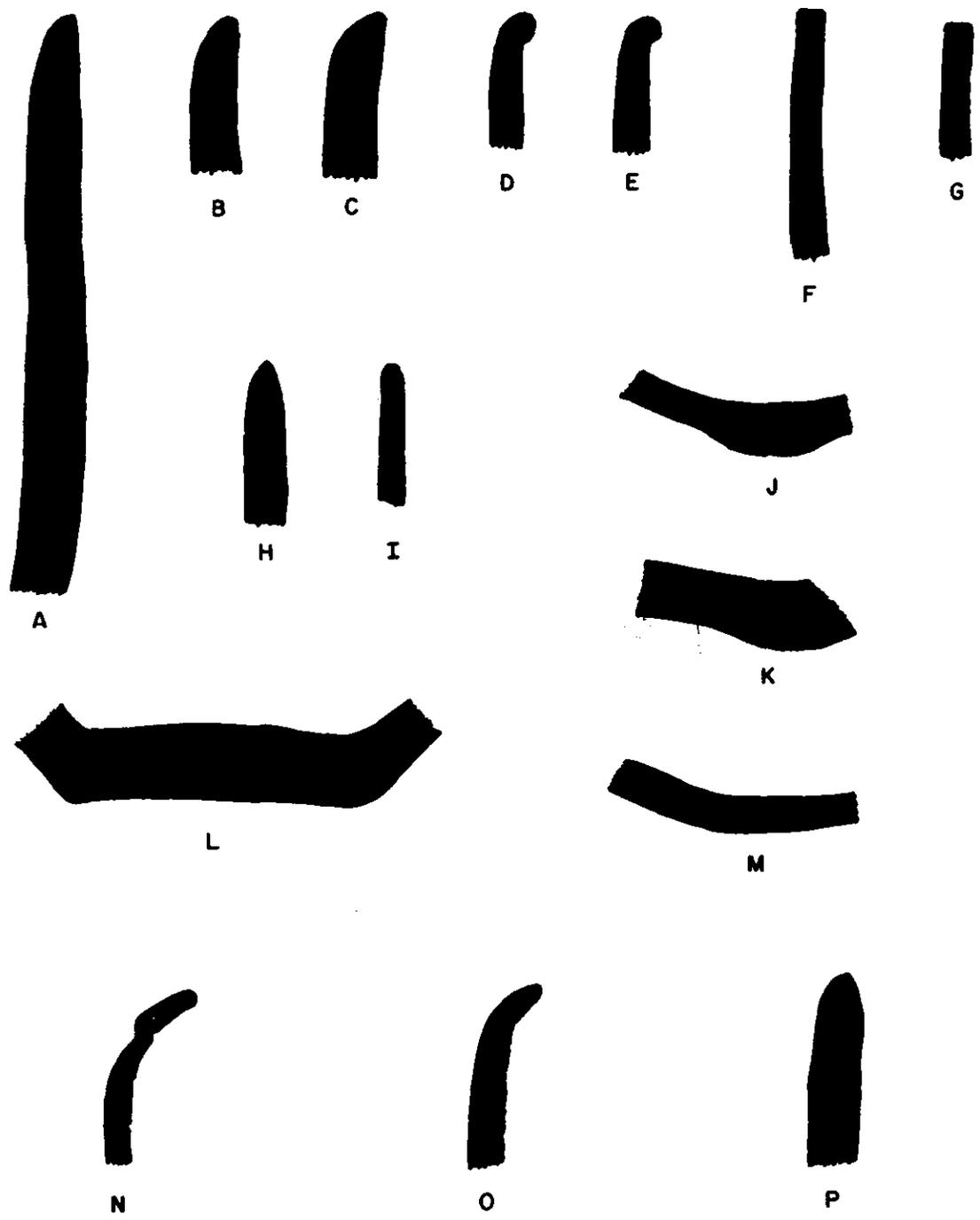


Fig. 3: Selected Goose Creek rim and base profiles. Rims: A-C, direct with interior thinning; D-E, rolled to exterior; F-G, direct with flattened lip; H-I, direct with rounded or sharpened lip. Bases: J-K, noded; L, flattened; M, rounded. Intrusive pottery rim profiles: N, unclassified incised; O, unclassified red-filmed incised; P, Rockport(?) Incised. Due to small size of sherds, orientation is sometimes questionable. All profiles are actual size.

body sherd, and two incised rim sherds.

Method of manufacture: coiled, coils are well wedged.

Paste: sandy clay containing some clay (grog) fragments; hard and brittle; well smoothed exteriors. Cores and interiors are mainly black in color; exteriors are white to light gray and are nearly covered with a grayish brown coating of organic(?) material.

Form: average wall thickness (approximately 25 mm. below the lip) is 3.5 mm. The rim is markedly everted and folded to the interior (Fig. 3:n). The fold is about 10 mm. wide. Diameter of the vessel at the lip is estimated to be 300 mm.; diameter where the everted rim begins (about 15mm. below the lip) is estimated to be 260 mm.

Decoration: lip notching; exterior incising. The incised design begins at the lip, extends down for at least 40 mm. below the lip, and consists of diagonal cross-hatching. Incisions are narrow and deep, and have not been applied with precision (Pl. 1).

Discussion: since these sherds are alien in almost every respect to those known to have been manufactured locally, a number of inquiries were made in an effort to determine whether or not they could be associated with any known type elsewhere. The most substantive comments came from Clarence Webb. Webb (personal communication) indicated that this particular kind of folded rim and paste characteristics were not what one would expect for a Caddoan ware, but that the vessel shape and decoration would be acceptable for the type Harrison Bayou Incised. Perhaps it is an imitation of Harrison Bayou Incised on some local paste.

UNCLASSIFIED RED-FILMED INCISED

Number of specimens: 1 rim sherd approximately 40 mm. in length, and extending 30 mm. below the lip.

Method of manufacture: probably coiled; very well wedged.

Paste: a silty clay containing abundant fine (0.3 mm.) bone fragments; compact; somewhat lumpy; surfaces are well smoothed, almost polished. Interior color is reddish yellow; the core is black; the exterior has been coated with a dark red, finely powdered mineral pigment.

Form: average wall thickness is 4.5 mm.; the rim is everted with a thinned lip (Fig. 3:o). Diameter of the vessel at the lip is estimated to be 285 mm.; diameter where the everted rim begins (about 11 mm. below the lip) is estimated to be 270 mm.

Decoration: lip notching, incising, and red-filming. The incised design consists of at least seven narrow lines parallel to the lip and spaced about 3.5 mm. apart. The entire exterior surface has been covered with a dark red mineral paint which has, for the most part, filled in the grooves made by the incising tool (Pl. 1).

Discussion: this specimen is likewise dissimilar to indigenous ceramics. Clarence Webb (personal communication) felt that the sherd was definitely Caddoan and could be best associated with either the late Alto or the early Bossier Focus.

LITHIC ARTIFACTS

Arrow points: this functional category includes 50 projectile points and 50 unidentifiable fragments which, because of their light weight and small, thin size, are thought to have been suitable for hafting on arrow shafts. Very likely there exists some functional overlap between arrow points and dart points.

These specimens were subdivided into previously recognized types and into descriptive categories on the basis of their total morphology, but with emphasis upon stem form, as experience has shown this to be the most significant in terms of temporal and spatial change.

Projectile point parts in the following descriptions are generally referred to by the terminology proposed by Suhm, Krieger, and Jelks (1954: 530, Fig. 7). *All measurements are given in millimeters.*

ALBA

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-25-S	-	23.5	4.0	7.5	8.0	-	Q	Pl. 2, B
R-71	19.5	17.5	3.0	6.5	8.5	-	C	Pl. 2, C
R-112	17.5	19.5	2.5	4.5	7.5	II	S	Pl. 2, D
R-133	26.5	18.0	3.5	5.0	7.5	II	Q	Pl. 2, A
R-253	14.0	15.0	2.0	4.5	8.0	II	C	Pl. 2, E
Average	20.8	18.7	3.0	5.6	7.9			

Description:

Blade: triangular; edges slightly concave; R-71 and R-133 are serrated; shoulders wide and usually at right angles to the stem; R-112 is slightly barbed.

Stem: edges range from slightly contracting to slightly expanding; bases are flat except for R-71 which is rounded; comprises approximately 1/3 to 1/5 of total length.

Workmanship is generally good. All specimens are bifacially chipped.

Reference: Suhm and Jelks, 1962: 263, pl. 132.

BASSETT

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-68	18.0*	17.0	3.0	3.0	6.0	-	C	Pl.2, H
R-122	20.0	18.0*	3.5	2.5	4.0	III	C	Pl.2, G
R-223	22.0	20.5*	4.0	4.0	4.5	III	C	Pl.2, F
Average	20.0	18.5	3.5	3.1	4.8			

Description:

Blade: triangular; edges straight to slightly convex; R-223 is serrated; shoulders are wide and slightly barbed.

Stem: edges are contracting; bases pointed or sharply rounded; comprises approximately 1/6 to 1/8 of total length.

Workmanship is fair. All specimens are bifacially chipped; however, this is minimal on R-223.

Reference: Suhm and Jelks, 1962: 265, pl. 133.

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-15	—	19.5	3.0	4.5	7.0	III	Q	Pl. 2, O
R-20	24.0*	11.5	4.0	4.0	6.5	III	S	Pl. 2, Q
R-65	18.5	14.0*	4.0	2.5	6.0	—	C	Pl. 2, T
R-72	17.0	15.5	4.5	2.5	6.5	—	Q	Pl. 2, U
R-90	27.0	19.5	5.5	4.0	9.0	III	C	Pl. 2, M
R-107	21.5	18.5	3.0	2.5	7.5	III	S	Pl. 2, S
R-141	—	16.0	4.5	4.0	6.5	III	S	Pl. 2, P
R-204	28.0	18.0	5.0	4.5	8.0	III	S	Pl. 2, L
R-225	22.0	15.5	3.5	3.5	8.0	III	S	Pl. 2, N
R-241-S	—	17.0	4.5	3.0	6.0	—	C	Pl. 2, R
R-246	16.5	17.0	4.0	2.0	7.5	II	C	Pl. 2, V
R-248	15.5	15.0	2.0	2.0	6.0	III	S	Pl. 2, W
Average	21.1	16.4	3.8	3.8	7.0			

Description:

Blade: triangular; edges are slightly concave to slightly convex; recurved on R-107; shoulders are generally square but range from slightly barbed to slightly upflaring; most are assymetrical.

Stem: short and contracting in all specimens; bases are pointed on some specimens; comprises approximately 1/6 to 1/9 of total length; base of R-90 is formed by the original cortical surface of the raw material.

Workmanship is good on R-204 and R-246, but is generally poor on the remainder. Specimens R-90, 107, 225, and 248 are worked essentially on one face only; the remainder are bifacially chipped.
Reference: Suhm and Jelks, 1962: 269, pl. 135.

FRILEY (?)

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-75	24.5	12.0	3.5	4.5	6.5	—	S	Pl. 2, X
R-131	22.5	12.5	3.0	4.0	7.5	II	C	Pl. 2, Y
Average	23.5	12.3	3.3	4.3	7.0			

Description:

Blade: roughly triangular; edges recurved; weak serrations; shoulders are prominent and project sharply upward toward the distal end on one specimen (R-131) - less sharply on R-75.

Stem: edges are slightly expanding; bases are slightly concave; comprises approximately 1/6 of total length.

Workmanship is good. Both specimens are bifacially chipped. The malformed shoulder and stem on R-75 is due to an imperfection in the material.

Discussion: Consultation concerning the identity of these two specimens has resulted in no unanimous opinion, principally because the barbs are not clearly recurved toward the distal end of the point. The combination of morphological traits encountered however, seems sufficient to suggest that these specimens are closely related to the Friley type as encountered in the more northern portions of East Texas and northwestern Louisiana.
Reference: Bell, 1960: 46, Story, 1965: 161, fig. 8; Webb, 1963: 180, fig. 11.

FERDIZ

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-163	22.0	15.0*	3.0	3.0	5.0	II	S	Pl. 2, I
R-244	17.0	14.0	3.5	4.5	4.5	III	Q	Pl. 2, K
R-260	19.0	16.0*	3.5	4.5	6.0	III	C	Pl. 2, J
Average	19.3	15.0	3.3	4.0	5.2			

Description:

Blade: triangular; edges slightly concave to slightly convex; R-163 is serrated; shoulders are wide; R-163 is slightly barbed.

Reference: Suhm and Jelks, 1962: 235, pl. 142.

Stem: edges are slightly contracting; bases are pointed to rounded; comprises 1/4 to 1/7 of total length.

Workmanship is generally good. All specimens are bifacially chipped.

A-1

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-106	—	29.0	4.5	4.5	10.0	III	S	Pl. 2, DD
R-202	31.0	19.5	6.0	3.0	8.0	III	S	Pl. 2, Z
R-203	21.0*	24.0*	4.5	3.0	7.5	III	Q	Pl. 2, CC
R-227	21.5	18.0	3.5	3.0	5.0	II	Q	Pl. 2, BB
R-251	31.0*	20.0*	4.5	4.5	7.0	III	Q	Pl. 2, AA
Average	26.0	25.1	4.6	3.6	7.5			

Description:

Blade: triangular; edges straight to strongly concave; all specimens are barbed except R-251 which has upflaring shoulders; barbs may be rounded or squared at the tips; R-202 is markedly asymmetrical.

Stem: edges are contracting; bases are rounded or pointed; R-106 and R-251 have cortex remaining on base; stems comprise

1/7 to 1/10 of total length.

Workmanship is generally good. All specimens are bifacially chipped. R-227 has asphalt adhering to stem.

Discussion: The blade form of these specimens is very similar to that of the Catahoula type (Bell, 1960:16), the principal difference being in the stem form. The stem form, on the other hand, is quite similar to that found in the Clifton type. Specimens similar in form to A-1 have been found sporadically throughout the Galveston Bay area and are now being recovered in some numbers in the Comroe, Texas area (Harry Shafer, Don Moore, personal communications; Chandler, 1967).

A-2

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-148-S	--	--	4.0	4.5	7.0	--	Q	Pl. 3, B
R-253	--	25.0	4.0	8.0	10.0	II	C	Pl. 3, A
Average	--	25.0	4.0	6.3	8.5			

Description:

Blade: roughly triangular (?); edges slightly concave; shoulders are roughly squared; barbs are large and squared.

Stem: edges are parallel; bases are flat; comprises an unknown portion of total length.

Workmanship is fair. Both specimens are bifacially chipped.

A-3

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-43	--	14.0	4.0	4.5	7.0	II	Q	Pl. 3, E
R-120	--	17.0	3.5	6.0	8.5	III	Q	Pl. 3, D
R-210	14.5	9.5	3.0	2.0	3.5	III	C	Pl. 3, F
R-224	23.5	18.0*	4.0	4.0	7.0	III	Q	Pl. 3, C
Average	19.0	14.6	3.5	4.1	6.5			

Description:

Blade: triangular; edges slightly convex; shoulders project at right angles to the stem; all specimens are characterized by prominent laterally projecting shoulders.

Stem: edges are more or less straight; bases range from slightly concave to slightly convex; comprises 1/6 to 1/7 of total length.

Workmanship is fair. All specimens are bifacially chipped.

Reference: Duffield, 1961:76, Fig. 8, B.

A-4

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-14	12.0	11.0	3.0	4.5	8.0	III	Q	Pl. 3, M
R-100	27.0	15.0	4.0	3.5	5.5	III	S	Pl. 3, H
R-138	29.0	10.0	3.5	3.5	5.0	III	S	Pl. 3, G
R-228	--	18.0	4.5	3.5	6.0	II	S	Pl. 3, I
R-229	22.0	13.0*	4.0	2.5	4.5	II	Q	Pl. 3, K
R-250	--	15.0	3.5	4.5	7.0	III	S	Pl. 3, L
R-251	--	18.5	4.5	4.0	6.0	III	S	Pl. 3, J
Average	22.5	14.4	3.3	3.7	6.0			

Description:

Blade: triangular; edges straight to slightly concave; shoulders vary from right angle (R-14, 100, 138, 250) to slightly downward projecting (R-228, 229, 251).

Stem: edges are slightly contracting; bases are flat (R-100, 228) to slightly convex (R-14, 138, 229, 250, 251); comprises approximately 1/3 to 1/9 of total length.

Workmanship varies from good to poor. All specimens are bifacially chipped.

A-5

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-19	15.5*	14.5	3.5	4.0	6.0	III	S	Pl. 3, N
R-262	--	13.0	3.0	5.5	7.0	III	C	Pl. 3, O
Average	--	13.8	3.3	4.8	6.5			

Description:

Blade: triangular; edges slightly concave; shoulders project approximately at right angles from stem.

Stem: edges slightly expanding, base is rounded; comprises approximately 1/4 of total length.

Workmanship is fair. Both specimens are bifacially chipped.

A-6

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-244	19.0	15.5	5.5	5.0	8.0	III	C	Pl. 3, T
R-250	25.5	16.5	5.0	5.0	8.0	III	Q	Pl. 3, S
R-252	25.0	18.0*	5.0	3.0	6.5	II	S	Pl. 3, R
R-253a	26.0	19.0	6.0	7.0	11.0	II	J	Pl. 3, Q
R-253b	29.5*	24.5	6.0	3.0	9.0	II	S	Pl. 3, P
Average	25.0	18.7	5.5	4.6	8.5			

Description:

Blade: roughly triangular; edges slightly concave to convex; shoulders vary from slightly downward to slightly upward projecting. All specimens are unusually thick for arrow points.

Stem: edges slightly contracting to straight; base probably flat; comprises 1/4 to 1/10 of total length.

Workmanship is generally very poor (except for R-253b which is fair), and gives the impression that at least some of these specimens may represent unsuccessful attempts at projectile point manufacture. All specimens are bifacially chipped, although R-250 and R-253a are mainly unifacially worked.

ARROW FRAGMENTS

24

These unidentifiable fragments are listed here only to make more complete our knowledge of the distribution within the site of arrow points, blade serrations, stem forms and stone materials.

R- No.	A.U.	Serrated	Stem Form	Material
R-21	III		straight	S
R-41	III	X		S
R-91	III	X		S
R-100	III	X		C
R-105	III	X		C
R-105	III			S
R-105	III	X		S
R-108	III			S
R-114	II	X		C
R-123	III	X		S
R-139	III			C
R-140	III			C
R-147-S	--	X		S
R-210	III	X		Q
R-210	III			C
R-213	Ib			Q
R-214	Ib		straight	C
R-226	III			S
R-226	III			S
R-230	II			Q
R-230	II			S
R-230	II			S
R-233	II			S
R-244	III			S
R-245	II			C
R-251	III			C
R-253	II			C
R-257	II			S
R-260	III			C
R-260	III			Q

DART POINTS: This functional category consists of 55 specimens which, because of their generally larger dimensions, appear to have been suitable for hafting on larger shafts.

As was done with the arrow points, these specimens were subdivided into previously recognized types and into descriptive categories on the basis of their total morphology, with the emphasis however, placed upon stem form. It is recognized that a functional overlap very likely exists between dart points and arrow points, and between dart points and knives.

BOOKER

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-252	50.0*	33.0	9.5	14.0	20.0	II	C	Pl. 3, U

Description:

Blade: triangular, edges concave; prominent barbs and down-flaring shoulders; asymmetrical.

Stem: edges are expanding; base is flat; comprises approximately 1/4 of total length.

Workmanship is fair. This specimen is bifacially chipped.

Reference: This is a new type named by D. T. Kent, Jr. (Dee Ann Story, personal Communication.)

ELLIS

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-213	--	24.0*	8.5	9.0	17.5	Ib	C	Pl. 3, V
R-243	47.0	22.0	8.0	11.5	20.5	Ia	C	Pl. 3, W
Average	--	23.0	8.3	10.3	19.0			

Description:

Blade: triangular; edges slightly convex; prominent shoulders project very slightly upwards.

Stem: edges are expanding; bases are slightly convex; comprises approximately 1/4 of total length.

Workmanship is generally good. Both specimens are bifacially chipped and have asphalt adhering to the stem area.

Reference: Suhn and Jelks. 1962, 182. pl. 94.

GARY

This group of 11 specimens all share those attributes associated with the Gary type as defined by Newell and Krieger (1949:164-65); i.e., triangular blade and contracting stem. Physical distinctions however, are made within this group, some of which are identified with varieties proposed by Johnson (1962).

GARY - also variety

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-233	36.0*	31.5	12.5	7.5	15.0	II	C	Pl. 4, B
R-250	34.0	28.0	11.0	8.0	16.0	III	C	Pl. 4, A
Average	35.0	29.8	11.8	7.8	15.5			

Description:

Blade: roughly triangular; edges straight to slightly concave; very prominent shoulders projecting at right angles to the vertical axis of the artifact; not barbed.

Stem: contracting; base is rounded; comprises approximately 1/5 to 1/4 of the total length of the artifact.

Workmanship is crude with relatively large flakes removed bifacially.

Discussion: The crude workmanship, great thickness, and general form of these specimens seem to relate them morphologically to the also variety of the Gary type. (Johnson, 1962:163; Story, 1965:190-192).

GARY - kaufman variety

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-142	41.0*	25.0	7.5	11.0	11.5	III	Q	Pl. 4, D
R-194-S	43.0*	27.0	5.0	10.5	11.0	--	Q	Pl. 4, F
R-213	38.0*	22.5	8.0	8.0	10.0	Ib	S	Pl. 4, E
R-230	--	25.0	5.0	--	11.0	II	Q	Pl. 4, G
R-265	37.0	21.0	9.0	8.0	11.0	Ib	C	Pl. 4, C
Average	39.8	24.1	6.9	9.4	10.9			

Description:

Blade: triangular; edges straight to slightly concave; shoulders are prominent; no barbs.

Stem: contracting; base is rounded to pointed; comprises 1/5 to 1/4 of total length.

Workmanship is generally good to fair (depending on the material used); R-265 has asphalt adhering to the stem.

Discussion: The general form and fair workmanship of these specimens seems to relate them morphologically to the kaufman variety of the Gary type (Johnson, 1962:161-163; Story, 1965:193).

GARY - (miscellaneous)

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	
R-76	41.0*	25.5	7.0	11.0	16.0	Ib	S	Pl. 4, I
R-144	40.0*	18.0	6.5	11.0	14.0	Ib	C	Pl. 4, K
R-194-S	--	18.0	6.5	8.0	10.5	--	C	Pl. 4, J
R-258	50.0*	24.0	9.5	14.0	16.5	II	Q	Pl. 4, H
Average	43.7	21.4	7.4	11.0	14.3			

Description:

Blade: triangular; edges are slightly concave to slightly convex; shoulders are less prominent than the two previously described varieties of Gary; no barbs.

Stem: contracting; bases are rounded; comprises about 1/3 of total length.

Workmanship is fair to good; R-144 has asphalt adhering to the stem.

Discussion: This is very likely a fortuitous grouping of Gary forms which do not clearly identify with any previously defined variety.

NECHES RIVER

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-189	34.5	20.0	9.5	10.0	18.5	Ib	C	Pl. 3, X
R-253	33.0	21.0	8.5	10.0	20.0	II	C	Pl. 3, Y
Average	33.7	20.5	9.0	10.0	19.2			

Description:

Blade: triangular; edges are straight to slightly convex and are serrated; shoulders are moderately prominent, asymmetrical, and barbed on only one side of blade.

Stem: edges are expanding, bordering on side-notched; bases are flat to slightly convex; comprises approximately 1/3 of total length.

Workmanship is fair to good. Both specimens are bifacially chipped; R-253 has asphalt adhering to the stem area.

Reference: Jelks, 1965:140-141, fig. 72.

PAIMILLAS

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-194-S	41.0	23.5	9.0	8.0	14.0	--	S	Pl. 4, M
R-255	49.0	20.0	8.0	9.0	13.0	Ib	S	Pl. 4, L
Average	45.0	21.7	8.5	8.5	13.5			

Description:

Blade: triangular; edges are convex; asymmetrical with shoulders more pronounced on one side than the other; shoulders are not prominent and project upwards.

Stem: expanded bulbous stem; comprises approximately 1/5 of total length.

Workmanship is fair. Both specimens are bifacially chipped.

Reference: Suhm and Jelks, 1962: 229, pl. 115.

WILLIAMS

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-26-S	46.0	26.0	12.5	9.0	18.5	--	Q	Pl. 4, Q
R-74	44.0*	26.5	8.5	12.5	21.9	Ib	C	Pl. 4, P
R-78	44.0	26.5	7.0	12.0	19.5	Ib	C	Pl. 4, N
R-192-S	61.0	28.5	10.5	13.0	21.0	--	C	Pl. 4, O
Average	47.5	26.6	9.3	11.6	20.0			

Description:

Blade: triangular; edges straight to convex; blades generally asymmetrical, except for R-78; shoulders are prominent and slightly barbed.

Stem: edges are expanding; bases are flat to slightly convex; stem corners are rounded; comprises 1/4 to 1/5 of total length. Bases are formed by cortex on R-74 and R-192-S.

Workmanship is fair to good. All specimens are bifacially chipped.

Reference: Suhm and Jelks, 1962: 259, pl. 130; c.f. Jelks, 1965: 144, 146, fig. 72, 74, (Forms X & Y).

WOODEN

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-36	40.5	23.5	8.0	7.5	17.0	Ib	S	Pl. 4, T
R-194-S	28.0	20.0	6.0	8.5	13.0	--	C	Pl. 4, R
R-262	44.5	25.0	6.5	9.5	14.0	III	S	Pl. 4, S
Average	37.7	22.8	6.8	8.5	14.7			

Description:

Blade: roughly triangular; edges straight to convex; shoulders are prominent and asymmetrical.

Stem: edges straight to expanding; bases are flat and consists of the original cortex surface of the raw material; comprises approximately 1/3 to 1/5 of total length.

Workmanship is poor to fair. All specimens are bifacially chipped; R-36 and R-194-S have asphalt adhering to the stem area.

Reference: Jelks, 1965: 142-143, fig. 73.

D-1

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-38	54.5	19.0	9.5	11.5	15.0	Ib	C	Pl. 5, A
R-194-S	54.5	29.0	13.0	7.5	17.0	--	C	Pl. 5, D
R-198	50.5	30.0	12.0	11.5	20.0	Ib	S	Pl. 5, C
R-255	--	20.5	--	10.5	14.0	Ib	C	Pl. 5, B
Average	53.2	26.0	11.5	10.2	17.3			

Description:

Blade: triangular; edges straight to slightly convex; R-194-S is strongly beveled; shoulders are weak to prominent.

Stem: edges of R-38, 198, 255 are slightly expanding, R-194-S is straight; bases are convex; comprises approximately 1/4 to 1/7 of total length.

Workmanship is fair. All specimens are bifacially chipped; R-38 and R-255 have asphalt adhering to the stem area.

D-2

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-17	35.0	24.0	9.0	4.5	13.5	III	Q	Pl. 5, G
R-263	30.0	21.5	7.0	4.0	9.0	Ib	Q	Pl. 5, E
R-?-S	29.0	20.5	5.5	4.0	10.0	—	S	Pl. 5, F
Average	31.3	22.0	7.2	4.2	10.8			

Description:

Blade: triangular; edges straight to slightly convex; shoulders are prominent, upflaring, and asymmetrical.

Stem: edges are contracting, bases vary from flat (R-263) to slightly convex (R-17) to pointed (R-?-S); comprises approximately 1/7 to 1/8 of total length.

Workmanship is poor to fair. All specimens are bifacially chipped.

D-3

R-No.	L	W	T	S.L.	S.W.	Mat.	A.U.	Illus.
R-194-S	31.0	21.0	6.0	10.5	20.0	S	—	Pl. 5, H
R-205-S	—	20.0	9.0	16.0	17.0	C	—	Pl. 5, I

Description:

Blade: triangular on R-194-S (blade is missing on R-205-S); shoulders are more or less prominent, upward sloping, and asymmetrical.

Stem: long, asymmetrical side-notches; bases are slightly convex (R-205-S) and flat (R-194-S); comprises approximately 1/3 of total length on R-194-S.

Workmanship is poor (R-194-S) to fair (R-205-S). Both specimens are bifacially chipped.

Dart Fragments

These unidentifiable fragments are listed here only, to make more complete our knowledge of the distribution within the site of dart points, stem forms, and stone materials used.

R-No.	A.U.	Stem Form	Material
R-22	III		C
R-101	III		S
R-124	III		S
R-159	Ib		S
R-161	Ib		C
R-179	Ib	straight	S
R-180	Ib	straight	C
R-183	Ib		C
R-185	Ib	straight	C
R-191-S	--		C
R-191-S	--		S
R-194-S	--		C
R-194-S	--		C
R-199	Ib	straight	C
R-207	--	contracting	S
R-211	II		S
R-211	II		C
R-213	Ib		C
R-245	II		S
R-254	Ib		S
R-269	Ia		C

TOOL ASSEMBLAGE

The remaining functional categories are for the most part identical with the descriptive categories, and all are grouped together under the heading "Tool Assemblage". This includes all stone specimens (no bone tools were recovered) that have been modified in some degree to become a utilitarian implement other than a projectile point.

Knives:

This category includes a series of generally large, thick, biface implements, occasionally with stems, which have the form of knives more than anything else.

Knife (1)

R-No.	L	W	T	A.U.	Mat.	Illus.
R-247	61.0	30.0	23.0	II	C	Pl. 6, A

Description:

This specimen is a bifacially percussion flaked, elongated stream cobble. Flakes have been removed from a little more than half the length of the cobble to form a jagged cutting edge.

Discussion:

This specimen is more or less similar to the Perkin Pike (Jelks, 1965:175-176) and to the type V blade (Tunnell, 1961:133, fig. 6g-i).

Knife (2)

R-No.	L	W	T	A.U.	Mat.	Illus.
R-248	40.5	47.0	9.0	III	S	Pl. 6, B

Description:

This specimen is a sub-circular, bifacially percussion flaked blade. The cutting edge is very irregular and extends around the entire circumference except for about 2 cm. which remains unworked.

Knife (3)

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-265	62.0	29.5	10.0	6.0	21.0	Ib	S	Pl. 6, C

Description:

This specimen is a bifacially percussion chipped, stemmed knife. The blade is triangular. The stem is asymmetrical, one side merging with the blade without a shoulder. The one shoulder present slopes upward toward the blade tip. The base at the stem is flat and consists of cortex. The material tends to chip into irregular, tabular cleavage fragments that parallel the relief wood structure. The stem comprises approximately 1/10 of the total length.

Relict

Knife (4)

R-No.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-143	55.0	23.0	12.0	9.0	13.0	Ib	Q	Pl. 6, E
R-233	45.0	17.0	11.0	4.0	6.5	II	C	Pl. 6, D

Description:

These roughly lanceolate blades are characterized by proportionately small stems ($1/6$ to $1/11$ of total length). Both blades have been bifacially chipped by the percussion technique and have irregular cutting edges. The stems grade into the blade with no perceptible shoulder.

Knife (5)

R-No.	L	W	T	A.U.	Mat.	Illus.
R-61	34.0	22.5	7.5	Ib	C	Pl. 6, H
R-145-S	36.0	24.5	8.0	--	S	Pl. 6, F
R-194-S	40.0	22.0	9.0	--	S	Pl. 6, G
R-261	34.0	28.0	12.0	Ib	S	--

Description:

These bifacially percussion chipped blades are roughly lanceolate in shape, with rounded tips and flat bases that consist of cortex. The cortex base has been very nearly removed on specimen R-145-S.

Knife (6)

R-No.	L	W	T	A.U.	Illus.	Mat.
R-186	48.5	22.0	11.5	Ib	Pl. 6, I	C

Description:

This specimen is a lanceolate, bifacially percussion chipped blade. The cutting edge extends around the entire specimen and is quite irregular. The blade is plano-convex in cross-section.

Knife (7)

R-No.	L	W	T	A.U.	Mat.	Illus.
R-29	38.0	11.0	7.5	III	S	
R-34	56.0	17.5	12.0	II	S	Pl. 6, J
R-237	37.0*	10.0	6.5	Ib	S	

Description:

These specimens are elongate, bifacially chipped blades

with roughly triangular cross-sections. The cutting edges along the long axis are more or less parallel. One end is pointed or rounded; the other end is more or less squared. Examination under a microscope shows no striations about the pointed end which would suggest use as a drill. These tools were used as cutting and perhaps perforating instruments.

Uniface (1)

R-No.	L	W	T	A.U.	Mat.	Illus.
R-105	24.0	14.0	3.5	III	C	
R-231	20.0	12.0	2.0	II	C	Pl. 5, Q

Description:

The specimens are roughly ellipsoid in outline, plano-convex in cross-section, and well flaked on the convex surface. R-231 has had a few small use flakes removed from the plane surface. No cortex remains.

Uniface (2)

R-No.	L	W	T	A.U.	Mat.	Illus.
R-31	37.0	29.0	7.5	II	C(5)	
R-40	to	to	to	Ib	C(2)	
R-75	20.0	15.0	2.0	--	C	
R-94-S				--	C(2)	Pl. 5, R
R-191-S				--	C	
R-239				Ib	C(3)	
R-241-S				--	C	

Description:

Very roughly circular in outline, plano-convex in cross-section, generally crudely flaked on convex side only, cortex commonly remains.

Uniface (3)

R-No.	L	W	T	A.U.	Mat.
R-40	41.0	23.5	11.5	Ib	C(2)
R-110	to	to	to	II	C
R-111	23.0	15.0	2.0	II	C
R-156				Ib	C
R-162				Ib	C
R-191-S				--	C(2)
R-239				Ib	C(2)

Description:

This is probably a fortuitous grouping of irregularly shaped flakes with small use(?) flakes removed from one side only. Most are plano-convex and commonly have cortex remaining.

Gravers

R-No.	L	W	T	A.U.	Mat.
R-22	37.0	14.0	7.0	III	C
R-247	21.0	20.5	4.0	II	C

Description:

These specimens are irregularly shaped flakes that would otherwise be classed as Unifaces save for small projections which may be graver tips. This may very well be a fortuitous classification.

Spokeshaves

R-No.	L	W	T	A.U.	Mat.	Illus.
R-22	29.0	23.0	3.5	III	C	Pl. 5, T
R-125	22.0	13.0	4.0	III	C	

Description:

Irregularly shaped uniface flakes on which excessive use along one edge has created a concavity.

Biface

R-No.	L	W	T	A.U.	Mat.	Illus.
R-191-S	30.5	23.5	9.5	---	S	Pl. 5, S

Description:

This specimen is a thick, crudely chipped, sub-rectangular biface tool. Cortex remains on both surfaces.

Miscellaneous biface fragments

R- No.		A.U.	Mat.
R-12		III	S
R-41		III	C
R-66		--	S
R-105		III	C
R-117		III	S
R-125		III	S
R-135-S		--	S
R-157	No measurements	Ib	C
R-200-S		--	S
R-230		II	S
R-231		II	S
R-241-S		--	Q
R-252		II	C
R-266		II	S

Description:

This category consists of miscellaneous fragments of bifacially chipped artifacts that, because of their incompleteness, cannot be assigned to any particular functional category. Included in this group are two specimens (R-200-S; R-266) which may be unfinished projectile points. One specimen (R-241-S) may have been a large broad-bladed knife or dart point; several appear to be knife fragments. The main purpose of listing them here is to tabulate the occurrence of biface tools and the kinds of material used to make them.

Hammerstone

R-No.	L	W	T	A.U.	Mat.	Illus.
R-130	105.0	90.0	61.0	III	Q	Pl. 6, K

Description:

This is an irregular cobble best visualized as something approximating an ellipsoid that has been severely battered about its greatest diameter.

Gouge (?)

	L	W	T	A.U.	Mat.	Illus.
R-219	--	32.0	16.0	Ia	C	Pl. 5, O

Description:

This fragment is suggestive of the Proximal end of a gouge. The original tool apparently was more or less rectangular, biconvex in cross section, and has been bifacially chipped on both sides.

End Scraper

R-No.	L	W	T	A.U.	Mat.	Illus.
R-22	24.5	26.0	6.0	III	S	Pl. 5, P

Description:

This is a bifacially chipped, "fan" shaped tool with a finely chipped cutting edge prepared along the broad, curving end.

Microflints

R-No.	L	W	T	A.U.	Mat.	Illus.
R-105	24+	9.0	5.5	III	C	--
R-113	20+	3.0	3.0	II	C	Pl. 5, N
R-126	17.0	6.0	2.0	III	C	Pl. 5, M
R-161	21.0	6.0	2.5	Ib	S	Pl. 5, L
R-215	19.5	8.0	3.0	Ib	C	Pl. 5, K
R-250	20+	15.0	5.0	III	C	--

Description:

These specimens are small perforating and scraping tools. Specimens such as R-105, 113, 215, and 250 are commonly referred to as drills, however these show no evidence of grinding, rather they exhibit microscopic fractures apparently identical to those described by Ford and Webb (1956) for microflints found at the Jaketown site

and the Poverty Point site. Our specimens R-113, 126, 161, and 215 are identical to microflints from the Poverty Point site; specimens R-105 and 250 are a little different but seem to be the basal portions of artifacts originally possessing narrow points which have since broken off. The similarity seems sufficient to include them in the group of microflints. To be sure, we did not recover a microflint industry and the comparison may very well be invalid; nevertheless, the artifacts are similar.

Blanks (?)

Dimensions:

R-no.	L	W	T	A.U.	Mat.	Illus.
R-13	40.0	32.0	7.0	III	S	-
R-22	25.0	20.0	6.0	III	S	-
R-219	27.5	13.0	5.5	Ia	S	Pl. 5, U

~~wood~~Description:

These specimens are tabular cleavage fragments that have been sawed or ground into more or less rectangular shapes. Some specimens show fairly clear evidence of sawing. Whether or not these are actually materials intended to have been formed into projectile points or tools of some sort is problematical; that they have been specially prepared for some purpose seems clear, however.

Stemmed perforator:

R-no.	L	W	T	S.L.	S.W.	A.U.	Mat.	Illus.
R-266	46.0	19.0	17.0	9.0	11.0	II	C	Pl. 5, J

Description:

This specimen is bifacially percussion chipped with a more or less straight-sided stem and a thick subcircular mid-section that tapers to a point at the distal end. Since no grinding was seen about the tip, it seems more likely that this tool functioned as a perforator.

Awl

R-no.	L	W	T	A.U.	Mat.	Illus.
S-1	34.0	19.0	9.0	X	S	

Description:

This specimen is a crudely chipped, triangular shaped tool which, judging from a few small pressure flake scars at the distal end, functioned as an awl or punch.

MISCELLANEOUS UTILIZED FLAKES:

This category consists of 48 flakes that exhibit very small conchoidal fractures along one or more edge that are presumably due to some cutting or scraping utilization. These are recorded here principally to aid in examination of the distribution of the various kinds of stone materials used at the site.

R-no.	A.S.	Material
R-13	III	S
R-22	III	S(2), C
R-31	II	S(2), C(2)
R-40	Ib	C
R-44	Ib	S(2), C(2)
R-66	-	S(2), C, Q
R-75	-	S(4), C(2)
R-82	III	C
R-92	III	S
R-105	III	S
R-110	II	S
R-121	III	S
R-123	III	S
R-125	III	S(2), C
R-128	II	Q
R-190-S	-	C
R-191-S	-	S, C(3)
R-194-S	-	S
R-219	Ia	S
R-222	II	S
R-239	Ib	S(2), C(3)
R-246	II	S
R-250	III	C

MISCELLANEOUS MATERIALS

Under this heading are included descriptions of all remaining specimens except unmodified animal bone.

CLAYBALLS

Approximately 11,000 objects of hard clay were excavated of which only about 150 were retained after washing. To have discarded the clayballs now seems to have been unfortunate, as examination of the few that remain shows that it might have been

possible to group the material into categories of potential cultural significance. These are: discarded fired(?) pottery clay; fragments of laminated sediment transported by floodwaters; and clay with impressions of twigs and branches that are suggestive of daub, but are not clearly so.

Although unable to examine the validity of these groups and their distribution throughout the site, it seemed worthwhile nevertheless, to examine them more closely. Determination of the mineral phases present in the clayballs by means of X-ray diffraction would make it possible to differentiate between unaltered products of sedimentary processes, and those modified by fire.

Initially, a sample of clayballs was selected for maximum morphological dissimilarity. Following the analysis of this sample, a second sample was selected to give maximum vertical and horizontal distribution throughout the excavation. Accompanying this second sample were one specimen each of midden soil and bed-rock clay, to be used for comparison purposes. In all, thirteen samples were tested.

The X-Ray diffraction patterns of the first group of samples indicated that all of these morphologically dissimilar clayball specimens had been heated up to at least a temperature where all of the original clay minerals were destroyed (approximately 500-600°C, D. R. Lewis, personal communication). Diffraction patterns of the second group of samples produced similar results. The soil samples by way of contrast, contained much greater percentages of unaltered clay minerals. The details of the X-ray diffraction results are not presented here, but are available from the author if desired.

Although clayballs have rarely been mentioned in the literature for southeast Texas, their presence is more or less common knowledge. In view of our investigations of the Jamison site clayball specimens, there seems to be a reasonable possibility that a very large proportion of the clayballs originate in very close proximity to some form of domestic activity, i.e., house or shelter, pottery manufacture, or fire hearth. It would seem important in future excavations where clayballs are encountered, to diligently recover as many as possible in hopes of being able to interpret from their form and distribution, some knowledge of the spatial arrangement of these domestic activities during any given occupation of a site.

ASPHALT:

Several small fragments of a material resembling asphalt were recovered from N505/N530: 18-24" (R-81). Unfortunately this square is thought to have been disturbed during excavations of the money hole, and it cannot be stated with certainty that this material is associated with the Indian occupation. However, several projectile points were recovered with asphalt adhering to their stems.

MISCELLANEOUS ROCK FRAGMENTS:

R-151: Brownish-yellow ferruginous sandstone, bedding is fairly prominent; medium to coarse grained. Very likely this is an imported material rather than a locally formed concretion. There are no obvious marks to indicate function.

Dimensions: 160 by 75 by 60 mm. Occurs in A:U. II.

R-150: Yellowish-brown, well sorted, very fine grained mica-
ceous sandstone. There are no obvious marks to indicate function.
Dimensions: 35 by 25 by 10 mm. Occurs in A.U. II.

FOOD REMAINS

Food remains consisted of one nut fragment (possibly chinquapuin) and a large quantity of bone. The provenience of the various species by excavation unit is presented in Table 2 and by analysis unit in Table 3.

Preservation of animal bone at this site was uniformly poor and very likely related to the acidity of the soil. In view of this, and the fact that no special techniques were employed to recover the remains of any smaller animals that may have been present (i.e., fish, rodents), it can be argued that our faunal list is not representative.

Bone identifications were made by B. H. Slaughter of Southern Methodist University. Although several kinds of vertebrates are represented, the majority of specimens are of the white-tailed deer. Slaughter noted that of these deer remains, most of the long bone specimens are humeri. Also present are only one deer vertebra and quite a few foot elements. This suggests that deer were butchered where killed, with the forelimb (and shoulder?) most commonly brought back to camp. Although many deer teeth were present, these could represent as few as three individuals.

Although some of the species are confined to particular analysis units, it is difficult to see any change in their temporal distribution that cannot be explained in terms of the relatively limited sample available.

CULTURAL ANALYSIS

Early in the analytical process I decided to try to group excavation levels in some more realistic (and hopefully, more natural) manner than by simply consolidating arbitrary levels according to their common depth. By plotting specimen distributions on site profiles, the following circumstances were noted: certain levels containing specimens in lower parts of the site were isolated by levels in which artifacts did not occur (although there was apparently no observable change in the midden soil and unmodified animal bones were recovered); the distribution of river pebbles (retained in only 3 squares) showed two fairly prominent peaks which could be correlated laterally from square to square; and in these same 3 squares, the deepest occurrence of clay (grog)-tempered pottery commonly occurred in the same level with the highest peak in the river pebble curve, and never more than one level away from this peak (Fig. 4). The meaning of these river pebble zones is not clear from a geological viewpoint, but the implication however, is that they are natural zones of some sort. In any event, the coincidence of the upper river pebble zone and the first appearance at the site of the clay (grog)-tempering technique strongly suggests that a hiatus of unknown duration occurred in the occupation of the site, and that occupation was

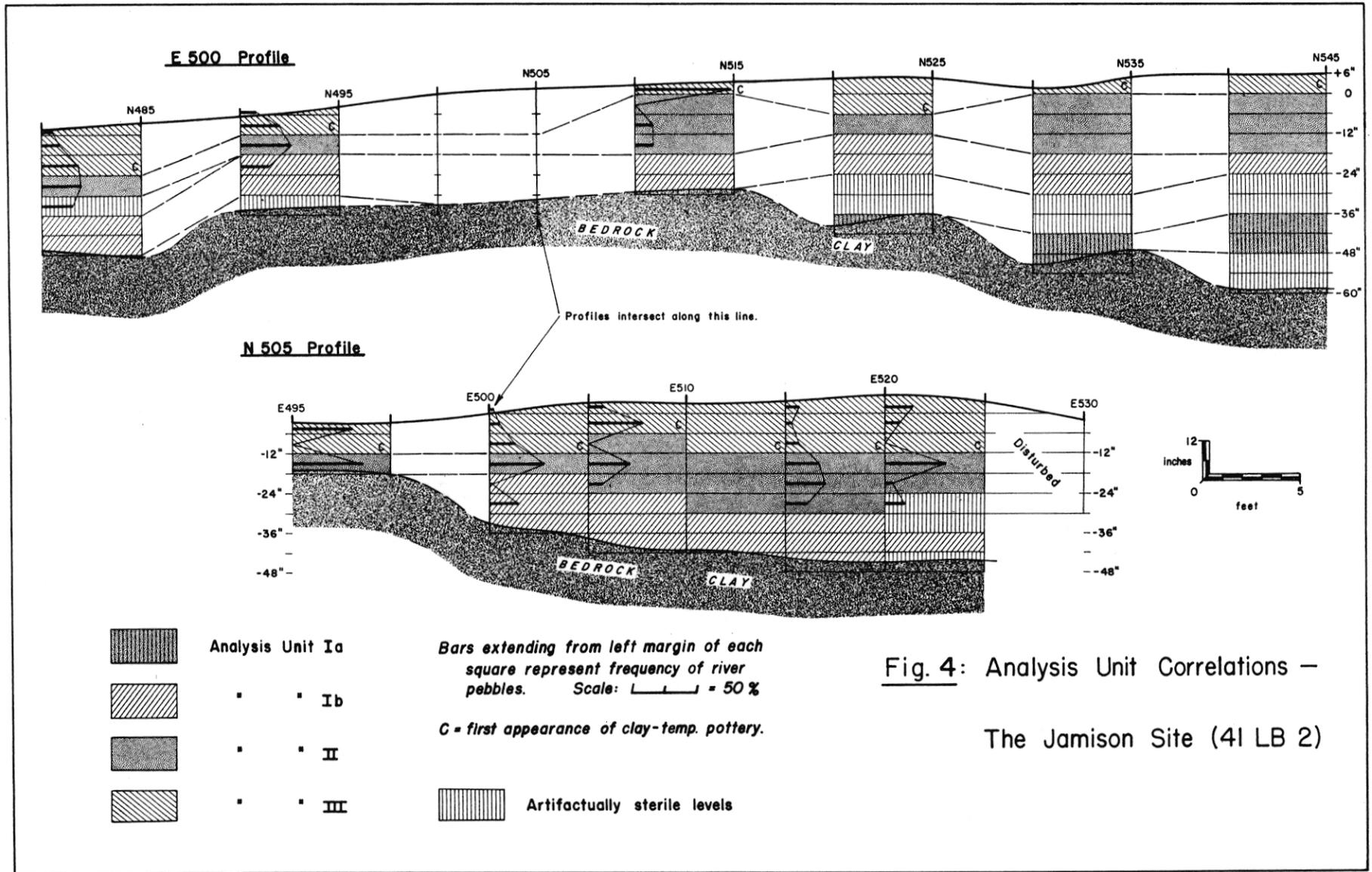


Fig. 4: Analysis Unit Correlations –
The Jamison Site (41 LB 2)

later resumed after the clay (grog)-tempering technique had begun to be used in this area.

With these indications that it might be possible to organize the excavated specimens into units more realistic (or "natural") than consolidated arbitrary levels, such a procedure was used. Square N505/E530 was not included in the analysis unit correlations because it was suspected of being excessively disturbed.

As a result, four analysis units were recognized (Fig. 4). The first (Analysis Unit Ia - lowest and oldest) consisted of levels isolated by artifactually sterile levels; the second (Analysis Unit Ib) is bounded below by artifactually sterile levels and above generally by the first occurrence of sandy paste pottery; the third zone (Analysis Unit II) is bounded below by the first occurrence of sandy paste pottery, and above by the first occurrence of clay (grog)-tempering in pottery; and the fourth (Analysis Unit III - uppermost and youngest) zone is bounded below by the first appearance of clay (grog)-tempering and above by the surface of the site.

It may very well be that Analysis Unit Ia is totally fortuitous; indeed, the situation in squares N505/E520 and N505/E525 does suggest that Analysis Unit Ia merges with Analysis Unit Ib (Fig. 4). The practical effect however, of either combining or separating the two is negligible, and in the absence of any data showing the two units clearly to be continuous, it seems neater to leave them separate. The use of different types of ceramics to divide the site into analytical units is justified because ceramics are far more numerous than any other artifact category and thus can generally be recognized in every square, and because, in the case of the clay (grog)-tempering, there is a strong suggestion that this approximates a time line, i.e., the beginning of reoccupation of the site. Even so, it was not always possible to pick the zone boundaries in some squares with absolute certainty, although the general distribution of artifacts would not be greatly affected.

TRAIT LISTS: the following trait lists characterize the material culture of the four analysis units recognized at this site. The relative popularities of some artifacts and artifact groups are shown in Figures 5 and 6.

Analysis Unit Ia

Site location: on the late Pleistocene Deweyville terrace, midway in elevation between the uplands and the present Trinity River floodplain.

Subsistence:

1. Hunting - only deer remains were recovered, but presumably most animals of the floodplain forest and uplands forest were sought.
2. Gathering - no direct evidence was found, but is inferred considering the environment.

Handwritten notes:
 possible to
 rearrange
 the analysis
 units
 slightly

Technology:

1. The only dart point found was of the Ellis type (expanding stem).
2. One broken bifacially chipped artifact that may have been a small gouge or scraping tool was found.
3. Waste flakes were utilized as cutting instruments.
4. Rectangular, tabular cleavage fragments of silicified fossil wood with neatly prepared edges may have been blanks.
5. Chert was used most often (60%) for manufacturing chipped stone implements; silicified fossil wood was of secondary importance (40%).
6. Asphalt was found on the stem of the Ellis dart point and was presumably used to assist in hafting.

Analysis Unit Ib

Site location: same as Analysis Unit Ia.

Substance:

1. Hunting - deer and turtle remains were recovered; presumably other animals of the floodplain and uplands forests were sought.
2. Gathering - no direct evidence, but is inferred.

Technology;

1. Ten sandy paste potsherds and two arrow point fragments were included in Analysis Unit Ib; these are not thought to be part of the assemblage, but due to mixing.
2. Dart points of Ellis, Gary, Neches River, Palmillas, Williams, Woden, and D-1 types were found.
3. Tools consist of knives (all are roughly lanceolate forms, some with stems); microflints (similar to the Poverty Point microflints); unifacial scraping or cutting tools; and waste flakes apparently utilized as cutting tools.
4. Chert still used most often (60%); silicified fossil wood is of secondary importance (29%); and quartzite is now used in small quantity (5%).
5. Expanding stem dart forms (47%) are preferred over straight stemmed forms (29%) and contracting stemmed forms (24%).
6. Asphalt was commonly used when hafting dart points.

Analysis Unit II

Site location: same as for Analysis Unit Ia.

Substance:

1. Hunting - deer, alligator, turtle, and fish remains were recovered; presumably other animals of the floodplain and uplands forests were sought.
2. Gathering - no direct evidence, but is inferred.

Technology:

(Pottery)

1. Sandy paste wares predominate (99%).

2. Clay (grog)-tempered sherds are very rare (.6%) and probably represent mixing.
3. The locally made pottery types at this time are Goose Creek Plain and Goose Creek Red-Filmed.
4. No information is available on vessel shape; rims are direct with flattened lips and direct with rounded or sharpened lips; bases are noded and rounded (spherical); decoration appears to be confined to lip-notching and red-filming.

(Chipped stone)

1. First significant occurrence of arrow points, which outnumber dart points more than 2 to 1.
2. Expanding, straight, and contracting stem arrows occur in about equal proportions.
3. The arrow point types occurring are Alba, Clifton, Friley(?), Perdiz, A-1, A-2, A-3, A-4, and A-6.
4. Dart points of Booker, Gary, and Neches River types occur.
5. Contracting stem dart forms outnumber expanding stem dart forms about 2 to 1.
6. Tools from this unit consist of an assortment of knives, unifacial cutting tools, graters, microflints, a stemmed drill, and utilized waste flakes.
7. Chert (52%) is still more popular than silicified fossil wood (36%), with quartzite increasing in popularity to about 12%.
8. One arrow and one dart point have asphalt remaining on their stems.

Analysis Unit III

Site location: same as for Analysis Unit Ia.

Subsistence:

1. Hunting - deer and bear remains were found, although other animals of the floodplain and upland forests were presumably sought.
2. Gathering - one nut fragment (chincupuin?) was found, but presumably other plant foods were sought.

Technology:

(Pottery)

1. Sandy paste wares still predominate (89%) although clay (grog)-tempered pottery is now significant (10%); bone-tempered pottery occurred as a minor trait (1%).
2. Sandy paste pottery types are Goose Creek Plain (95%), Goose Creek Incised (3.5%), and Goose Creek Red-Filmed (1.5%).
3. Clay (grog)-tempered types are San Jacinto Plain (8.6%), and San Jacinto Incised (1.1%).
4. No information is available on vessel shapes of the sandy paste ceramics. Rims are direct with thinned lip interiors, direct with flat lips, direct with rounded or sharpened lips, and rolled to the exterior; bases are flat, rounded (spherical), and noded.

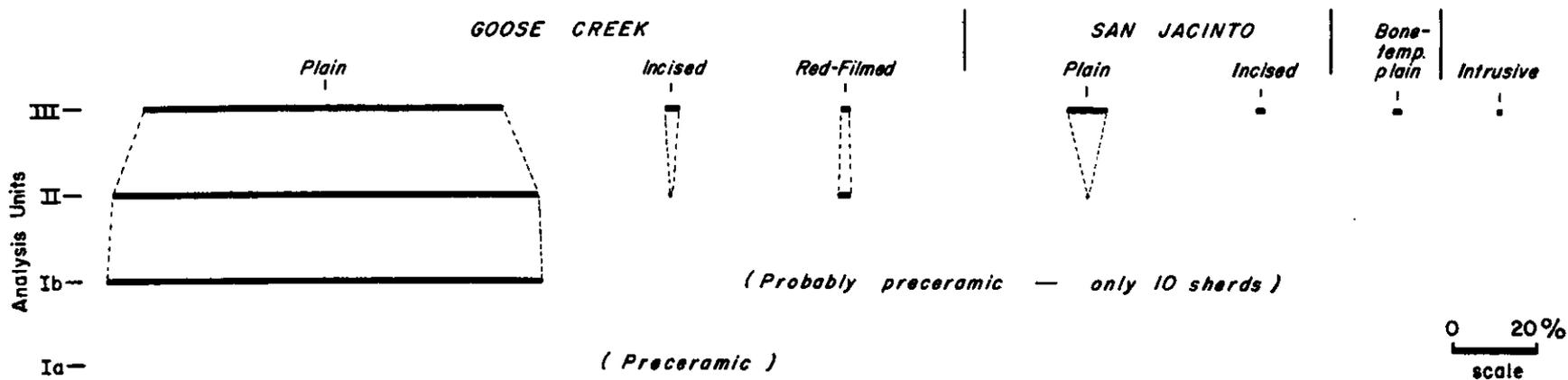


Fig. 5a: Relative popularity of pottery types by analysis units.

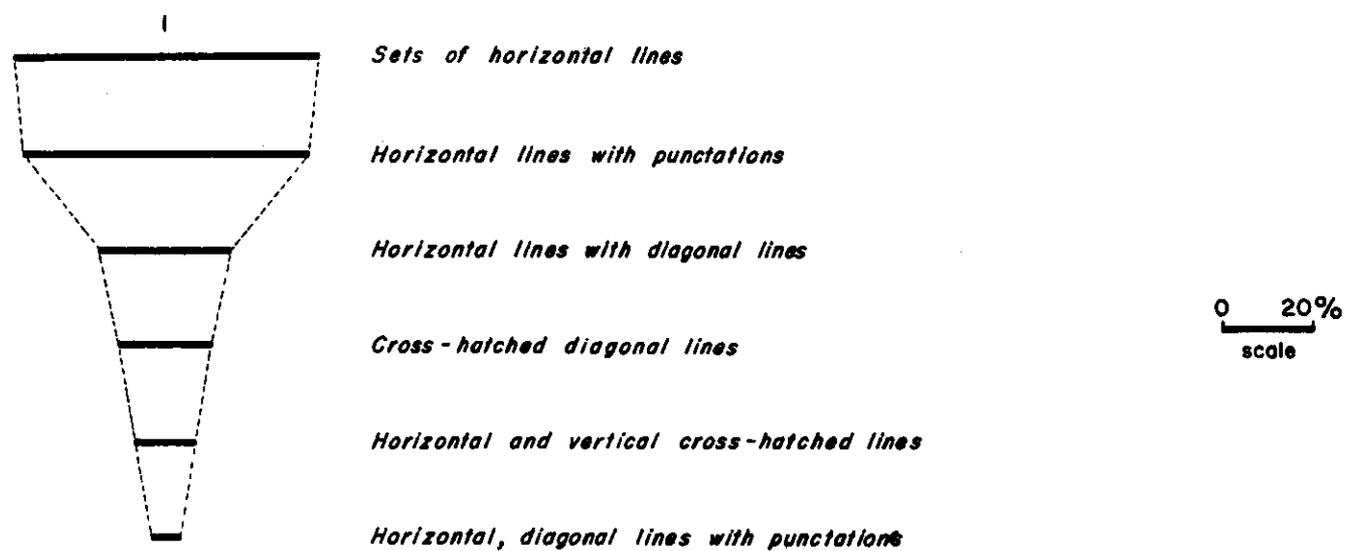


Fig. 5b: Relative popularity of design styles on Goose Creek Incised in Analysis Unit III.

5. Decorations on locally made sandy paste pottery are incising and punctations, lip notching, and red-filming. The principal incised design styles are horizontal sets of parallel lines (53%) and horizontal sets of parallel lines with punctations (30%), with the remaining 37% distributed among four other styles.
6. No information is available on vessel shapes of the clay (grog)-tempered ceramics. Rims are direct with lip thinner on the interior, direct with lip flattened, and direct with lip rounded; one questionable base sherd is flat.
7. Decorations on locally made clay (grog)-tempered pottery consist of incising and lip notching. The only incised design style encountered at the Jamison site on these ceramics was the horizontal set of parallel lines.

(Chipped stone)

1. Arrow points now predominate over dart points 7 to 1; contracting stem arrow points outproportion straight, and expanding stem arrow points 2 to 1.
2. The arrow point types found were Bassett, Clifton, Perdiz, A-1, A-2, A-3, A-4, A-5, and A-6.
3. The dart points are mainly contracting stem forms.
4. The dart point types are Gary, Woden, and D-1.
5. Tools from this unit consist of knives, a unifacial cutting tool, a graver, spokeshaves, a hammerstone, a bifacially chipped end scraper, microflints, blanks, and utilized waste flakes.
6. Silicified fossil wood is now the most popular stone material (51%), chert continued to diminish in popularity (15%) over the proportions found in Analysis Unit II.
7. No projectile points were found with asphalt on their stems. It is not clear if this reflects a real trend or is an accident of preservation.

Trade:

A few sherds of intrusive ceramics are present from the coastal area to the southwest, and from the Caddoan area to the north and northeast. These are Rockport(?) Incised, unclassified incised, and unclassified red-filmed incised. These comprise 1.2% of the ceramics from Analysis Unit III.

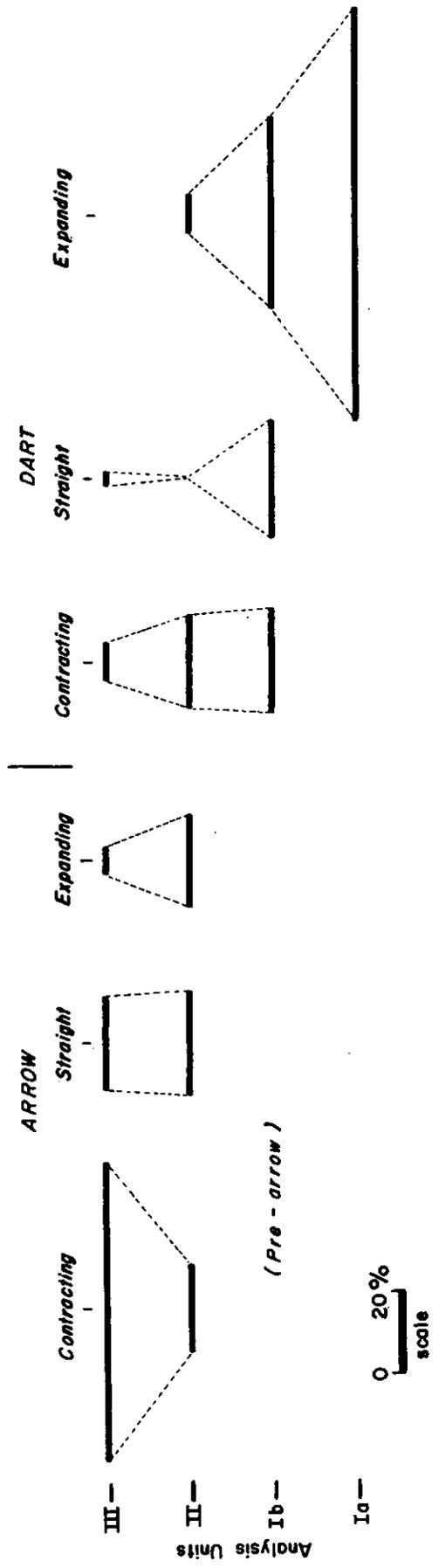


Fig. 6a: Relative popularity of projectile point stem forms by analysis unit.

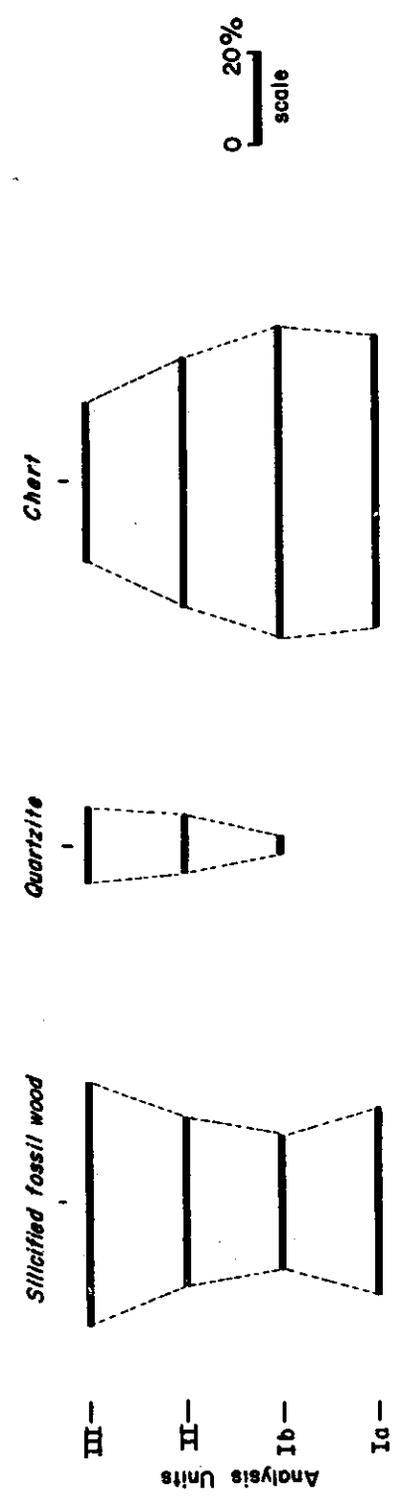


Fig. 6b: Relative popularity of stone materials by analysis unit.

SUMMARY AND CONCLUSIONS

The preceramic analysis units (Ia and Ib) are distinctive not so much for traits they contain, but rather for traits they do not contain, i.e., ceramics and arrow points. Very likely these represent late Archaic occupations, but the specimens present are either not sufficiently distinctive or else are not sufficiently abundant to permit a clear characterization of the assemblages and to permit us to relate them to other preceramic assemblages from other sites.

The problem of relating Analysis Units II and III to other sites is likewise difficult in view of the paucity of published stratigraphic information but, in contrast to the preceramic analysis units, their meaning in relation to an historical framework (expressed in terms of characteristic artifact assemblages) is reasonably clear.

Analysis Unit II relates to a time when plain, sandy paste vessels were the dominant locally made ceramics; red-filmed vessels also occur. Incised vessels are either not present or are extremely rare. Contracting, straight, and expanding stem arrow points were present in about equal proportions; and arrow points of all kinds far outproportioned the presence of dart points.

Analysis Unit III relates to a time when sandy paste ceramics commonly (but not abundantly) included incised and red-filmed vessels; when a new kind of ceramic paste technology (clay-tempering) achieved a small measure of popularity; when contracting stem arrow points far outproportioned the use of other stem forms; and when arrow points as a group literally eclipsed the usage of dart points.

There are, of course, other traits associated with these assemblages, but in the main, these are the distinctive characteristics that should be kept in mind when making comparisons.

At the present time, inter-site comparisons are not generally feasible, for other than the Jamison site excavation and the work currently underway at the Wallisville Reservoir and at Cedar Bayou, ~~no~~ No worthwhile stratigraphic information is available for the Galveston Bay area. The Addicks Basin report (Wheat, 1953) is of little use as a result of an analytical procedure unsuited to present day needs. Other site reports from the area are similarly of little use for historical purposes because of the absence of stratigraphic data, and the use of entirely inadequate artifact descriptions. As a result, we are left to content ourselves with frustratingly inadequate threads of information. It is gratifying then to learn of a series of four ceramic assemblages (covering a longer time span than is represented at the Jamison site) that have recently been recognized at the Wallisville Reservoir and at Cedar Bayou. Two of these are apparently quite similar to

Analysis Units II and III (J. R. Ambler, personal communication).

Since very little in the way of meaningful comparisons can be made at the present time, the concluding paragraphs of this report will be concerned with comment upon a number of questions of broader interest, but which do relate to the Jamison site material.

A fairly clear succession of arrow points has been documented for the Central Texas area (Jelks, 1962: 78-83; Suhm, 1957: 55). In this sequence an expanding stem assemblage (Scallorn and related types) is gradually replaced by a contracting stem assemblage (Cliffiton and related types). A mixed association of both assemblages (a common situation in Central Texas as well) was found at Adiloke Basin (Wheat, 1953: table 3), and the several arrow point types constituting both assemblages have been recovered from sites throughout the Galveston Bay area. Why then, were no specimens of the Scallorn assemblage found at the Jamison site? One implication is that a similar stratigraphic (and chronologic) distinction between the assemblages exists in the Galveston Bay area.

Another arrow point problem requiring attention concerns certain miscellaneous forms. The descriptive categories A-1 ("Hybrid" Cliffiton-Catahoula) and A-3 (straight stemmed with prominent laterally projecting shoulders) occur in some numbers at the Jamison site and appear to be real rather than accidental forms. Similar specimens have been reported as miscellaneous forms from some other East Texas sites (especially in the Conroe area) and an effort should be made to identify them locally.

Bone tools also require study. Bone implements of all types are commonly (although not abundantly) found throughout the Galveston Bay area; yet, at the Jamison site, none were found. It is true that the soil was quite acidic and well drained, thus favoring the destruction of bone in the ground; however, more than 200 fragments of unmodified animal bone were recovered. At this time we cannot say whether the absence of bone tools is due to cultural or natural causes.

Turning to pottery, major separations of artifact assemblages are now being made on the basis of the associations of paste categories and the presence or absence of various kinds of decoration. It is a fact however, that in most collections from this area, the proportion of sandy paste plain sherds is higher than the proportion of all other categories combined. These same sandy paste plain sherds are essentially identical to the sandy paste plain ceramics found over a vast area of eastern and coastal Texas. Clearly then, in order to make our local Galveston Bay ceramics (sandy paste and otherwise) a more distinct and recognizable cultural entity in relation to this vast area in which a similar ceramic technology was employed, we need to pay the very strictest attention to the distribution of overall vessel forms and individual vessel forms for traits, i.e., rims and bases. Similarly, it is essential to record in site reports, the distribution of red-firing, lip treatment, and incised design styles. Enough is presently known of all these

traits to say that at least some will be found to have clear and useful time and/or space meaning.

Another interesting question regards the newly defined clay (grog)-tempered type, San Jacinto Incised. Why, at the Jamison site, is it that horizontal sets of parallel lines were the only design style encountered on this type when contemporaneously in the same site we see six design styles employed on the sandy paste ceramics and the clay(grog)-tempered ceramics were manufactured by culturally separate groups who both occupied the same site?

A great deal of discussion regarding the origin of sandy paste ceramics in eastern Texas has taken place in recent years. Very recently however, a fairly detailed hypothesis on the origin of this ceramic tradition was presented informally in a somewhat light-hearted vein in the newsletter of the Texas Archeological Society by Burney B. McClurken and C. N. Bollich. I have been assured however, that the ideas were presented for serious consideration (C. N. Bollich, personal communication). It seems appropriate therefore, to offer alternatives to some of the propositions in view of the facts that I have undertaken to alter the existing typological framework for the upper Galveston Bay area; and because the question is one of very great importance to those of us working in southeast Texas.

The hypothesis, which the authors properly qualified as being based on very limited evidence, makes the following points: coincidental based, sandy paste pottery was the initial pottery in the southeast Texas area; it was probably introduced sometime around 1000 B.C. or earlier; it diffused through the coastal Louisiana area on a post-Poverty Point, pre-Tchefuncte time level; and that it was derived from Mosey Oak, Thomas Creek, and/or possibly other ceramics in the southeastern United States.

First, it would seem that to suggest introduction of sandy paste pottery by 1000 B. C. is too early; this would require that the sandy paste pottery very nearly predate the ceramics from which it is supposed to have been derived (Bullen, 1961: 104-5).

Second, to characterize the earliest sandy paste pottery as coincidental based seems totally unjustified. Indeed, the only pottery zone in the Galveston Bay area unquestionably known to be very early contains flat bases (J. R. Ambler, personal communication). Also, as was pointed out in the description of Goose Creek Plain (this paper) a variety of base forms occur in the area, and it has yet to be demonstrated that coincidental bases have ever predominated the assemblage of base forms at any given time.

Third, there is no evidence of any kind that diffusion of sandy paste pottery across the coast of Louisiana at some time between the Poverty Point and Tchefuncte cultures ever happened; and perhaps this is the weakest portion of the hypothesis. To the contrary, there are several lines of

? like

type Goose Creek
Incised?

Could it be that
the sandy
paste

Thomas

evidence suggesting that sandy paste pottery did have its origin in the pottery complex of the Tchefuncte Period.

The pottery reported from several Tchefuncte Period sites in southeastern Louisiana (Ford and Quimby, 1945: 67) consists principally of two paste categories: clay-tempered; and sand-tempered (or sandy paste). Pottery frequency graphs clearly show these sandy paste ceramics increasing in popularity to about 30% or 40% late in the Tchefuncte Period (Ford and Quimby, 1945: figs. 22, 23). This popularity of sandy paste pottery in late Tchefuncte time agrees well with a series of dates averaging about 200 A.D. on the earliest known sandy paste pottery levels in the Wallisville Reservoir shell middens (J. R. Ambler, personal communication). The similarity does not end with paste characteristics and contemporaneity. There are present in the Tchefuncte pottery complex virtually all of the vessel forms known to be present in the Galveston Bay area. Although similarities do exist, I have not compared Galveston Bay area decorative traits with those of the Tchefuncte pottery complex for two reasons. First, there is accumulating evidence for the existence of an early plain, sandy paste pottery period in coastal East Texas; and second, it seems more likely, because of the similarity in design styles, that the Galveston Bay area decorative traits were derived from the later ceramic cultures of Louisiana (particularly Coles Creek).

Furthermore, sherds of types associated with the Tchefuncte pottery complex have been excavated with indigenous sandy paste wares at Addicks Basin (Wheat, 1953: 190; Ring, 1960: 320), and at Wallisville Reservoir (J. R. Ambler, personal communication), and have also been found in surface collections at Wallisville (Shafer, 1966: 30). These indicate contact with Lower Mississippi Valley cultures on a Tchefuncte time level.

It is sometimes argued that while these similarities do exist, it is also true that many other Tchefuncte Period ceramic traits are not present in the Galveston Bay area. True enough, but are we to assume that all of the traits we recognize as characteristic of the Tchefuncte Period were known and were used by all individuals, or even groups of individuals living in the time and geographic area referred to as Tchefuncte? Certainly not.

To summarize then, it would seem that the important considerations (at the present state of our knowledge) are: that a sandy paste pottery complex (very likely undecorated and containing at least some flat-based vessels) existed in the Galveston Bay area contemporaneous (at least in part) with the Tchefuncte Period of southeastern Louisiana; that all of the known ceramic traits present in this local complex are present in the Tchefuncte pottery complex; and that Tchefuncte (Tchefuncte-like) sherds have been excavated in association with this early, undecorated, sandy paste pottery.

Obviously, our most pressing need at the present time is the development of detailed local chronologies along the coast of the northwestern Gulf of Mexico, in order to properly evaluate the dispersion of these and other cultural traits.

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Form Trait	Pottery Type							
	G.C. Pl.		G.C. Inc.		G.C. R-F		S.J. Pl.	S.J. Inc.
	II	III	II	III	II	III	III	III
Rim form:								
direct with interior thinning	2	8		2	1			4
(lip notched)		(2)			(1)			(3)
"rolled" to the exterior	3	6	1					
(lip notched)		(3)						
direct with lip flattened	5	11		5				3
(lip notched)	(2)	(4)		(4)				
direct with lip rounded or sharp	8	18		4	3	4	1	
(lip notched)	(1)	(2)		(2)		(3)		
Total sherds	18	43	1	11	4	4	1	7
Base form:								
noded	1	1						
rounded	1	1						
flattened		1					1?	

Table 1: Distribution of pottery rim and base forms and lip notching.

TABLE 2: Provenience of specimens by excavation unit.

N435, E500

SPECIMEN	12-18	18-24	24-30	30-36	36-42	42-48
POTTERY:						
Goose Creek						
Plain	27	52	28	13	1	
Incised		5				
Red-filmed		1*	2*			
Red-incised		1*	1*			
San Jacinto						
Plain	10	16	4			
Incised	1	4				
Bone-tempered						
Plain	2	2				
PROJECTILE POINTS:						
Cliffton		1				
A-4		1				
Woden					1	
D-1					1	
D-2			1			
Misc. fragments			1			
OTHER TOOLS:						
Knife(7)		1	1			
Uniface(2)			1		1	
Uniface(3)					1	
Spokeshave		1				
Graver		1				
End Scraper		1				
Misc. biface frag.	1					
Blank(?)		1	1			
Utilized flakes		4	4		1	4

(*includes 1 incised sherd)

TABLE 2: (cont.)

SPECIMEN	N495/E500				
	0-6	6-12	12-18	18-24	24-30
POTTERY:					
Goose Creek Plain	14	37	32		
Incised	2	2			
Red-filmed					
San Jacinto Plain	3	4	1		
Bone-tempered Plain	1	1			
PROJECTILE POINTS:					
Cliffton	1				
A-4		1			
A-6		1	1		
Booker				1	
Gary		1			
Palmillas					1
D-1					1
Misc. fragments			1		
OTHER TOOLS:					
Knife(2)	1				
Misc. biface frag.			1		
Micro flints		1			
Utilized flakes		1			

TABLE 2: (cont.)

SPECIMEN	N515/E500					
	+4½-0	0-6	6-12	12-18	18-24	24-30
POTTERY:						
Goose Creek Plain	41	7	5	3		
Red-filmed	1					
San Jacinto Plain	4					
PROJECTILE POINTS:						
Cliffton			1			
Perdiz	1					
A-6	1					
Misc. Arrow frag.	1	1				
Gary						1
Misc. Dart frag.		1				
OTHER TOOLS:						
Knife(1)				1		
Knife(3)						1
Knife(5)					1	
Graver				1		
Utilized flakes		1				

TABLE 2: (cont.)

SPECIMENS	N525/E500					
	46-0	6-6	6-12	12-18	18-24	36-42
POTTERY:						
Goose Creek			12*			
Plain	39	65	1			
Incised			1			
Red-filmed			1			
San Jacinto						
Plain	2	1				
PROJECTILE POINTS:						
Cliffton	1					
A-1	2					
A-3			1			
Misc. Arrow frag.		3		2		
Ellis					1	
Gary					1	
Misc. Dart frag.			2	1		
OTHER TOOLS:						
Gouge(?)						1
Blank(?)						1
Microflints					1	
Utilized flakes						1

(*includes 2 sherds that are very thin ± 1mm)

TABLE 2: (cont.)

SPECIMENS	N535/E500						
	S-0	0-6	6-12	12-18	18-24	24-30	42-48
POTTERY:							
Goose Creek Plain	40	37	25	26			
Incised	1						
Red-filmed	2	2		1			
San Jacinto Plain	2						
Rockport(?) Incised	5						
PROJECTILE POINTS:							
Bassett	1						
Cliffton	1						
A-1		1					
A-3	1						
A-4	1	1					
Misc. Arrow frag.	1	3	1				
Ellis							1
Gary		1	1				
OTHER TOOLS:							
Knife(4)			1				
Knife(7)					1		
Uniface(1)			1				
Uniface(2)						1	
Uniface(3)						1	
Misc. biface frags.		1	1				
Utilized flakes		1				5	

Note: Levels containing no specimens have been omitted.

TABLE 2: (cont.)

		N545/E500				
SPECIMENS	S-0	0-6	6-12	12-18	18-24	42-48
POTTERY:						
Goose Creek Plain	27	40	17	6		
Incised		1				
San Jacinto Plain						
Incised	1					
PROJECTILE POINTS:						
Alba		1				
A-1	1					
A-2		1				
A-4	1					
A-6		2				
Misc. Arrow frag.	1	1	1			
Gary				1		
Neches River		1				
D-2					1	
Misc. Dart frags.						1

Note: Levels containing no specimens have been omitted.

TABLE 2: (cont.)

N505/E495

SPECIMENS	S-6	6-12	12-13
POTTERY:			
Goose Creek Plain	13	48	18
Incised		1	
San Jacinto Plain	1	1	
Incised		1	
PROJECTILE POINTS:			
Perdiz	1		
A-5		1	
Misc Arrow frags.	2		
Woden		1	
OTHER TOOLS:			
Drill			1
Misc. biface frags.			1

TABLE 2: (cont.)

N505/E505

SPECIMENS	S-0	0-6	6-12	12-18	18-24	24-30	30-36
POTTERY:							
Goose Creek Plain	5	28	14	7		1	2
Incised		1	8				
Red-filmed			1*				
San Jacinto Plain		1	3				
PROJECTILE POINTS:							
Alba				1			
Bassett		1					
Friley				1			
A-3		1					
Misc. Arrow frags.		1					
Gary					1		
D-1							1
Misc. Dart frags.		1					
OTHER TOOLS:							
Knife(4)					1		
Knife(6)						1	
Hammerstone			1				
Micro flints			1				
Utilized flakes		2		1			
Daub(?)							present

* this sherd is also incised.

N505/E510

SPECIMENS	S-0	0-6	6-12	12-18	18-24	24-30	30-36	36-42
-----------	-----	-----	------	-------	-------	-------	-------	-------

POTTERY:

Goose Creek Plain	13	36	6	11	7			
----------------------	----	----	---	----	---	--	--	--

San Jacinto Plain		5						
----------------------	--	---	--	--	--	--	--	--

PROJECTILE POINTS:

Neches River								1
Misc. Dart frags.						1	1	

OTHER TOOLS:

Spokeshave		1						
Misc. biface frags.	1	1						
Utilized flakes		3						

TABLE 2: (cont.)

N505/E515

SPECIMENS	S-6	6-12	12-13	12-24	24-30	30-36	36-42
POTTERY:							
Goose Creek Plain	27	34	15			4	
Incised		2					
Red-filmed		1	2				
San Jacinto Plain	6	2					
PROJECTILE POINTS:							
Cliffton		1					
Perdiz				1			
A-4	1	1					
Misc. Arrow frags.	1	2					
Gary			1				
Misc. Dart frags.	1					1	2

TABLE 2: (cont.)

N505/E520

SPECIMENS	S-0	0-6	6-12	12-18	18-24	24-30	30-36	36-42	42-48
POTTERY:									
Goose Creek Plain	13	42	57	24	8	1	1		
Incised			3						
Red-filmed		1	1*		1				
San Jacinto Plain	4	2	4	1					
Incised	1		1						
Bone-tempered Plain			3						
Unclassified incised	4								
PROJECTILE POINTS:									
Alba				1					
Cliffton		1	1						
A-2			1						
Misc. Arrow frag.		1	4		1				
Misc. Dart frag.								1	1
OTHER TOOLS:									
Uniface(1)			1						
Uniface(3)				1	1		2		
Misc. biface frag.			1				1		
Microflints			1		1				1
Utilized flakes	1	1	1	1					
Misc. rock frag.						3			

* this sherd is also incised.

TABLE 2: (cont.)

N505/E525

SPECIMENS	S-6	6-12	12-18	18-24	24-30	30-36	36-42
POTTERY:							
Goose Creek Plain	75	76		1			
Incised	2	3					
Red-filmed		5		1			
San Jacinto Plain	12	4				1	
Incised		1					
Bone-tempered Plain		1					
Unclassified incised	2						
PROJECTILE POINTS:							
Cliffton	1						
A-5	1						
A-3			1				
Misc. Arrow frag.	1	1					
Gary							1
Williams							2
OTHER TOOLS:							
Knife(5)				1			
Misc. biface frag.		1					

TABLE 2: (cont.)

SPECIMENS	N505/E530						SURFACE COLL.
	S-0	0-6	6-12	12-18	18-24	24-30	
POTTERY:							
Goose Creek							
Plain	2	27	45	29	4		
Incised	4			1	1		4
Red-filmed	3	1	3	1			3
San Jacinto							
Plain	10		7		1		10
Incised	1						1
Unclassified incised				1			
PROJECTILE POINTS:							
Alba			1				1
Bassett		1					
Cliffton		1	1				1
Friley				1			
A-2							1
Misc. Arrow frag.							1
Gary							2
Palmillas							1
Williams							2
Woden							1
D-1							1
D-2							1
D-3							1
D-4							1
Misc. Dart frag.						1	4
OTHER TOOLS:							
Knife(5)							2
Uniface(2)				1			3
Uniface(3)							1
Awl							1
Biface							1
Misc. biface frag.		1					3
Utilized flakes		4		6			6
Asphalt						1	

Table 3: Provenience of specimens by stratigraphic analysis unit.

Specimens	Analysis Units			
	Ia	Ib	II	III
POF DRY				
Goose Creek Plain		10	320	335
Goose Creek Incised			2	30
Goose Creek Red-Filmed			7	17*
San Jacinto Plain			2	91
San Jacinto Incised				11
bone-tempered plain				10
rockport(?) Incised				5
Unclassified incised				6
Unclassified red-filmed incised				1
PROJECTILE POINTS				
Arrow:				
Alba			3	
Bassett				2
Cliffton			1	8
Friley(?)			1	
Perdiz			1	2
A-1			1	3
A-2			1	1
A-3			1	3
A-4			1	6
A-5				2
A-6			3	2
Misc. fragments		2	8	20
Dart:				
Booker			1	
Ellis	1	1		
Gary alsa			1	1
Gary kaufman		2	1	1
Gary (miscellaneous)		2	1	
Neches River		1	1	
Palmillas		1		
Williams		2		
Woden		1		1
D-1		3		

* includes 4 red-filmed sherds that are also incised.

Table 3; continued.

Specimens	Analysis Units			
	1a	1b	II	III
D-2			1	1
Misc. fragments	1	9	3	3
TOOLS				
Knife (1)			1	
Knife (2)				1
Knife (3)		1		
Knife (4)		1	1	
Knife (5)		1	1	
Knife (6)		1		
Knife (7)		1	1	1
Uniface (1)			1	1
Uniface (2)			2	1
Uniface (3)		4	2	
Graver			1	1
Spokeshave				2
Misc. Biface fragments		1	4	5
Hammerstone				1
Gouge (?)	1			
End scraper				1
Microflints		2	1	3
Blank (?)	1			2
Utilized flakes	1	10	8	13
Stemmed drill			1	
Misc. rock fragments			3	
MATERIALS				
Chert	3	36	29	29
Silicified fossil wood	2	16	20	44
Quartzite		3	7	15
FOOD REMAINS				
White-tailed deer (<u>Odocoileus virginianus</u>)	present	present	present	present
Black bear (<u>Ursus americanus</u>)				present
Alligator (<u>Alligator mississippiensis</u>)			present	
Turtle (unidentified)		present	present	
Fish (unidentified)			present	
Nut fragment (chinquapuin?)				present

Table 4: R(report)-numbers and corresponding excavation units.

(Numbers omitted do not refer to excavation units.)

R-10	N505 E525	+ 2" to 30"	R- 94	Surface		
11	" "	0" to 6"	95	N505 E515	+	3" to 0"
12	N485 E500	- 7 1/4" to 12"	99	" "		0" to 6"
13	" "	12" to 18"	100	" "		0" to 6"
14	" "	12" to 18"	101	" "		0" to 6"
15	" "	12" to 18"	105	N505 E520		6" to 12"
17	" "	18" to 24"	106	" "		6" to 12"
18	" "	18" to 24"	107	" "		6" to 12"
19	N505 E525	0" to 6"	108	" "		6" to 12"
20	" "	0" to 6"	109	" "		6" to 12"
21	" "	0" to 6"	110	" "		12" to 18"
22	N485 E500	18" to 24"	111	" "		18" to 24"
23	Surface		112	" "		12" to 18"
24	"		113	" "		18" to 24"
25	"		114	" "		18" to 24"
26	"		117	N505 E510	+	3" to 0"
28	Surface		118	N505 E505	+	3" to 0"
29	N485 E500	18" to 24"	119	" "		0" to 6"
31	N485 E500	24" to 30"	120	" "		0" to 6"
32	" "	24" to 30"	121	" "		0" to 6"
33	" "	24" to 30"	122	" "		0" to 6"
34	" "	24" to 30"	123	" "		0" to 6"
35	" "	30" to 36"	124	" "		0" to 6"
36	" "	30" to 36"	125	N505 E510		0" to 6"
38	N485 E500	30" to 36"	126	N505 E505		6" to 12"
40	N485 E500	36" to 42"	128	" "		12" to 18"
41	N505 E525	6" to 12"	129	N505 E510		6" to 12"
42	" "	6" to 12"	130	N505 E505		6" to 12"
43	" "	12" to 18"	131	" "		12" to 18"
44	N485 E500	42" to 48"	132	N505 E510		6" to 12"
49	N505 E525	12" to 18"	133	N505 E505		12" to 18"
56	N505 E525	18" to 24"	134	Surface		
59	N505 E530	surface only	135	Surface		
61	N505 E525	18" to 24"	136	N505 E505		18" to 24"
62	" "	24" to 30"	137	N505 E515		6" to 12"
63	" "	30" to 36"	138	" "		6" to 12"
64	N505 E530	+ 2" to 0"	139	" "		6" to 12"
65	" "	0" to 6"	140	" "		6" to 12"
66	" "	0" to 6"	141	" "		6" to 12"
68	" "	0" to 6"	142	" "		6" to 12"
71	" "	6" to 12"	143	N505 E505		18" to 24"
72	" "	6" to 12"	144	" "		18" to 24"
73	N505 E525	36" to 42"	145	Surface		
74	" "	36" to 42"	146	Surface		
75	N505 E530	12" to 18"	147	Surface		
76	N505 E525	36" to 42"	148	Surface		
77	N505 E530	12" to 18"	150	N505 E520		24" to 30"
78	N505 E525	36" to 42"	151	" "		24" to 30"
80	" "	42" to 48"	152	Surface		
81	N505 E530	18" to 24"	153	N505 E520		24" to 30"
82	N505 E520	+ 5" to 0"	154	N505 E510		12" to 18"
89	" "	0" to 6"	156	N505 E520		30" to 36"
90	" "	0" to 6"	157	" "		30" to 36"
91	" "	0" to 6"	159	" "		36" to 42"
92	" "	0" to 6"	160	N505 E515		12" to 18"

41-Lb-2 R-Numbers and Proveniences (cont.)

R-161	N505 E520	42" to 48"	R-234	N535 E500	12" to 18"
162	" "	30" to 36"	235	" "	12" to 18"
163	N505 E515	12" to 18"	236	" "	18" to 24"
169	N505 E510	18" to 24"	237	" "	18" to 24"
171	Surface		238	Surface	
177	N505 E515	18" to 24"	239	N535 E500	24" to 30"
178	" "	24" to 30"	240	" "	30" to 36"
179	N505 E510	24" to 30"	241	Surface	
180	" "	30" to 36"	242	N535 E500	36" to 42"
183	N505 E515	30" to 36"	243	" "	42" to 48"
185	" "	36" to 42"	244	N515 E500 +	4 1/2" to 0"
186	N505 E505	24" to 30"	245	N515 E500	0" to 6"
187	" "	24" to 30"	246	" "	6" to 12"
188	N505 E510	36" to 42"	247	" "	12" to 18"
189	" "	36" to 42"	248	N495 E500	0" to 6"
190	Surface		249	N535 E500	48" to 54"
191	Surface		250	N495 E500	6" to 12"
192	Surface		251	N545 E500 +	6" to 0"
194	Surface		252	N495 E500	12" to 18"
195	N505 E515	36" to 42"	253	N545 E500	0" to 6"
196	" "	36" to 42"	254	N495 E500	18" to 24"
197	" "	36" to 42"	255	N495 E500	24" to 30"
198	N505 E505	30" to 36"	256	N495 E500	30" to 36"
199	N505 E515	36" to 42"	257	N545 E500	6" to 12"
200	Surface		258	" "	12" to 18"
201	N525 E500 +	6" to 0"	259	N495 E500	36" to 42"
202	" " +	6" to 0"	260	N505 E495	6"
203	" " +	6" to 0"	261	N515 E500	18" to 24"
204	" " +	6" to 0"	262	N505 E495	6" to 12"
205	Surface		263	N545 E500	18" to 24"
206	Surface		264	N545 E500	24" to 30"
207	N505 E530	24" to 30"	265	N515 E500	24" to 30"
209	N525 E500	0" to 6"	266	N505 E495	12" to 18"
210	" "	0" to 6"	267	N545 E500	30" to 36"
211	" "	6" to 12"	268	N545 E500	36" to 42"
212	" "	12" to 18"	269	N545 E500	42" to 48"
213	" "	12" to 18"	270	N545 E500	48" to 54"
214	" "	12" to 18"	271	N545 E500	54" to 60"
215	" "	18" to 24"			
216	" "	24" to 30"			
217	" "	30" to 36"			
218	Surface				
219	N525 E500	36" to 42"			
220	N535 E500 +	5" to 0"			
222	" " +	0" to 6"			
223	" " +	5" to 0"			
224	" " +	5" to 0"			
225	" " +	5" to 0"			
226	" " +	5" to 0"			
227	" "	0" to 6"			
228	" "	0" to 6"			
229	" "	0" to 6"			
230	" "	0" to 6"			
231	" "	6" to 12"			
232	" "	6" to 12"			
233	" "	6" to 12"			

EXCAVATIONS AT THE JAMISON SITE (41LB2), LIBERTY CO., TEXAS

ERRATA

- p. iii for Method of Excavation..., read Method of excavation
page headed INTRODUCTION should be numbered page 1.
page headed LOCATION AND NATURAL SETTING should be numbered
page 2
line 4, read 30°04'40"
line 5, read (figures 1, 2)
line 7, for Swamp, read Swamp
line 28, for Swaten, read Swanton
- p. 3, line 17, read...Houston Archeological Society (Chandler,
1967).
line 21, for (Aten, 1965), read (Aten, 1965b).
line 38, for (Johnson, 1962), read (Johnson, 1962)
- p. 4, line 21, for...site is roughly..., read...site is a
roughly
- p. 6, line 12, for...overaa lateral..., read...over a lateral...
- p. 7, line 10, for berehold, read borehole.
- p. 9, line 17, for undobtably, read undoubtedly.
line 29, for...existingtypology..., read...existing
typology...
- p. 11, line 10, read It may very well be that...
- p. 12, line 26, for (Aten, 1965:2), read (Aten, 1965a:2).
- p. 13, line 10, read...red-filming appeared prior to...
- p. 14, line 3, for...in/estigate..., read...investigated...
line 12, for W:L. Fullen, read W. L. Fullen.
- p. 15, line 29, for...althoughlumpy..., read...although lumpy...
line 44, for...Reckport incised, read...Reckport Incised
- p. 16, line 37, read...coated with a dark...
line 41, for...285mm.;; diameter..., read...2.85 mm.;
diameter...
- p. 17, line 19, add this sentence: All measurements are given
in millimeters.
- p. 18, ALBA, average T should read 3.0
BASSINT, R-223, column T should read 20.5*

- p. 43, line 5, for...as..., read...a...
line 10, for...Unite..., read...Unit...
line 19, for...surace..., read...surface...
line 34, should read...absolute certainty and it is possible to rearrange the analysis units slightly...
- p. 44, line 2, for...poin..., read...point...
- p. 47, line 35, for...Cedar Bayou. No...read...Cedar Bayou, no...
line 39, for...thearea..., read...the area...
- p. 48, line 19, for...existes..., read...exists...
- p. 49, line 8, should read...sandy paste type Goose Creek Incised?
Could it be that the sandy paste ceramics...
line 20, for...some of the..., read...some of these...
line 29, for...difused..., read...diffused...
line 32, for...Thomas..., read...Thems...
- p. 50, line 24, for...Cole..., read...Coles...
line 48, for...(Tchefuncte-like)..., read (or Tchefuncte-like)...
- p. 51, line 1, for...Aten. Lawrence E. ..., read...Aten, Lawrence E. ...
- p. 52, line 13, for...Baily)..., read...Bailey)...
line 19, for Nody..., read...Nody...
- p. 55, Table 2, 12-18 18-24
for Red-filmed 2
read Red-filmed 1* 3*
cross out Red Incised 1* 1*

- p. 20, FENDIZ, column W should read:
R-163 15.0*
R-260 16.0*
A-1, column L should read:
R-203 21.0*
R-251 31.0*
column W should read:
R-203 24.0*
R-251 20.0*
- p. 21, A-3, R-224, column W should read 18.0*
- p. 22, A-4, R-229, column W should read 13.0*
A-5, R-19, column L should read 15.5*
- p. 23, A-6, R-252, column W should read 18.0*
R-253b, column L should read 29.5*
- p. 25, BOOKER, R-252, column L should read 50.0*
ELLIS, R-213, column W should read 24.0*
- p. 26, GARY - also variety
R-233, column L should read 36.0*
GARY - kaufman variety, column L should read:
R-142 41.0*
R-194-S 43.0*
R-213 38.0*
- p. 27, line 8, add heading...illus...over last column
GARY - (miscellaneous), column L should read:
R-76 41.0*
R-144 40.0*
R-258 50.0*
- p. 28, WILLIAMS, R-74, column L should read 44.0*
- p. 32, line 26, read...parallel the relict wood structure.
- p. 33, line 4, for...befacially..., read...bifacially...
Knife (7), R-237, column L should read 37.0*
- p. 36, line 31, for...occurence..., read...occurrence...
- p. 37, line 9, for...Proximal..., read...proximal...
- p. 38, line 15, delete...wood...
AWL, add _____ below column headings
- p. 40, line 7, for...wothwhile..., read...worthwhile...
line 19, FOR...X-Ray..., read...X-ray...

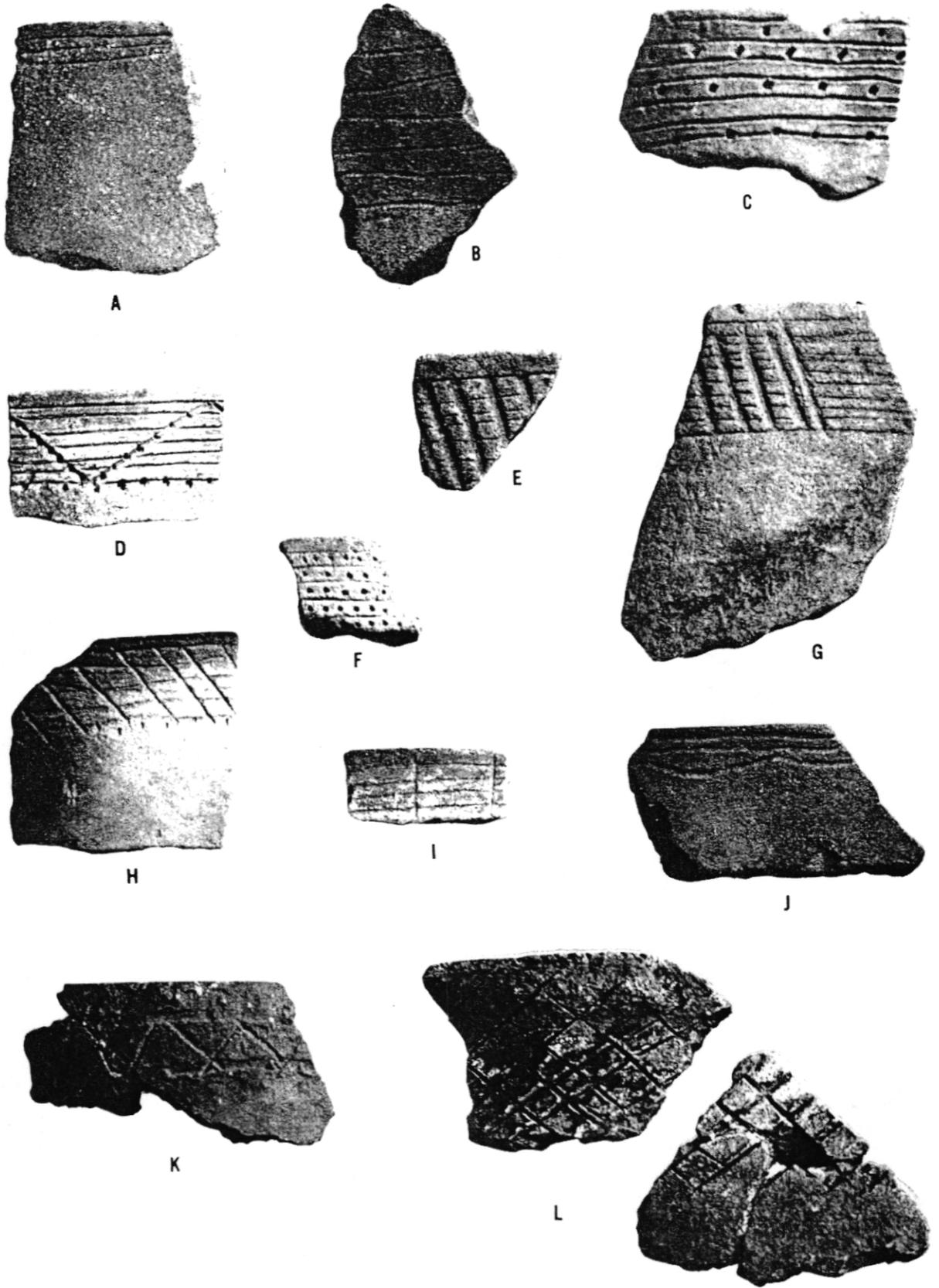


Plate 1: A-J, Goose Creek Incised; K, Rockport(?) Incised; L, unclassified incised. All specimens are shown at actual size.

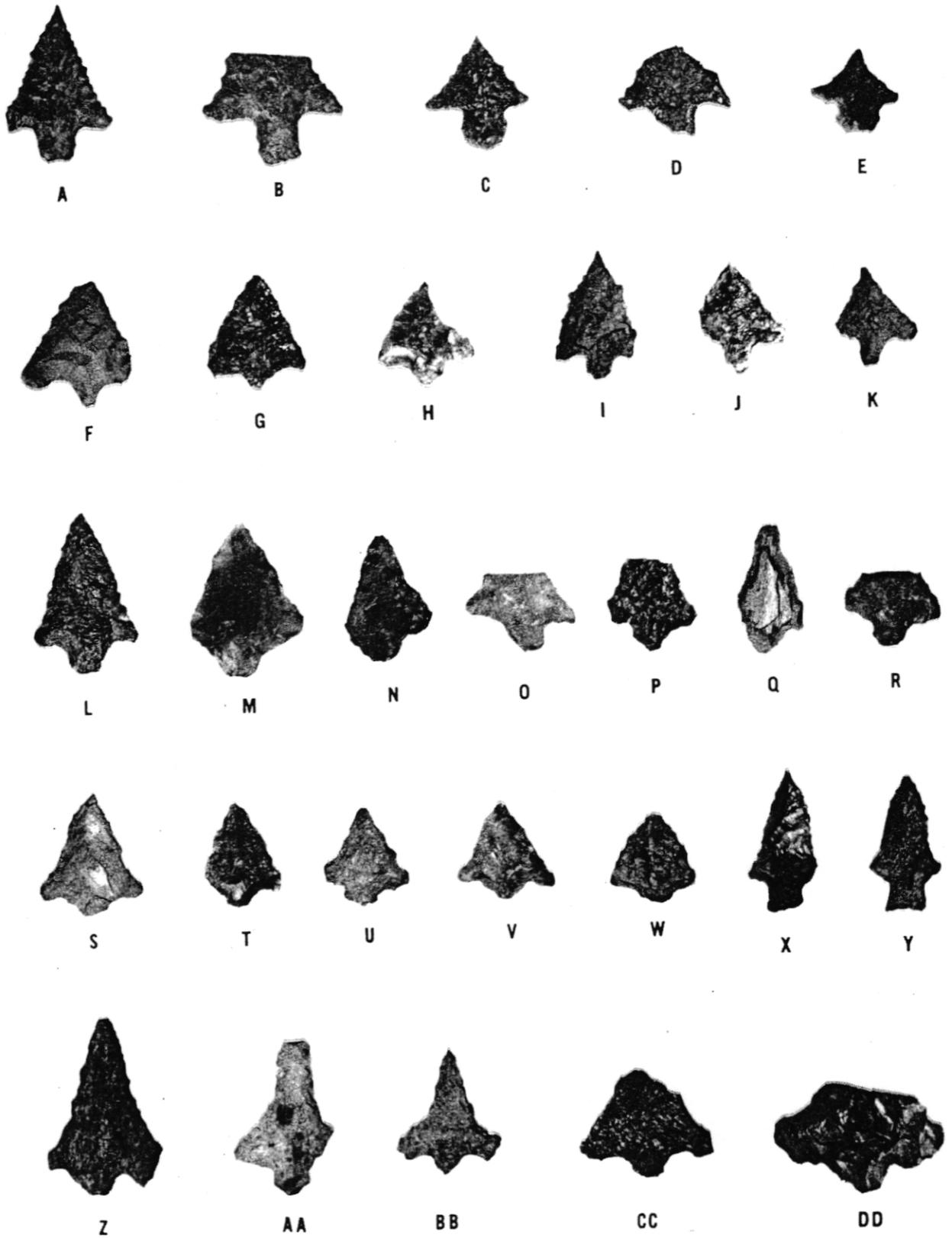


Plate 2: A-E, Alba; F-H, Bassett; I-K, Perdiz; L-W, Clifton;
 X-Y, Friley(?); Z-DD, A-1. All specimens are shown at actual
 size.

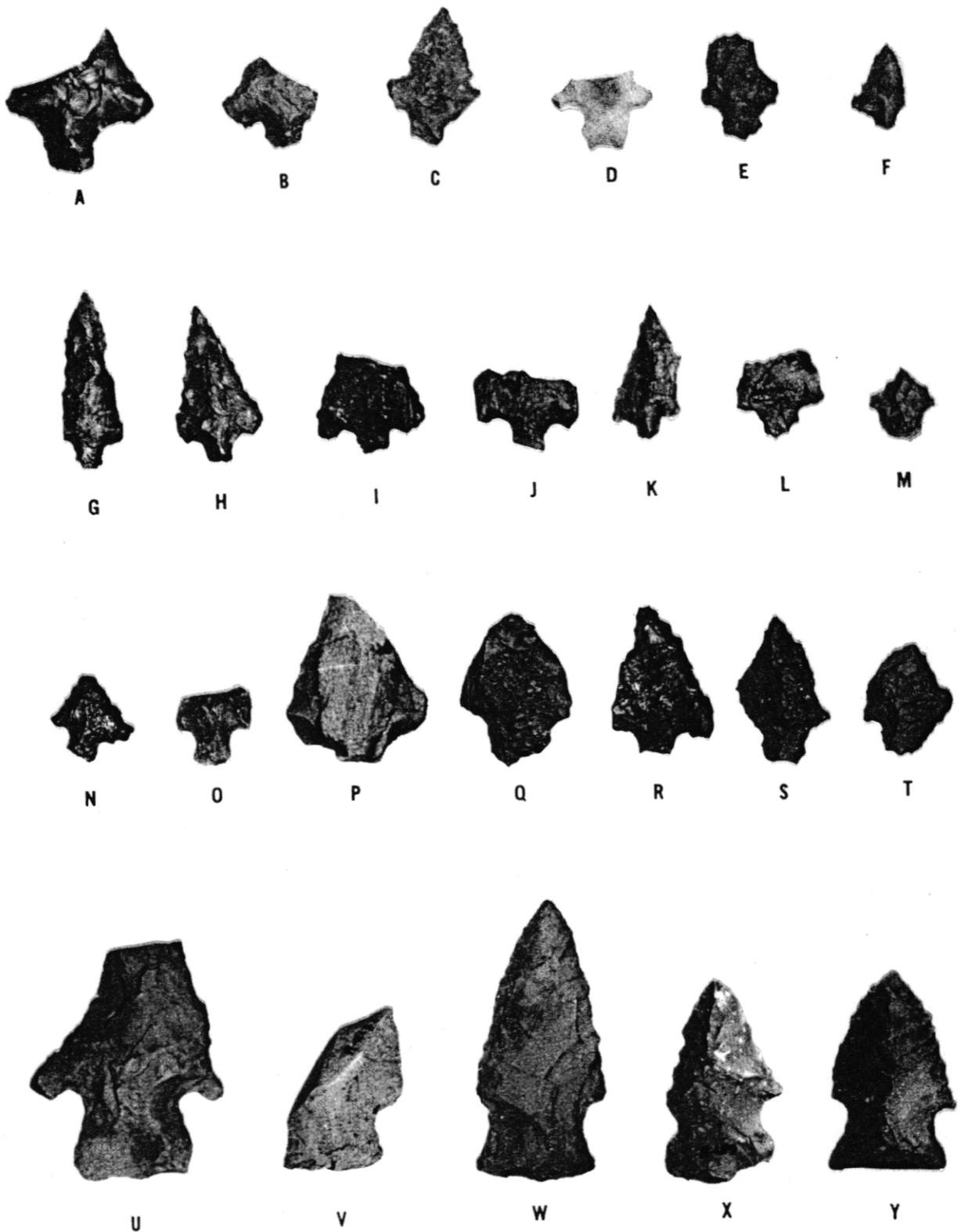


Plate 3: A-B, A-2; C-F, A-3; G-M, A-4; N-O, A-5; P-T, A-6;
 U, Booker; V-W, Ellis; X-Y, Neches River. All specimens are
 shown at actual size.

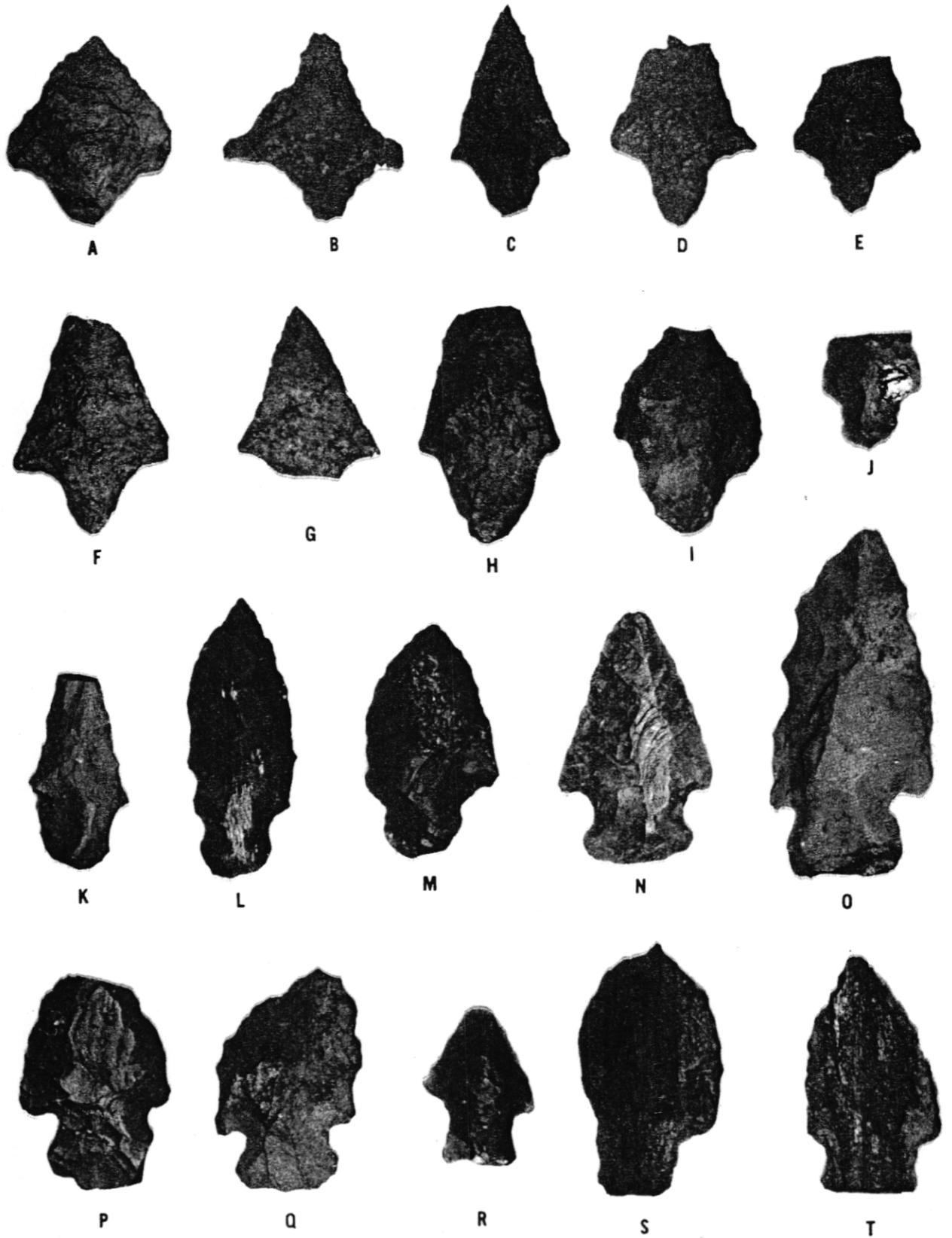


Plate 4: A-B, Gary alsa; C-G, Gary kaufman; H-K, Gary (miscellaneous); L-M, Palmillas; N-Q, Williams; R-T, Woden. All specimens are shown at actual size.

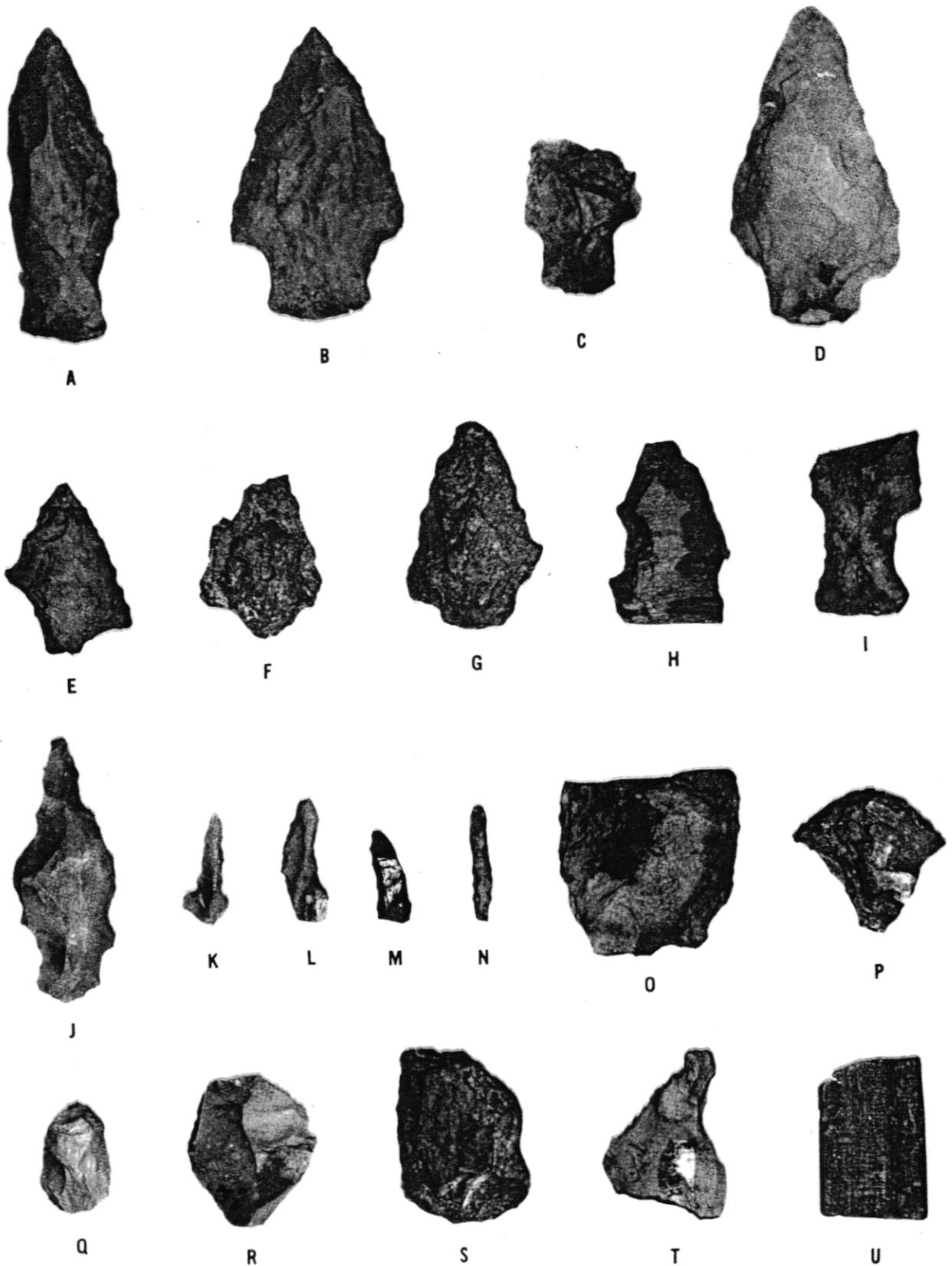


Plate 5: A-D, D-1; E-G, D-2; H-I, D-3; J, Stemmed perforator; K-N, Microflints; O, Gouge(?); P, End scraper; Q, Uniface (1); R, Uniface (2); S, Biface; T, Spokeshave; U, Blank(?). All specimens are shown at actual size.

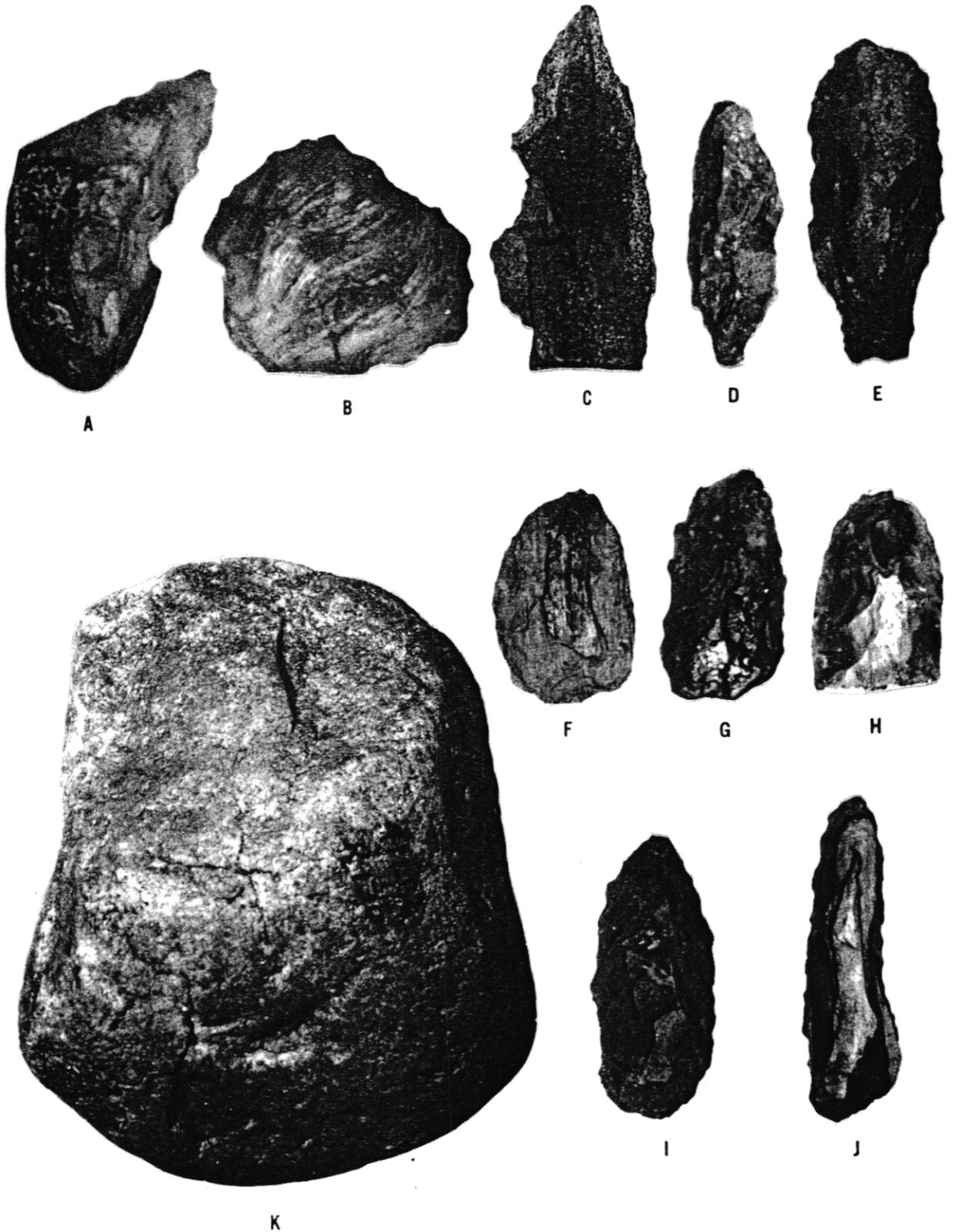


Plate 6: A, Knife (1); B, Knife (2); C, Knife (3); D-E, Knife (4); F-H, Knife (5); I, Knife (6); J, Knife (7); K, Hammerstone. All specimens are shown at actual size.