

CHAPTER 6

EXCAVATIONS AND FINDINGS DURING THE 1970s

Systematic investigations at the Mitchell Ridge Site began in 1974, soon after the site's discovery by an employee of The Woodlands Corporation. From that year to 1978, the site was intermittently investigated by members of the Houston Archeological Society in cooperation with students from the Department of Anthropology at Rice University led by Barbara Atkins, an anthropology graduate student (Atkins n.d.). In June, 1978, the site was the scene of the annual field school of the Texas Archeological Society, an effort once again under the direction of Barbara Atkins. During the course of these early investigations, financial and/or logistical support was provided by The Mitchell Development Corporation of the Southwest, the Harris and Eliza Kemper Fund of Galveston, Rice University, The Houston Archeological Society and the Texas Archeological Society. The initial work in the fall of 1974 was carried out by a class from Rice University, and members of the Houston Archeological Society continued testing through the spring of 1975. A crew of ten fieldworkers was hired for six weeks of additional testing in the summer of 1975 with financial assistance provided by the Harris and Eliza Kemper Fund. In the spring of 1976, another crew worked at the site for three weeks, with funding provided by the Mitchell Development Corporation. The final phase of work was carried out in June, 1978 when the site was the scene of the annual Field School of the Texas Archeological Society. Members of the Houston Archeological Society provided assistance with field and lab work throughout the four-year period (Atkins n.d.).

The combined work during these years resulted in the hand excavation of a several hundred 1-m² units and limited exposure of other areas through machine stripping of 7 one-meter-wide "trenches". Large artifact and faunal samples and nine volumes of field notes were generated during the course of fieldwork.

Materials and Data: Their Analytical Limitations and Potentials

It is most unfortunate that, as noted previously, field notes from the 1970s are incomplete and that provenience has been lost on much of the excavated material. Concerning the field notes, a complete set of unit/level data sheets for the 1-meter² excavation units is on file at the Texas Archeological Research Laboratory, The University of Texas at Austin. However, notes on individual features, including prehistoric human burials, are lacking. Also absent is any kind of daily log which might help to fully understand the sequence of work carried out and to better interpret the existing materials. Fortunately, a set of black and white photographic negatives was discovered by Dr. Frank Hole (formerly on the faculty at Rice, now at Yale University) among his possessions. Dr. Hole recently sent these to the Texas Archeological Society, and they were forwarded to the author through Dr. James Bruseth of the Texas Historical Commission.

The author has thoroughly examined the extant unit/level data sheets, on the basis of which it is concluded that they are of only very limited value for interpretation of the work at the site during the 1970s. Several specific points should be noted concerning these notes.

First, while it is apparent that unit/level sheets were conscientiously filled out during excavation, there is considerable inconsistency in detail. Very few of the many hundreds of data sheets record observations of soil matrices or contents beyond a cursory level. Thus, while many sheets show plan maps with a few potsherds or flakes located, the full range of debris is not represented in situ, and many sheets show very little or no in situ materials at all (even though adjacent or nearby units sometimes appear to have contained abundant cultural debris). Descriptive terminologies used for depositional units are either inconsistent or inappropriate in many instances. Such problems make it virtually impossible to reconstruct stratigraphic details within the excavated areas. This is most critical when trying to determine the vertical and horizontal extent of cultural materials within natural stratigraphic deposits. In many instances, the entire dark brown fine sand soil horizon was designated as "midden", at other times a discrete cultural zone was indicated within the soil profile. In other cases, no indication of any sort was given. An inadequate understanding of depositional processes in general is indicated by the fact that the geologic sediments underlying the brown soil were sometimes designated as "old beach", which is inaccurate, and at other times as a "shell floor", a potentially misleading, inaccurate term for the naturally occurring lenses of shell

Table 6.1. Numbers and percentages of excavation units for which provenience of materials is complete, incomplete, non-existent or uncertain, 1970s excavations, by area.

| Area | Complete | | Incomplete | | Non-existent | | Uncertain* | | Total |
|-------------------------|-------------|-----|--------------|-----|--------------|-----|-------------|-----|---------------|
| | No. | % | No. | % | No. | % | No. | % | |
| Cemetery | 6 | 9% | 30 | 46% | 11 | 17% | 18 | 28% | 65 |
| Burke House | 2 | 7% | 19 | 61% | 0 | 0% | 10 | 32% | 31 |
| Corral | 0 | 0% | 22 | 69% | 1 | 3% | 9 | 27% | 32 |
| Cut bank | 0 | 0% | 7 | 50% | 6 | 43% | 1 | 7% | 14 |
| C.C. Area | 46 | 35% | 81 | 61% | 2 | 1% | 4 | 3% | 133 |
| Cross Area | 3 | 3% | 21 | 20% | 56 | 54% | 23 | 22% | 103 |
| Totals & % of all units | 57 (15%) | | 180 (48%) | | 76 (20%) | | 65 (17%) | | 378 (100%) |

* Uncertainty derives from the fact that some arbitrary levels within a unit may simply have been devoid of cultural debris (i.e. no materials were found in collection which had provenience labels for a level which may have been above or below cultural horizon).

hash which are found within this underlying material.

Particularly unfortunate is the fact that cultural features are usually not indicated on the unit/level data sheets. In a subsequent summary report by Barbara Atkins, hearths are mentioned (though not described), so it is at least clear that such features were recognized in the field. If these were documented in detail on separate forms, the records have been lost. The absence of feature documentation in the unit/level notes precludes our learning the number or kinds of features which may have been present within the excavated areas. Similarly, burials were not indicated in these notes though, fortunately, maps showing locations of burials and general patterns of interment are available.

Finally, inconsistent thicknesses of arbitrary excavation levels contributes to making reconstruction of the precise vertical nature of the excavated deposits a virtual impossibility. In some units, for example, "level 1" extended from the surface to a depth of only 5 cm, in other units (within the same excavation area), the same designation was used to indicate the top 20 cm.

Had the collections made during excavations retained provenience designations according to 1-meter² units, it would at least be possible to reconstruct horizontal patterns of relative debris density within excavated areas, an effort which might provide some insights concerning spatial patterning of on-site prehistoric activities. This too cannot be accomplished, since provenience was lost on a majority of the specimens; the collection was housed temporarily at the Galveston Historical Museum, during which time much of the material was removed from labelled containers and mixed beyond any hope of restoring provenience. As may be seen in Table 6.1, of the 364 1-m² units excavated within five main excavation areas, the materials from only 57, or 15.6%, retained provenience labels for all arbitrary levels within the unit. For most units (243 or 68%), provenience on materials was incomplete (i.e., unavailable for some of the arbitrary levels in the unit) or completely non-existent (i.e., no materials from any arbitrary levels in the unit could be located). For the remaining 64 units (17%), the completeness of provenience is uncertain,

meaning that those arbitrary levels for which no labeled material could be found were at the top or bottom of the excavated soil profile and thus possibly above or below the cultural zone (a possibility entertained on the basis on our 1992 findings, which indicated that cultural debris was concentrated in about the middle of the soil profile, as most clearly indicated by Zone 2 in the Block Excavation).

A partial, preliminary summary report of the 1970s work was prepared by Barbara Atkins (n.d., ms. on file, The Woodlands Corporation, and Texas Archaeological Research Laboratory, Austin). Atkins' manuscript is of very limited value in terms of placing the large collections from the 1970s within a meaningful interpretive framework. The descriptions of the fieldwork are highly generalized; lacking are discussions of the work in specific excavation areas, artifact descriptions, feature descriptions, or any coherent discussion of research design or underlying rationale in the investigations. The report also demonstrates unfounded assumptions concerning regional ethnohistory, insofar as the archaeological remains at the site are assumed to represent the Karankawa, with the result that dubious correlations are made between disconnected fragments of ethnohistoric fact (and folkloric non-fact) and the archaeological record. Indicative of the overall limited understanding of archaeological materials and procedures are the radiocarbon data obtained from the 1970s work. Atkins reports a number of assays on "charcoal" which produced ages in excess of 30,000 years. When examining the collections, the author found a number of samples wrapped in aluminum foil which were labelled as "charcoal". Even the most cursory visual examination showed these to consist entirely of asphaltum nodules; obviously this is the material on which were obtained the extremely old ages, which merely reflect the maximum age obtainable with the radiocarbon dating method on a natural petroleum material.

The Atkins report does provide a general observation which appears to be useful, insofar as it corresponds with our 1992 findings. This is the fact that the varied and extensive excavations indicated that cultural debris was found almost exclusively in the eastern part of the site. This was noted by Atkins (n.d.) as a general pattern, and is reflected in the fact that the great majority of the still-provenienced collection came from excavation areas within that part of the site.

Faced with the obstacles to detailed analyses of the 1970s material inherent in the limited field notes and the poor provenience data for the collections, the only viable option has been to examine the extant materials and data for what information can be gleaned. Lowering expectations of interpretive possibilities to a realistic level, it is apparent that a good deal of valuable information can still be extracted. While intra-site variability in kinds or densities of materials cannot be realistically determined (except for the basic fact, already noted, that most of the materials are from the eastern end of the site), the collection as a whole holds considerable potential for elucidating the nature of archaeological material culture at the site. When combined with the materials excavated during our 1992 work, we have a remarkably large and varied assemblage of material. Additionally, there is sufficient data available on the burials excavated during the 1970s with which to make some basic and important observations. The actual human osteological materials have been well curated (at the Texas Archaeological Research Laboratory) and were available for human bioarchaeological analysis (Powell report, Chapter 9, herein) and for providing small bone samples for accelerator mass spectrometer radiocarbon dating. Also, artifacts found with the burials appear to have been retained with provenience information. In short, the collections permit (a) insights into the range and variability in technology and style in material culture remains, (b) acquisition of data on the chronology of burials at the site, and (c) generation of several kinds of human biological data (e.g., age/sex of burials, pathologies, stature, biological affinities of the burial population).

The Spatial Layout of the 1970s Excavations

As may be seen in the map, Figure 6.1, the excavations carried out in the 1970s were extensively distributed across the site. These include several areas of clustered, contiguous 1-m² units, 1-m² units scattered along most of the length of the site, and the seven mechanically bladed trenches. For the sake of clarity, these areas are listed and very briefly discussed here.

The Cross Area

That part of the site designated as the Cross Area was located on the relatively high ground overlooking Eckert Bayou near the northeastern edge of the site (just east of the Bayou lots investigated in 1992). This area is largely encompassed within the bounds of a National Register of Historic Places site

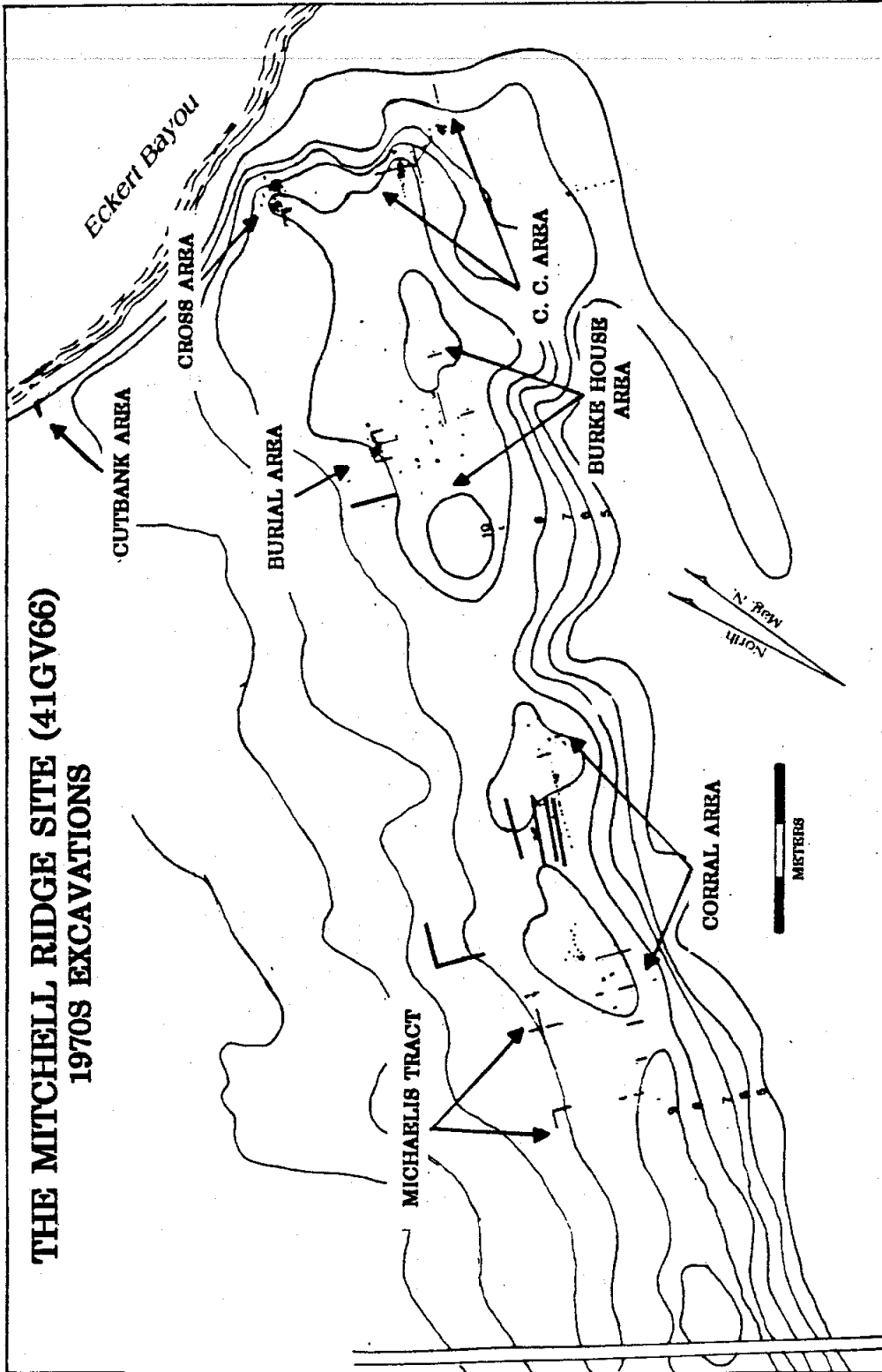


Figure 6.1. Map showing locations of 1970s excavation areas. Actual excavation units and machine trenches are shown in black.

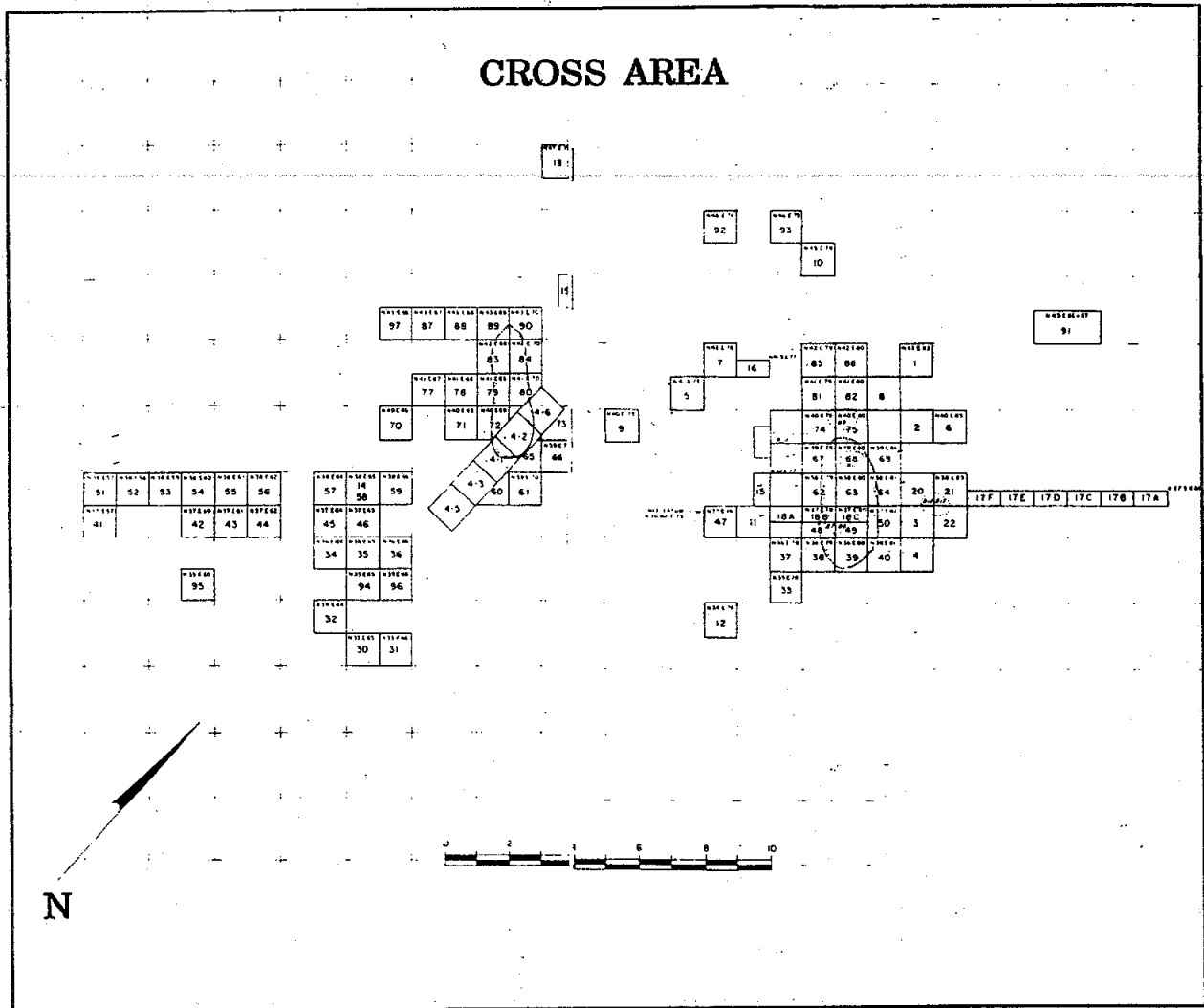


Figure 6.2. Excavation layout of the Cross Area, after map on file at the Texas Archeological Research Laboratory, The University of Texas at Austin. Scale is in meters. The delineated oblong areas are oyster shell lenses, termed "shell floors" by Atkins. Group of five grave pits was found under and near the shell lens in the block of excavation units at the right.

designation. The layout of excavation units in the Cross Area may be seen in Figure 6.2. This was one of the most extensively excavated of the areas investigated in the 1970s, consisting of 93 1-m² units and 10 .5 x 1-meter units. All but five of the units are oriented along the same grid used elsewhere on the site, the north-south axis of which was actually oriented west of magnetic north. The other five units were oriented along a magnetic north-south axis. These intersect several of the other units, and probably represent initial testing at the site prior to the establishment of the larger grid system. Found within the Cross Area were seven of the thirteen aboriginal human burials excavated during the 1970s.

Also recorded were two concentrations of oyster shell, which Atkins (n.d.) termed "shell floors", under the assumption that they represented house floors. These were oblong in plan, each about 4 meters in length; widths were approximately 1.2 and 2 meters. Since no detailed field notes are available, it is impossible to evaluate Atkins' interpretation of these oyster shell concentrations. The fact that the probable aboriginal post molds patterns documented in 1992 were not associated with shell floors perhaps

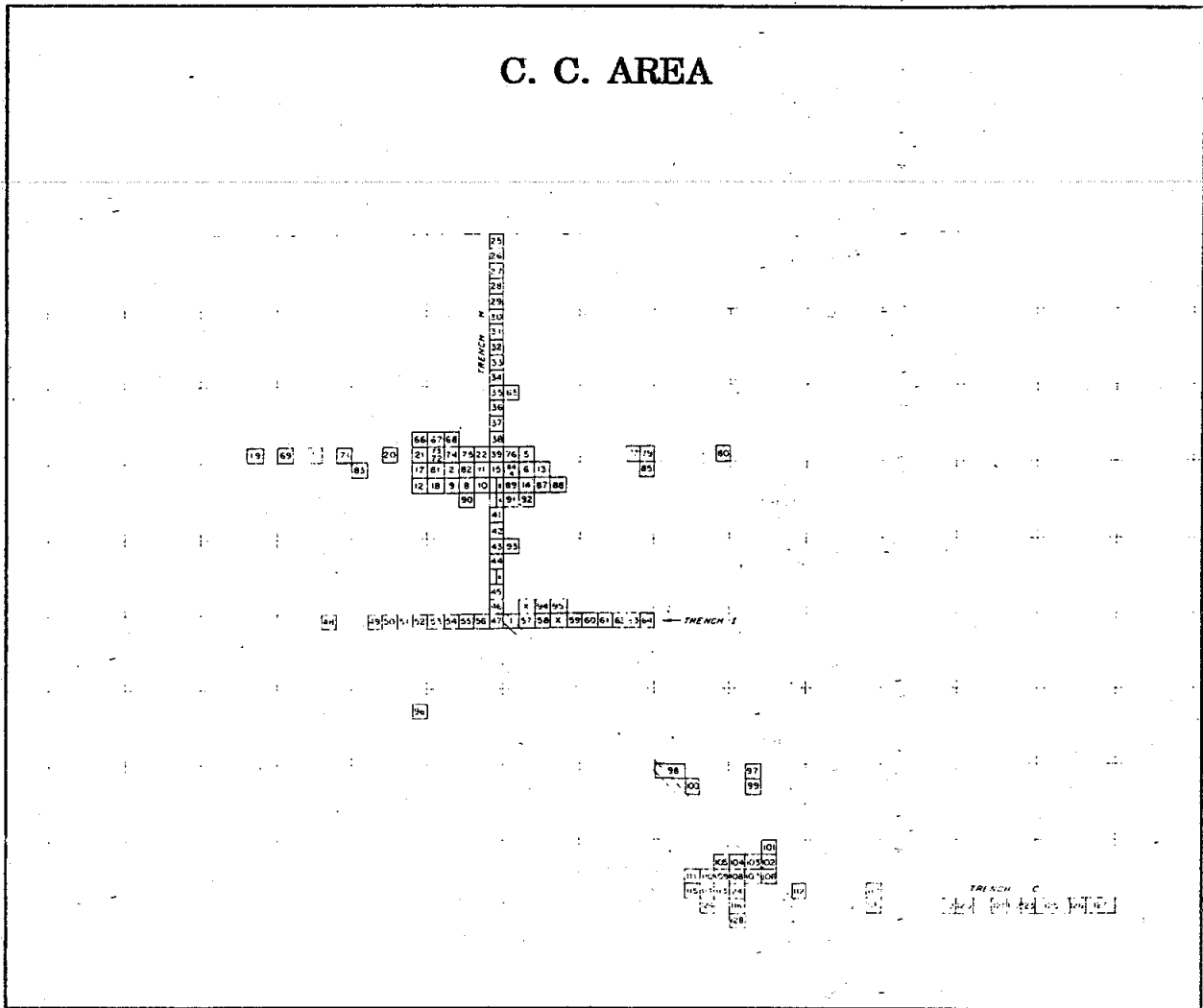


Figure 6.3. Excavation layout of the C. C. Area, after map on file at the Texas Archeological Research Laboratory, The University of Texas at Austin. Square excavation units are 1x1 meter. Several outlying 1m² units included by Atkins in the C. C. Area are beyond the limits of this map.

reduces the credibility of this interpretation. Possibly more likely is that these features represent localized oyster shucking, as suggested above for Feature 106 in the 1992 Block Excavation, an apparently similar lens of oyster shell.

The C. C. Area

This area was also on the relatively high ground overlooking Eckert Bayou, southeast of the Cross Area (see Figure 6.3). The C. C. Area involved the excavation of 127 1m² units, 2 1x2m units and 3 .5x1m units, making it the most extensive investigated area on the site. As mentioned, it is also the 1970s excavation area with the most complete artifact provenience data. As may be seen in the map, Figure 6.3, excavations were in two clusters of contiguous units and a series of trenches composed of adjoining 1-meter units.

The Burial Area

This area was designated as the Burial Area due to the discovery of a cluster of 6 aboriginal human interments within the bounds of the excavations. A detailed layout of the excavation units is not available for this area. The only extant map is of that part of the area which contained several aboriginal burials; this is presented and discussed in Chapter 8.

The Burke House Area

As shown in the map, Figure 6.1, this area was located south of the Burial Area. It is a vaguely defined area lying at the crest of the ridge between two high points which reach elevations of 10 feet. Nineteen 1m² units and four narrow trenches were investigated in this area.

The Corral Area

The part of the site designated The Corral Area is 50 meters wide and runs for 150 meters along the crest of the ridge. Within this area, 53 1m² units were hand excavated and four machine trenches, approximately 2 meters wide by 30-40 meters long, were opened. Several smaller trenches were excavated or machine-stripped (see map, Figure 6.1) but no documentation exists to indicate exactly how these were dug or whether there were internal subdivisions. The Corral Area, as defined during the 1970s work, encompasses those areas investigated in 1992 designated Area 3, The Corral Area, and Area 2 (compare Figures 5.1 and 6.1).

The Michaelis Tract

Immediately west of the Corral Area was a property designated in the 1970s as the Michaelis Tract. This is within the same area designated Area 4 in 1992. Several machine trenches were opened in this area (Figure 6.1), but no documentation exists. Presumably little or no aboriginal materials or features were found, since both the 1970s work and our 1992 investigations indicated very sparse occupational debris in this area.

The Cutbank Area

This area lies adjacent to the shoreline of Eckert's Bayou some 150 meters west of the main body of the site at and just above the 6-foot contour line (see Figure 6.1). Potsherds and other aboriginal cultural debris were found in a total of 14 1m² hand-excavated units laid out as 12 contiguous units in one trench and two additional single units. Subsequent to the 1970s this area was destroyed by construction activities. Careful surface inspection in 1992 of the ground adjoining the bayou shoreline failed to reveal the slightest trace of cultural material between the Cutbank Area and the main part of the site. On this basis it is concluded that the debris in the Cutbank area represents what was a separate site.

Procedures Followed in the Analysis of the 1970s Findings

After assessing the condition of records and collections, the following procedures were followed in order to optimize the recovery of information of meaningful interpretive value:

1. Most of the materials remained uncataloged, so the entire collection was inventoried. Artifacts and faunal materials were assigned lot numbers (in sequence with those given to our 1992 materials), and appropriately labelled. Whenever possible, this was according to area and unit/level provenience.
2. Check lists of all known excavation units and arbitrary levels within units were drawn up, and those unit/levels for which there remained provenienced material were indicated on the list. The results of this have already been mentioned, and are summarized in Table 6.1.
3. Because the majority of materials could not be provenienced, and more than 80% of the excavation units in the most productive (eastern) part of the site had incomplete, non-existent or uncertain correlations with material remains, it was considered meaningless to attempt analytical comparisons of materials between or within the several excavation areas. It was therefore decided to approach analysis

in two ways:

a) Where only a part of a given class of materials could be attributed to any given excavation area, all the specimens were lumped together and assumed to be generally representative of the site. This approach was taken in the case of all artifact classes except ceramics; too few arrowpoints, for example, could be provenienced to any one excavation area to provide any meaningful information on spatial variability across the site.

b) One excavation area-- the C.C. Area-- retained better provenience data than other areas, and this was chosen as a unit of analysis for those material categories which were numerically well represented. These material categories, consisting of ceramics and faunal remains, were analyzed using the same procedures employed for the more productive areas investigated in 1992, so that comparable results could be obtained which would permit identification of possible intersite variability in the technological and/or stylistic dimensions of artifacts and the kinds of faunal remains present.

4. As a result of these procedures, the material descriptions which follow are of two kinds: For those classes which are not abundantly represented, the analytical unit is the entire site-- for lithic, bone, shell and other classes of artifacts, provenience is meaningful only at that scale. While offering no insights into intrasite variability, these artifact classes provide an important record of the material culture remains from the site as a whole.

On the other hand, because of the abundance of ceramics and faunal remains, these materials were initially suspected to be sufficiently well represented to be potentially useful for intrasite comparisons. In fact, this proves to be the case only for one excavation area, the C. C. Area, which in general appears to have been the most productive of cultural debris and which retains the highest proportion of excavation units for which materials could be provenienced. On this basis, it was decided to use ceramics and faunal materials from this area for intrasite comparisons with materials from the 1992 excavations.

The Artifacts

A total of 15,562 artifacts pertaining to the aboriginal occupation of the Mitchell Ridge Site were documented in the extant 1970s collection. These are listed according to material and inferable functional categories in Table 6.2. Included are 524 lithics, 12 tools and ornaments of bone, 3 shell artifacts, 15,010 potsherds and 13 worked and unworked glass fragments believed to pertain to the Protohistoric or Early Historic Periods.

Lithics

Flaked lithics comprise the overwhelming majority of stone artifacts recovered. With the exception of single flake of pale red quartzite (Munsell color 10R 5/3), all consist of the same gray, brown and yellowish cherts reported above from the 1992 excavations. Tools include 2 probable dart point fragments, 20 arrowpoints and arrowpoint fragments, 19 drills or perforators or fragments thereof, 16 prismatic blades, a bifacial core, a unifacial end scraper, two biface fragments and nine retouched flakes. The great majority of specimens (N=449) are chert debitage (434 flakes, 15 chunks).

Probable Dart Point Fragments

Two small, relatively thick chert biface fragments are believed to pertain to dart points. One specimen appears to be the base of an unstemmed point; the base is rounded and slightly pointed and the distal section is broken off. The maximum width of the fragment is 14.5 mm, maximum thickness is 8.4 mm. Length is indeterminate, but is estimated to have been between 25 and 28 mm. The other specimen is probably a distal tip fragment of a dart point. Thickness of the fragment is 7.1 mm and the specimen is lenticular in cross section.

Arrowpoints

Fifteen of the 20 arrowpoint specimens are sufficiently complete for typological identification. Perdiz is the single the most common type, represented by eight complete or nearly complete specimens (see Figure 6.4, b-e, and Table 6.3 for metric data). On three additional specimens the stems are broken

Table 6.2 . Aboriginal artifacts from the 1970s excavations.

| Artifact class | Description | Quantity |
|--------------------------------------|--|----------|
| LITHICS | | |
| Dart points | Untypable fragments | 2 |
| Arrowpoints and arrowpoint fragments | Lozenge shaped arrowpoint | 1 |
| | Triangular with indented base | 1 |
| | Perdiz | 8 |
| | Probable Perdiz (distal tip and stem missing) | 3 |
| | Scallorn | 1 |
| | Round-base, sub-triangular arrowpoints | 2 |
| | Untypable stemmed (stem broken off) | 2 |
| | Distal fragments | 3 |
| Chert "drills" and "drill" fragments | Expanded base | 3 |
| | Expanded base, prox. fragments | 4 |
| | Cylindrical drill | 1 |
| | Proximal/distal drill fragments | 9 |
| | Medial drill fragments | 2 |
| Blades and blade fragments | Prismatic blades | 7 |
| | Prismatic blade fragment | 6 |
| | Retouched blades | 3 |
| Miscellaneous lithics | Core | 1 |
| | End scraper | 1 |
| | Bifacial knife | 1 |
| | Biface fragments | 2 |
| | Retouched flakes | 9 |
| | Debitage | 434 |
| Rough stone | Hammerstones | 2 |
| | Pumice abrader | 1 |
| BONE | Rectangular bone implements | 2 |
| | Pottery smoother | 1 |
| | Distal bone awl fragment | 1 |
| | Bird bone beads | 5 |
| | Bone points | 2 |
| SHELL | Busycon adze fragment | 1 |
| | Distal whelk fragment, ground to chisel-like bit | 1 |
| | Discoidal bead | 1 |
| CERAMICS | Potsherds | 15,010 |

Table 6.2, Cont.

| Artifact class | Description | Quantity |
|----------------|---|----------|
| GLASS | Edge flaked light violet clear glass fragment edge | 1 |
| | Flaked amber bottle glass fragment | 1 |
| | Heavily patinated green glass bottle fragments | 6 |
| | Badly weathered, patinated, indeterminate color bottle glass fragment with possible worked edge | 1 |
| | Indeterminate color, heavily patinated bottle glass fragments | 3 |

off, so typological identification is not quite certain. However, these specimens have thin triangular blades with prominent shoulder barbs and the stems were narrow, suggesting that they pertain to the Perdiz type; they are listed in Tables 6.2 and 6.3 as probable Perdiz.

A single complete arrowpoint is a good example of the Scallorn type (Figure 6.4, a). Two other stemmed arrowpoints, one with the stem broken off, appear to be unfinished and are not given a type designation.

Four arrowpoints are unstemmed. One of these (Figure 6.4, f) is a small triangular specimen with an indented, rather V-shaped base. It resembles the points of the Starr and McGloin types reported for the central and lower Texas coastal zones (e.g. Corbin 1974; Turner and Hester 1993), and may be within the range of variation for the Maud type of east Texas. The author finds considerable ambiguity in the typology of triangular arrowpoints in Texas (e.g. morphological and geographical overlaps in types such as Maud, Fresno, Starr, Guerrero, McGloin), so this point is not assigned here to a typological grouping. One of the unstemmed arrowpoints has a diamond or "lozenge" shape (Figure 6.4, g), and can be assigned to the so-called Lozenge type (Turner and Hester 1993), a poorly defined typological category with uncertain temporal, spatial and cultural significance, but generally reported for the lower coast. The remaining two specimens have straight to slightly convex blade edges and rounded bases (Figure 6.4, h). It is believed that these should not be forced into a typological category.

The remaining arrowpoints are represented only by three distal fragments.

Drills/Perforators

Nineteen specimens fall into this category. One is a long cylindrical drill or perforator with the distal tip broken off (Figure 6.4, k). Nine specimens have expanded bases (Figure 6.4, l, m); three of these are complete and six are proximal fragments. The remaining specimens consist of two medial fragments and nine tip fragments which may be either distal ends or the proximal ends of bipointed, cylindrical drills. Metric and provenience data are presented in Table 6.4.

As is the case with the examples from the 1992 excavations, the majority of specimens show no use wear under low (20X) microscopic examination (see Table 6.4). Six specimens show light to moderate polish on the lateral edges.

Prismatic Blades

The collection from the 1970s contains 10 whole and six fragmentary prismatic blades of chert; representative examples are illustrated in Figure 6.5. Lengths of the whole specimens range from 17.9 mm to 69.8 mm. Widths of all specimens range from 2.2 to 8.9 mm (see Table 6.5). Eight specimens

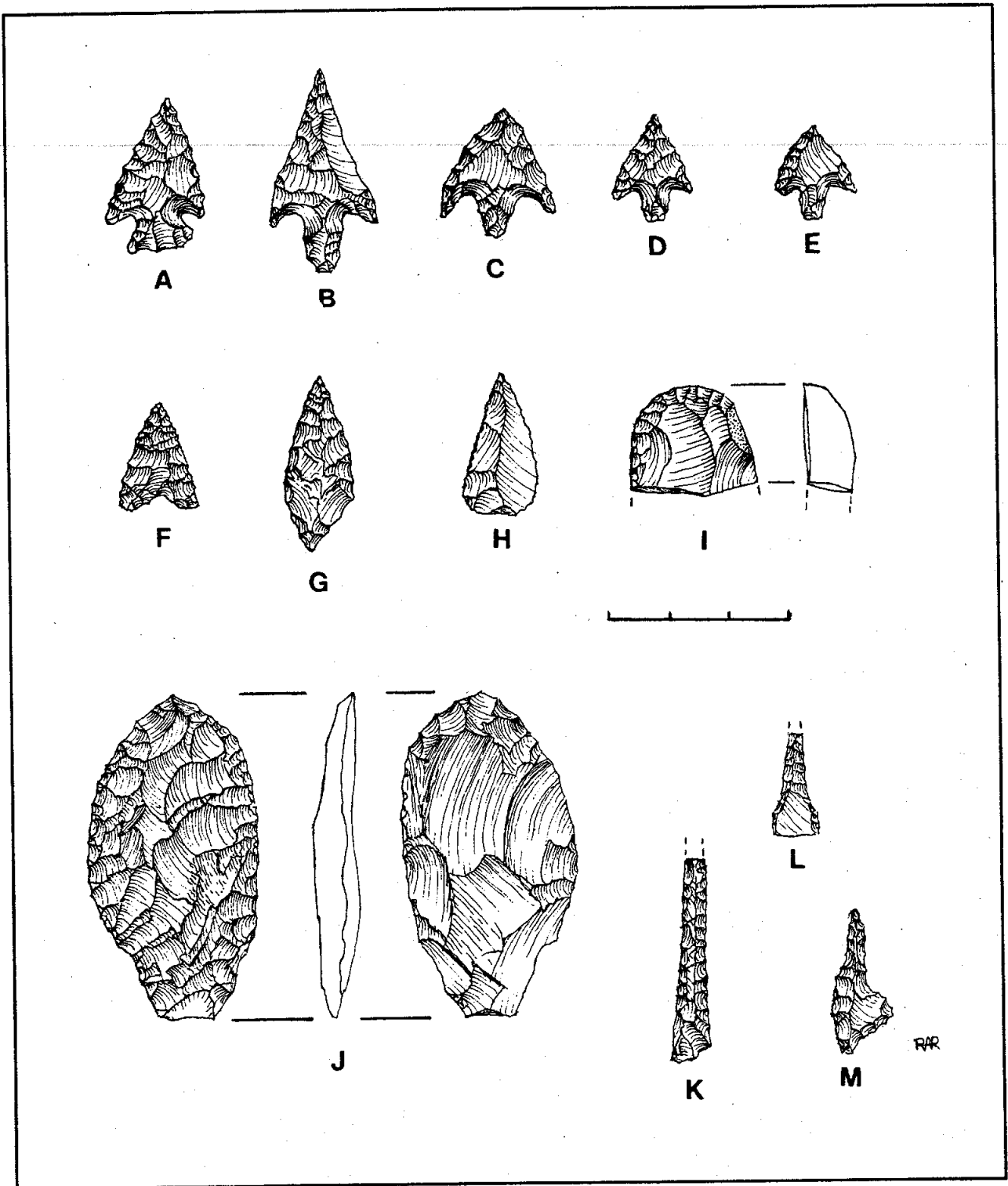


Figure 6.4. Selected lithic artifacts recovered during the 1970s excavations. A, Scallorn arrowpoint; b-e, Perdiz arrowpoints; f, triangular arrowpoint; g, lozenge-shaped arrowpoint; h, round-based subtriangular arrowpoint; i, unifacial end scraper; j, bifacial knife; k-m, chert drills.

Table 6.3. Arrow points and arrowpoint fragments from 1970s excavations.

| Description / type | Provenience | Bifacial/ Unifacial * | | Dimensions (mm.) | | | T | Use wear | Munsell number | Color |
|--|-------------|--------------------------|------|------------------|------|-----|------|-----------|---------------------|-------|
| | | stem | L | L | L | W | | | | |
| Cuney (tip of 1 barb missing) | S16E79 | B | 5.0 | 15.0 | NA | 1.8 | none | 10YR 6/1 | gray | |
| Lozenge-shaped arrowpoint | S15E71 | B | --- | 27.3 | 11.3 | 3.9 | none | 10YR 5/4 | yellowish brown | |
| Triangular, indent. base | S2E75 | B | --- | 16.9 | 12.2 | 1.6 | none | 5Y 4/1 | dark gray | |
| Perdiz | NA | B | 9.1 | 32.6 | 18.2 | 4.9 | none | 10YR 6/1 | mottled: | |
| Perdiz | S6E75 | B | 6.5 | 21.0 | 18.9 | 4.0 | none | 10YR 6/3 | gray | |
| Perdiz | NA | B | 8.0 | 20.3 | 13.2 | 2.7 | none | 10YR 6/4 | pale brown | |
| Perdiz | NA | B | NA | NA | 14.0 | 2.0 | none | ----- | lt yellowish brown | |
| Perdiz | S42E93 | B | 5.8 | 17.6 | 13.5 | 2.9 | none | 10YR 6/4 | heavily patinated | |
| Perdiz (tip of stem & tip of 1 barb missing) | S25E75 | U | NA | NA | NA | 2.2 | none | 7.5YR 6/1 | lt. yellowish brown | |
| Perdiz (possibly reworked, stem broken) | S61E70 | B | NA | NA | 12.0 | 2.0 | none | ----- | heavily patinated | |
| Perdiz fragment (distal tip missing) | S17E70 | U | 5.9 | 17.2 | 14.9 | 1.3 | none | 10YR 7/2 | light gray | |
| Probable Perdiz (stem missing) | S43E95 | B | NA | 21.9 | 13.6 | 2.3 | none | 10YR 6/1 | gray | |
| Probable Perdiz (distal tip & stem missing) | S24E75 | B | NA | 16.2 | 10.4 | 1.7 | none | 10YR 6/1 | gray | |
| Probable Perdiz (stem missing) | S17E76 | U | 11.0 | 33.2 | 18.4 | 6.1 | none | ----- | patinated | |
| Scallorn | S43E91 | B | 6.2 | 25.8 | 16.0 | 3.2 | none | 10YR 6/2 | lt brownish gray | |
| Untypable sub-triangular arrowpoint | S13E71 | U | NA | 23.0 | 11.9 | 3.1 | none | ----- | heavily patinated | |
| Untypable sub-triangular arrowpoint | NA | B | NA | 19.3 | 15.2 | 2.7 | none | 10YR 5/4 | yellowish brown | |

* "Unifacial" indicates that

original flake surface remains on much or most of 1 face of point.

Table 6.4. Chert drills and drill fragments from the 1970s excavations.

| Description | Provenience | Bifacial/ Unifacial | Dimensions | | | Use wear | Munsell number | Color |
|---|-------------|------------------------|------------|------|-----|-----------------|----------------------|--|
| | | | L | W | T | | | |
| Expanded base drill | NA | B | 26.5 | 9.2 | 3.8 | polish on edges | 10YR 5/2 | grayish brown |
| Expanded base drill | C.C. area | U | 31.7 | 14.0 | 4.0 | none | 10YR 4/1 10YR 6/4 | mottled: dark gray light yellowish brown |
| Expanded base drill (distal tip missing) | S13 E70 | U | NA | 6.5 | 2.2 | none | 7.5YR 4/1 | dark gray |
| Expanded base drill (distal tip missing) | S115E38 | U | NA | 7.5 | 1.6 | none | 7.5YR 3/3 | dark brown |
| Expanded base drill (base broken) | NA | B | NA | 4.0 | 3.1 | polish on edges | ----- | patinated |
| Expanded drill base | S25E75 | B | NA | 8.5 | 2.4 | none | 10YR 6/3 | dark gray |
| Expanded drill base | S17E77 | U | NA | 10.0 | 3.2 | none | ----- | patinated |
| Cylindrical drill | NA | B | 22.1 | 5.5 | 2.4 | polish on edges | 10YR 4/2 | dark grayish brown |

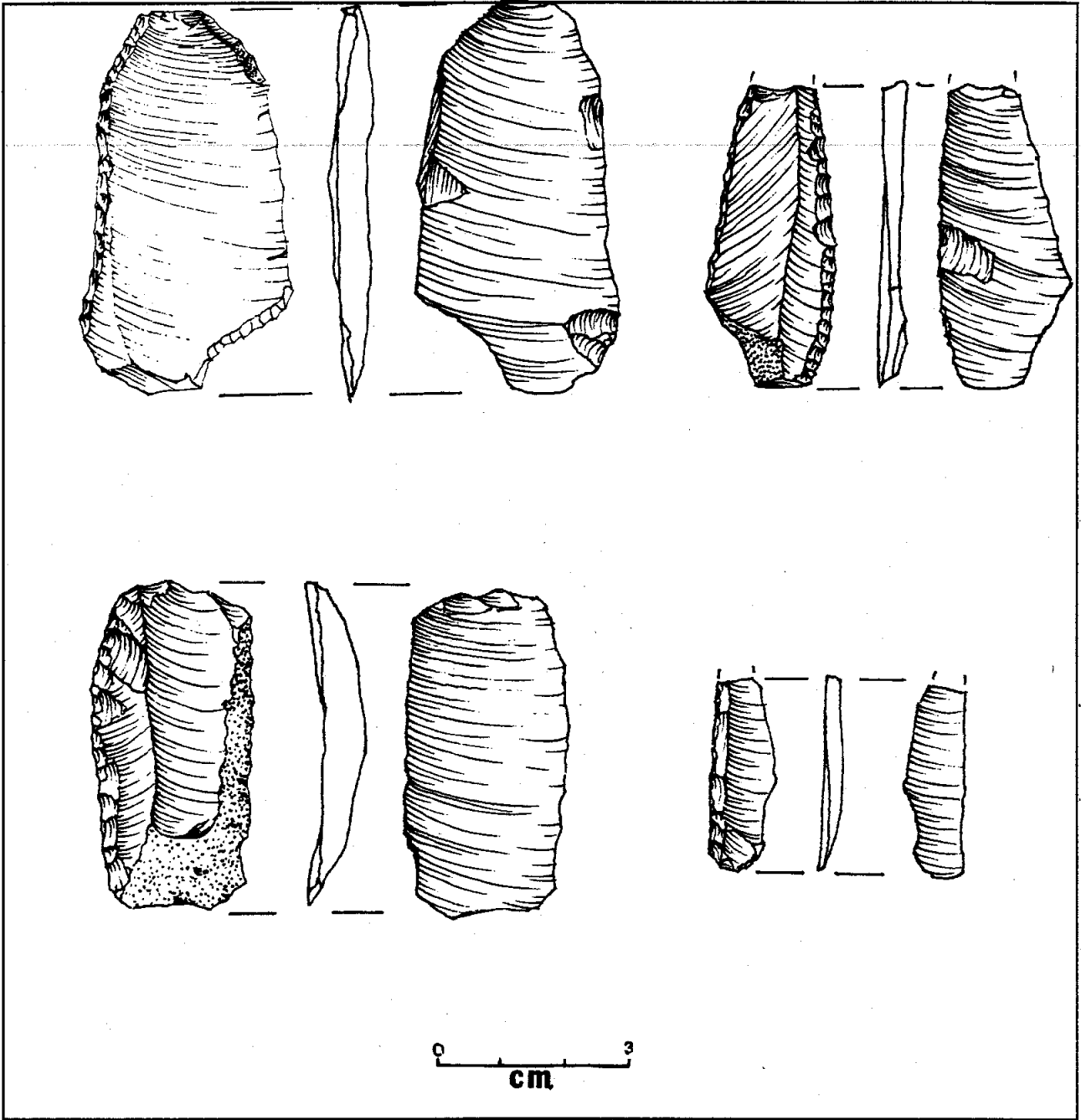


Figure 6.5. Chert blades from the 1970s excavations. A-c have unifacial retouch on one or both lateral edges.

Table 6.5. Prismatic blades and blade fragments from 1970s excavations.

| Description | Provenience | Dimensions (mm.) | | | Retouch flaking | Use wear | Munsell number | Color |
|--------------------------|-------------|------------------|------|-----|-----------------|---|----------------------------------|---|
| | | L | W | T | | | | |
| Prismatic blade | S35E86&87 | 17.9 | 10.0 | 3.1 | on 1 edge | none | ----- | patinated |
| Prismatic blade | S14E65 | 35.7 | 13.0 | 3.0 | on 1 edge | none | 2.5Y 6/2 | light brownish gray |
| Prismatic blade | S25E80 | 39.8 | 29.0 | 4.5 | on 1 edge | microflaking and polish on retouch | 2.5Y 5/2 2.5Y 8/2 2.5Y 6/2 | mottled; grayish brown pale yellow light brownish gray |
| Prismatic blade | S14E68 | 20.5 | 13.9 | 3.1 | none | polish on arises | 10YR 6/2 | light brownish gray |
| Prismatic blade | NA | 29.6 | 10.9 | 2.7 | on 1 edge | microflaking, polish on arises | ----- | patinated |
| Prismatic blade | NA | 28.0 | 13.7 | 5.8 | none | microflaking 1 edge | 10YR 6/2 | light brownish gray |
| Prismatic blade | NA | 20.5 | 10.5 | 3.2 | none | microflaking 1 edge | 10YR 6/4 | light yellowish brown |
| Prismatic blade fragment | NA | 20.9 | 10.5 | 3.0 | none | microflaking 1 edge | 2.5Y 6/2 | light brownish gray |
| Prismatic blade fragment | NA | 37.5 | 13.2 | 2.2 | on 1 edge | microflaking on edge opposite retouch, polish on arises | ----- | ----- |
| Prismatic blade fragment | NA | 37.9 | 18.0 | 8.9 | on 1 edge | polish on retouch | 10YR 5/3 | brown |
| Prismatic blade fragment | NA | 21.2 | 20.0 | 5.8 | none | microflaking 1 edge | 7.5YR | brown |
| Prismatic blade fragment | N19W79 | 28.6 | 11.7 | 2.7 | on 1 edge | microflaking 1 edge | 4/2 | patinated |
| Prismatic blade fragment | N20W75 | 23.0 | 18.0 | 4.0 | none | polish on ridges | ----- | light yellowish brown |
| Retouched blade | NA | 46.2 | 20.3 | 3.2 | both edges | polish on retouch | 10YR 6/3 | dark grayish brown |
| Retouched blade | NA | 69.8 | 31.0 | 8.0 | 1 edge | none | 2.5Y 4/2 | patinated |
| Retouched blade | NA | 69.8 | 31.0 | 8.0 | 2 edges | microflaking on retouched edges | ----- | patinated |

exhibit intentional retouch on one lateral edge; two have retouch on both lateral edges. All but three specimens show evidence of utilization as continuous edge microflaking or polish (see Table 6.5).

Miscellaneous Flaked Chert Artifacts

A small and variable sample of artifacts comprise this category. These include a small bifacial chert core, a unifacial end scraper (Figure 6.4, i), , a thin biface that is probably a knife (Figure 6.4, j) judging by its form and the presence of use polish on the lateral edges, two miscellaneous bifaces, and nine retouched flakes.

The miscellaneous bifaces are both broken, so the original, complete forms are indeterminate. Both specimens, which have medial breaks, are crudely formed and probably represent unfinished tools.

Debitage

As noted above, with the exception of a single flake of pale red quartzite, all debitage from the 1970s excavations is of chert. Aside from 15 amorphous chunks, the sample consists of 434 flakes (including flake fragments). Judging by the proportion of lithic debitage in the total artifact samples from the 1992 excavation, this seems to be an incomplete sample of the debitage that should have been recovered during the 1970s excavations. For this reason, the extant debitage sample from the 1970s is not used in the analysis of lithic technological organization presented in Chapter 7.

Rough/Ground Stone

Two implements fall into this category. The first is a cobble hammerstone of white quartzite. Measuring 78 x 88 x 52 mm, the cobble is nearly round but with slight natural flattening. The edges are distinctly battered through use on hard material. The second item is a small piece of water-worn pumice with one end which appears to have been flattened by grinding. Presumably this specimen served as an abrading stone. The length is 25 mm, and the width of the flattened end is 29 mm.

Bone Artifacts

Although the sample of bone implements is small, an interesting variety of utilitarian and non-utilitarian objects is represented. Aside from two specimens from one of the burials, discussed in Chapter 8, ten specimens were found in the collection. These are described below.

Rectangular Bone Implements

Two specimens are cut sections of mammal longbone which have been ground and smoothed to a rectangular shape. The larger of the two (Figure 6.6, a), measuring 35 x 51 mm, is made from the longbone of a large mammal, perhaps bison, judging from the unmodified exterior curvature of the bone. Modification consists of flattening of the interior surface and flattening of the ends by grinding of the ends. Both the interior and exterior surfaces and the ends show slight polish. This specimen come from the C. C. Area.

The second specimen (Figure 6.6, b), from the Cross Area, was manufactured in the same fashion, with the interior and ends flattened by grinding. This specimen is much smaller, however, measuring 19 by 29 mm; it is made from deer-sized longbone. The interior surface and the ends exhibit slight polish, whereas the exterior surface is somewhat more highly polished.

The function of these implements is indeterminate. Unlike the rectangular bone artifact from the 1992 Block Excavation which is thought to be a possible pottery smoother, the ends are flat rather than beveled. These specimens may have served a non-mundane function, though they were apparently found within deposits of occupational debris. In size and shape they resemble an engraved bone piece found next to the skull in a burial (No. 5, excavated during the 1970s) which is identical to specimens from a burial at the Harris County Boys School Site near Clear Lake (Aten 1976).

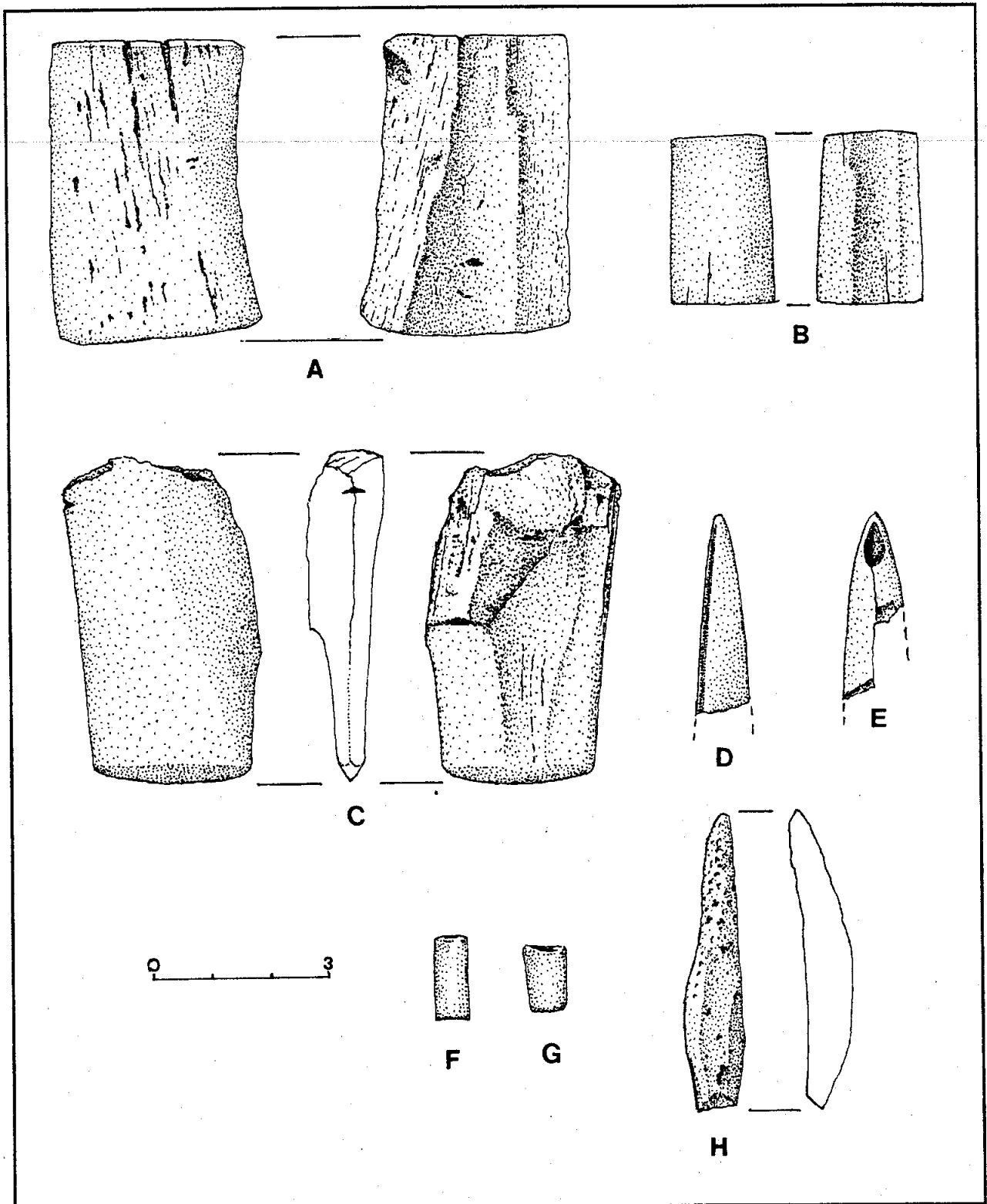


Figure 6.6. Bone artifacts, 1970s excavations. A, b, rectangular implements of mammal longbone; c, possible pottery smoother, large mammal longbone; d, bone awl fragment; e, distal fragment, socketed bone point; f, g bird bone beads; h, bone point.

Bone Awl Fragment

The single bone awl in the 1970s collection is a distal fragment, ground to a point (Figure 6.6, d). The specimen retains a natural groove along one side, indicating that it was made from an artiodactyl (probably deer) metapodial. This specimen was recovered from the C. C. Area.

Bone Points

Two specimens represent two different kinds of projectile point. One is the unprovenienced distal tip of a socketed bone point (Figure 6.6, e) and was probably made from a deer metapodial, as were several other specimens from a burial excavated in the 1970s (No. 10) and described further on in Chapter 8.

The other specimen appears to be made from a large fish fin spine (species is unidentifiable, but resembles kingfish). The surfaces are ground, resulting in a slight faceting. Natural post-depositional pitting of the surface precludes determination of whether the pointed tip was also ground or was simply the naturally pointed end found on this kind of bone element. This specimen is virtually identical to three examples from an Early Historic Burial at Mitchell Ridge excavated in 1992 (Feature 65), one of which retained asphaltum hafting mastic on the proximal end.

Bird Bone Beads

Five small beads of cut and polished longbone sections from duck-sized birds were recovered, all apparently from within general occupational debris deposits (two examples are illustrated in Figure 6.6, f, g). Four of these are from the C. C. Area, the fifth is unprovenienced. One specimen is broken and the length is indeterminate; the others range in length from 11 to 15 mm. Diameters range from 5 - 6.5 mm.

Shell Artifacts

Only three artifacts of shell are present in the collection. The dearth of shell implements is probably largely reflective of minimal use of shell as raw material for tools, since shell artifacts were also relatively few in those areas investigated in 1992. However, the complete absence of oyster shell tools (several were found in 1992) may reflect lack of recognition in the field. All oysters retained in the 1970s collection were examined for evidence of artificial modification, and none were found. It was apparent, however, that the few bags of collected oyster shell in the collection must have been only a small fraction of those encountered during the 1970s excavations.

The only identifiable shell tools in the collection are made from lightning whelk (*Busycon perversum*) shell. Both are unprovenienced. One specimen is the distal end of an adze. As may be seen in Figure 6.7, a, this exhibits the ground edge beveling characteristic of this type of artifact. This tool type is clearly quite rare on the upper Texas coast, since it is unreported from other sites in the region. It is, however, fairly common in Late Archaic and Late Prehistoric contexts in the central Texas coast region (e.g. Campbell 1952; Steele and Mokry 1985; Ricklis 1990), where higher estuarine salinities provide suitable habitats for whelk and other gastropod species (e.g. Steele 1988).

The second whelk shell artifact is an end-modified section of a rather large lightning whelk. The naturally elongated and pointed end of the shell has been ground at approximately a 40° angle to the long axis of the shell to form a chisel-like edge.

The final shell object is a small discoidal bead 10.4 mm in diameter. The edges are ground smooth and the bead has a central drilled hole 3 mm in diameter. Thickness is somewhat variable, ranging from 4.2 to 4.8 mm. This bead is not made from whelk shell, as are many of the shell beads from burials discussed later on; the natural growth laminations of the shell run parallel to the flat axis, which is not the case with whelk. The material may be quahog shell (*Mercenaria campechensis*), which has growth laminations parallel to the flat axis and which attains thicknesses comparable to that of this bead.

Glass Artifacts

Several glass fragments in the 1970s collection (excluding obviously modern clear and dark amber bottle glass fragments) merit consideration because they probably pertain to the Protohistoric or Early

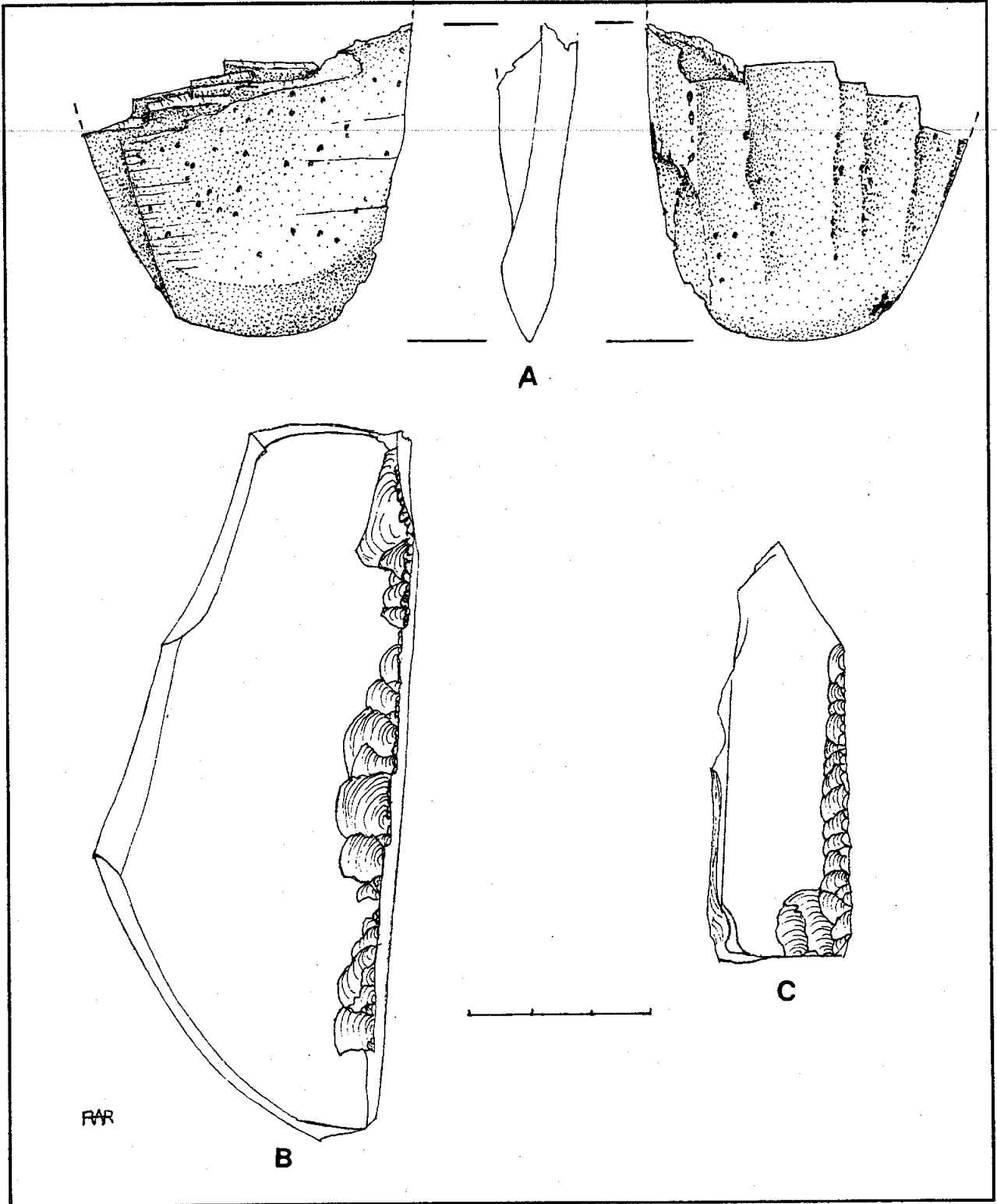


Figure 6.7. Artifacts recovered during the 1970s. A, whelk shell adze; b, c., edge-flaked glass bottle fragments.

Historic aboriginal occupations of the site.

Glass Arrowpoint Fragment

A fragmentary glass arrowpoint clearly represents aboriginal occupations during the period of European contact. Though uncommon, glass arrowpoints are reported sporadically along the Texas coast (e.g. Campbell 1958b; Corbin 1963) and represent the occasional use of European bottle glass for production of native tool forms. The present specimen, of heavily oxidized dark green (probably bottle) glass, consists of an arrowpoint proximal section. The blade was triangular in shape with slightly convex lateral edges. The central part of the base is present, but the two lateral corners are broken off. The point does not appear to have had a stem, and probably had an overall triangular outline. The specimen is bifacially flaked and exhibits a lenticular cross-section. The length of the fragment is 14.1 mm, the maximum width is 12.2, and the maximum thickness is 3.3 mm. Provenience is not available for this specimen.

Edge-Worked Bottle Fragments

Two fragments of bottle glass exhibit intentional modification in the form of continuous flaking along one edge. The larger of the two specimens (Figure 6.7, b), from the C. C. Area, is of unpatinated amber glass. The interior face of one edge has been modified by removal of a continuous series of flakes, leaving shallow, broad flake scars. Secondary modification is present in the form of continuous microflaking along the same edge. The outer part of the broken edge retains its original flat surface, so that the piece would not have functioned as a cutting tool. It could, rather, have served in scraping of hard material such as wood, with the long, flaked edge drawn along the surface of the material which was being worked.

The other specimen (Figure 6.7, c), found in a 1m² test unit in the Burke House Area, is of nearly clear, pale violet bottle glass. In this case, one edge shows continuous intentional pressure flaking which has created a beveled working edge which could have served well in cutting tasks.

Bottle Glass Fragments

Thirteen fragments of bottle glass bear heavy patination (oxidation), suggesting a relatively considerable age. Three of the larger fragments show uneven thicknesses, surficial air bubbles and slightly undulating surfaces, all characteristics of the hand-blown bottles commonly made prior to the mid-nineteenth century. Tiny sections of the edges were removed in the laboratory to determine the original color of the glass. Eight pieces were dark green, and two were light green. In the case of the remaining three specimens, oxidation had penetrated the entire thickness of the glass, making determination of the original color(s) impossible. The variations in color and degree of patination indicates that at least three bottles are represented.

Twelve of the specimens retain provenience. All but one were recovered in the C. C. Area, suggesting use and breakage of Early Historic bottles in that area, and, by implication, the possible presence of an significant Early Historic occupational component (though other indicators of such-- e.g. glass trade beads, early metal tools-- are not present in the collection). The remaining specimen was recovered from the Cross Area.

Ceramics

All but two of the more than 15,000 potsherds in the collection made during the 1970s are of the sandy paste, grog tempered, or, in a small minority of cases, bone tempered wares characteristic of Texas coast aboriginal pottery. Since the greatest proportion of this material which retains provenience comes from the C. C. Area, the sherds from that area are discussed in some detail, along with the pottery from the 1992 excavations, in Chapter 7. Suffice it to say here that at least 147 individual vessels are represented by the sherds from the C. C. Area, and that they show the same basic characteristics of paste, firing, form and decoration as those from the 1992 excavations.

The two exceptional specimens consist of a sherd from a shell tempered vessel and a fragment of

a loop handle. The shell tempered sherd is very small (max. length 15 mm), so nothing can be said about vessel form. Aside from being the only shell tempered sherd from the site, it is also unusual insofar as the paste is devoid of sand. The vessel wall was quite thin (sherd thickness is 3 mm). The color is a light brown throughout (Munsell 7.5YR6/3), except for dark gray smudging on the exterior. The exterior surface is smoothed, the interior burnished. In color, surface finish, and tempering, this sherd resembles much of the Mississippian pottery of the Lower Mississippi Valley (e.g. Phillips 1970) and Caddoan pottery of northeast Texas and adjacent portions of Louisiana and Arkansas (e.g. Suhm and Jelks 1962). It may represent an imported pot from one of those areas.

The other unusual sherd is also of virtually certain non-local origin. It consists of a small part of a vessel wall which retains part of a simple loop handle, a form of ceramic appendage that is non-existent among the aboriginal ceramics indigenous to the Texas coast (cf. Suhm and Jelks; Aten 1983a; Ricklis 1990). The section of vessel wall is too small (maximum length 28 mm) to indicate anything of vessel form. In cross section the attached handle is round, with a diameter of 14.5 mm). Surface color, interior and exterior, is oxidized to a reddish yellow (Munsell 5YR6/6), while the vessel wall and handle cores are gray. The paste contains both sand and grog. The sherd is much harder than the local native-made ceramics, suggesting the use of a different clay. The origin of this piece is uncertain, though the form, hardness and presence of grog tempering are suggestive of some of the Mississippian ceramics of the Lower Mississippi Valley area (Phillips 1970).

Faunal Remains

Because the C. C. Area retains the most complete provenience of the areas investigated during the 1970s, and also because it appears to have been the most productive of the areas, it was decided to use a faunal sample from that area for analysis. The same procedures were followed as have been described above for the 1992 Block Excavation and Feature 9, in order to produce comparable results and thus permit assessment of the degree of similarity or difference in the faunal remains from three separate areas of the site. The analyzed sample was selected from 12 1-m² excavation units in the central part of the C. C. Area. The ultimate goal of this procedure is to determine whether the recurrent occupations of the Mitchell Ridge Site involved essentially similar kinds of resource procurement, or whether subsistence practices may have significantly varied. The working assumption here is that if there were significant variability in subsistence activities during different occupations, this could be reflected in significant spatial variations in the kinds and/or proportions of faunal materials across the site, assuming that individual occupational episodes were not so extensive as to encompass all of the investigated areas.

The results of these analyses have been presented in Tables 5.6 and 5.7. Table 5.6 (p.89) presents the counts of individual identifiable bone elements by taxa, and Table 5.7 (p.96) indicates how these quantifications translate into minimum numbers of individuals (MNI) and estimates of meat weight, according the principles already discussed for the Block Excavation.

At a general level, it is apparent that the subsistence practices represented in the C. C. Area were essentially the same as those indicated by the faunal sample from the Block Excavation and Feature 9. In terms of estimated meat weight, the combined fish species were significant taxa in all three areas, representing 61.2%, 54.8% and 45.6 % of the total weights for the C. C. Area, Feature 9, and the Block Excavation, respectively. Mammals have respective percentages of total estimated meat weight of 26.2%, 42.5% and 48.0%. The primary mammalian food species in all areas was white-tailed deer, with hispid cotton rat consistently of secondary importance. Reptiles and birds combined comprise only a small fraction of the estimated meat weight in all areas, though at 11.8% they are better represented in the C. C. Area than Feature 9 or the Block Excavation (0.6% and 3.6% respectively); the difference is largely accounted for by the presence of an MNI of one alligator in the C. C. area, suggesting that sampling bias accounts for the discrepancy.

The proportional representation of fish in the C. C. Area is higher than the other two areas, and mammals, conversely have a lower representation. This may indicate that fishing, while apparently consistently of considerable importance, varied in significance. There are no radiometric chronological data for the C. C. Area, but most of the arrowpoints recovered are of the Perdiz type, suggesting that most of the occupation pertained to the Final Late Prehistoric or Protohistoric Periods. Although the available data are sorely limited, it can thus at least be suggested that the possible differences in the significance of fish as opposed to mammals do not reflect any major long-term trends in subsistence patterns. It is

perhaps more likely that there were stochastic variations in the relative availabilities of different classes of food resources during different occupational episodes. Nonetheless, the most basic points which emerge from the comparative intrasite faunal analyses is that fish were highly significant, along with mammals, and that mammalian meat weight was consistently provided mainly by deer, and secondarily by hispid cotton rat.

Seasonality

Little data on seasonality can be gleaned from the findings made during the 1970s excavations. Several small bags of oyster shell were present in the extant collection, but the shells are too weathered for seasonality readings. Three otoliths (one each of spotted seatrout, redfish and marine catfish), all from the C. C. Area, are unweathered and therefore suitable for seasonality determination. These were cross-sectioned and examined under 20X microscopy. Season of death is estimated on the degree of growth beyond the final winter interruption growth ring of the otolith (see Smith 1983; Prewitt 1987; Ricklis 1988, 1990; Eling et al. 1993 for discussions of methodology). The spotted seatrout appears to have died in the middle of the annual growth cycle, suggesting a summer death. The redfish and the catfish otoliths both ceased growth on the winter growth interruption ring, suggesting winter deaths.

Chronology

A total of nine samples were submitted during the 1970s for radiocarbon dating to the Radiocarbon Laboratory, The University of Texas at Austin. Five of these (TX-2599 through TX-2603) were run on a "charcoal-like substance" which, as mentioned above, was actually natural asphaltum. Ages ranging from 32,500/-2610 B.P. to 40,000+ years were obtained, as is expectable as the upper limit for the radiocarbon method when applied to natural petroleum. It is clear that the asphaltum nodules commonly found as a component of the general occupational debris were mistaken for wood charcoal, with the result that the assays are obviously useless.

Four additional samples, one of charcoal and three of oyster shell, were also assayed, and these produced apparently reliable and useful results. One oyster and one charcoal sample were submitted for assay as a paired sample; both were extracted from "Feature 10", a hearth exposed by mechanical blading in "Trench 5" one of the machine-excavated trenches in the Corral Area (Atkins n.d.). The charcoal sample (TX-2605) produced an age of 780 +/-150 B.P., and the oyster shell yielded an age of 510 +/-50 B.P. Both dates are reported in the summary manuscript by Atkins (n.d.) without indication that any corrections for ^{13}C or calibrations were carried out. A check of the laboratory files (Melissa Winans, pers. comm, 1994) indicated that this is indeed the case on these and all other samples from the 1970s excavations.

Since our 1992 radiocarbon assays on oyster shell indicated that 370 years should be added to uncorrected oyster shell assay results (see discussion in Chapter 5), this correction factor is added to the raw ages on shell dates obtained during the 1970s. This seems justified by the fact that the same factor was determined by mass spectrometry for the oyster samples from both Features 106 and 114 in the Block Excavation, and similar correction factors have been obtained on estuarine shells from the Corpus Christi Bay area (Ricklis and Cox 1991; Ricklis 1993a). Using this factor, then, the shell age, TX-2606, corrects to 880 +/-50 B.P., which calibrates (Stuiver and Reimer 1993) to a 1-sigma calendar date range of A.D. 1051-1226, with an intercept at A.D. 1275. The charcoal date is calibrated uncorrected, since wood charcoal generally requires a correction for ^{13}C of only about 25 years. Directly calibrated from the raw radiocarbon age of 780 +/-150 B.P., a 1-sigma calendar date range of A.D. 1052-1385, with an intercept at A.D. 1176, is obtained. The 1-sigma date ranges are thus in mutual agreement, suggesting that the two samples constitute a valid pair, which places the hearth in the latter part of the Initial Late Prehistoric or early part of the Final Late Prehistoric.

The two other samples consisted of oyster shells. Both came from features which, although there are no extant field notes, can be suspected to have been shell lined hearths. Sample TX-2598 ("Feature 28") produced an uncorrected age of 230 +/-70 B.P., which, using a factor of 370 years, corrects to 600 +/-70 B.P. This in turn calibrates to a 1-sigma calendar date range of A.D. 1300-1416, with intercepts at A.D. 1328, 1333 and 1395. The other shell sample (from Feature 27), TX-2603, yielded an uncorrected age of 50 +/-50 B.P. which corrects to 420 +/-50 B.P. and calibrates to a 1-sigma date of A.D. 1438-1611, with an intercept at A.D. 1454.

As a group, these four corrected and calibrated assays point to occupation between the end of the Initial Late Prehistoric and the early part of the Protohistoric Periods. For the most part, the artifacts excavated in the 1970s are in agreement with this small series of radiocarbon dates. Typologically, the projectile point sample is clearly dominated by the Perdiz arrowpoint, which is well dated to between ca. A.D. 1250/1300 and 1700 in the general Texas area.

Limited occupation during the Initial Late Prehistoric is suggested by a single unprovenienced Scallorn type arrowpoint, a type generally dated in Texas to between A.D. 700 and A.D. 1250/1300 (e.g. Prewitt 1981; Turner and Hester 1993). The fact that only the one Scallorn point is present in the collection from the 1970s suggests that occupation during the Initial Late Prehistoric was less intensive than later, an inference also supported by the finding of only a single Scallorn specimen during the 1992 excavations and, as we shall see further on, by the relatively large series of radiocarbon assays on human burials dating to the Final Late Prehistoric, Protohistoric and Early Historic Periods.

A limited occupation prior to the Initial Late Prehistoric is suggested by the two dart point fragments in the 1970s collection. Also, Atkins (n.d.) noted finding four large dart points during the 1970s work; one of these was reported to have been found near the base of the dark brown fine sand soil (termed, perhaps erroneously in this case, "the midden") in Trench 1 in the Corral Area. None of these are in the extant collection, so it is difficult to evaluate whether they were actually dart points or some other form of relatively large biface (e.g. knives). With the existing collections, it is possible to identify only the two small dart point fragments discussed above, and a Godley dart point from Burial 10 (excavated in the 1970s) discussed in Chapter 8. All indications are that occupation prior to the Late Prehistoric was relatively light.

Finally, aboriginal occupation during the period of European contact is suggested by the fragments of heavily patinated, hand-blown bottle glass and indicated with virtual certainty by the glass arrowpoint. These materials most likely pertain to the Early Historic Period, during which European goods became available to native peoples, and for which we have several burials dated on the basis of radiocarbon assays and time-diagnostic glass bead types.