THE USE OF TABLE ROCK RESERVOIR PROJECTILE
POINTS IN THE DELINEATION OF CULTURAL COMPLEXES AND THEIR DISTRIBUTION

A Thesis
Presented to
the Faculty of the Graduate School
University of Missouri

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Richard A. Marshall
June 1958

The undersigned, appointed by the Dean of the Graduate Faculty, have
examined a thesis entitled

THE USE OF TABLE ROCK RESERVOIR PROJECTILE POINTS IN THE
DELINEATION OF CULTURAL COMPLEXES AND THEIR DISTRIBUTION

presented by

Richard A. Marshall

a candidate for the degree of

Master of Arts

and hereby certify that in their opinion it is worthy of acceptance.

Carl H. Chapman
Robert F. S. Spicer
Maurice S. Mehl

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
II. A REVIEW OF PREVIOUS DESCRIPTIVE SYSTEM AND TYPOLOGIES	9
III. THE DEVELOPMENT OF A DESCRIPTIVE SYSTEM FOR PROJECTILE POINTS FROM TABLE ROCK RESERVOIR	20
IV. THE FORMATION OF PROJECTILE POINT TYPES AND SERIES BY ASSOCIATION IN CULTURAL COMPLEXES	33
List of Excavated Sites Used in the Study.	35
Partial Listing of Traits for the Table Rock Reservoir Cultural Complexes	36
The Early Nonceramic Complex	36
The Late Nonceramic Complex	37
The Early Ceramic Complex.	39
The Late Ceramic Complex	40
The Early Nonceramic Complex Projectile Points	43
The Late Nonceramic Complex Projectile Points.	49
The Early Ceramic Complex Projectile Points.	56
The Late Ceramic Complex Projectile Points	59
V. THE DISTRIBUTION OF COMPONENTS OF CULTURAL COMPLEXES ON THE BASIS OF PROJECTILE POINT TYPES	64
VI. THE BROADER AFFILIATIONS OF TABLE ROCK RESERVOIR CULTURAL COMPLEXES	72

CHAPTER	PAGE
VII. SUMMARY AND CONCLUSIONS	83
BIBLIOGRAPHY	90
COLLECTIONS	95
APPENDIX A	97
APPENDIX B	106
The Viola Series Projectile Point Types	107
The Lampe Series Projectile Point Types	117
The Shell Knob Series Projectile Point Types	127
The Golden Series Projectile Point Types	131

LIST OF TABLES

TABLE	PAGE
I. Description of Table Rock Reservoir Projectile Point Categories	137
II. The Viola Series Projectile Point Types and Categories	139
III. The Lampe Series Projectile Point Types and Categories	140
IV. The Shell Knob Series Projectile Point Types and Categories	141
V. The Golden Series Projectile Point Types and Categories	142
VI. Distribution of the Number of Projectile Point Category Specimens on Seventy-eight Sites in Table Rock Reservoir	143
VII. Components of Cultural Complexes Indicated by the Distribution of Table Rock Reservoir Surface Categories Associated with Named Projectile Point Types and Series.	145
VIII. Selected Sites Having Comparable Projectile Points to the Table Rock Reservoir Types.	152
IX. Projectile Point Types of Established Cultural Complexes of Table Rock Reservoir Showing a Possible Range of Popularity	154

LIST OF FIGURES

FIGURE	PAGE
1. Diagrammed Cross-section of Exposed Geologic Column at Table Rock Dam Site.	155
2. Diagram of Projectile Point Terminology and Possible Variations	156
3. Blank Outlines and Incomplete Projectile Points In- dicating Manufacture from Blanks.	157
4. Artifacts Made from Water Patinated Chert	158
5. Map of Prehistoric Sites in Table Rock Reservoir. .in pocket	
6. Early Nonceramic Components in Table Rock Reservoirin pocket	
7. Late Nonceramic Components in Table Rock Reservoirin pocket	
8. Early Ceramic Components in Table Rock Reservoirin pocket	
9. Late Ceramic Components in Table Rock Reservoirin pocket	
10. Location of Sites Used in Comparisons	160
11. Surface Categories K1 Through K8	161
12. Surface Categories K9 Through K14	162
13. Surface Categories K15 Through K21.	163
14. Surface Categories N1 Through N6, K22, S1, and S12	164
15. Surface Categories S2 Through S10	165

FIGURE	PAGE
16. Surface Categories B1 Through B6	166
17. Surface Categories B7 Through B9, K23, and C10 . . .	167
18. Surface Categories C1 Through C6	168
19. Surface Categories C7 Through C9, and Unclassified Points U1 Through U6	169
20. Rice Lobed and Jakie Stemmed Projectile Point Types .	170
21. Rice Lanceolate and Rice Contracting Stemmed Projectile Point Types	171
22. Stone Square Stem and Rice Corner-notched Projectile Point Types	172
23. Rice Beveled-notch, Dalton Serrated, and White River Archaic Projectile Point Types	173
24. Barry Square Stem and Standlee Contracting Stem Projectile Point Types	174
25. Stone Corner-notched and White River Corner-notched Projectile Point Types	175
26. Table Rock Stemmed, Kings Corner-notched and Lander Contracting Stem Projectile Point Types	176
27. Lander Corner-notched and Rice Side-notched Projectile Point Types	177
28. Table Rock Pointed Stem, Jakie Notched, White River Triangular, Table Rock Corner notch, and White River Elliptical Projectile Point Types	178

CHAPTER I

INTRODUCTION

The imminent destruction of archaeological resources in the White River Valley has been brought about by the construction of Table Rock Dam.¹ Archaeological research on a salvage basis began in 1951 prior to construction activities, and continued on a limited basis until June, 1953. At that time an expanded program of archaeological salvage was carried on continuously until the close of the summer field session in 1957. This salvage program, conducted by the University of Missouri, Department of Sociology and Anthropology, in co-operative agreement with the National Park Service, United States Department of the Interior, was the most intensive ever conducted in the state of Missouri.² The earlier work in the Table Rock Reservoir resulted in the development of a tentative chronological sequence of partially defined cultural complexes (Chapman, 1956, pp. 35-41).

¹Table Rock Dam is a hydro-electric power and flood control project on the White River west of Branson, Missouri near the Taney - Stone County line, under the direction of the U.S. Corps of Engineers, Little Rock District, Little Rock, Arkansas.

²A grant from the National Park Service of \$23,000 in 1955 and an additional grant of \$9500 in 1956 made possible the intensive program.

Additional information was obtained, through the expanded salvage program, to aid in the definition of the Table Rock Reservoir cultural complexes and to place them correctly in sequential order. This study will utilize the new and old information to expand the knowledge of the Table Rock Reservoir cultural complexes, their geographic distribution in the Table Rock Reservoir locality, their place in the cultural sequence, and their relationships with the cultural complexes in the surrounding regions. Phillips and Willey (1953, p. 618) define a locality as "the smallest unit of area ordinarily dealt with in archaeology, varying in size from a single site to a district of uncertain size, generally speaking not larger than might be occupied by a single community or 'local group'". The specific unit under study will be referred to as the "Table Rock Reservoir locality."

Table Rock Reservoir is located in southwest Missouri near the western edge of the Ozark Plateau. The reservoir centers near the confluence of the James River with the White River approximately sixty miles south of Springfield, Missouri. The topography is rough with prairie capped hills grading into steep hillsides and frequently into vertical bluffs many of which are one hundred to three hundred feet high. The clear streams are swift flowing and deeply entrenched (Chapman, 1956, p. 20). Springs seep out of horizontal layers of bedded limestone and dolomite and disappear into or flow over talus deposits to the valley below. The White River drains southeast from Table

Rock Reservoir to the Mississippi River and its headwaters form in northwestern Arkansas to drain part of the northern edge of a high plateau which separates the White River from the Arkansas drainage (Fig. 10). The James River begins east of Springfield, Missouri and drains in a southerly direction and empties into the White River as its largest tributary in Missouri. To the west of Table Rock Reservoir the rugged hills of the Ozark Plateau break upon the Central Lowlands, forming the boundary between the Ozarks and the Great Plains (Kroeber, 1939, p. 185).

The geology of Table Rock Reservoir has not been effectively defined nor is there any outstanding feature that tends to separate it from the rest of the Ozarks. A brief description of the geological formations in Table Rock Reservoir is necessary because they were the prime source of lithic materials utilized by the Indians who occupied the locality.³ Certain siliceous stones were used almost exclusively for the making of tools. Although limestone, dolomite, "cotton rock", fine grained sandstone, and some imported igneous or metamorphic stones were used, most artifacts were manufactured from a variety of quartz called by a number of names, but commonly referred to as flint, chert, or chalcedony. In this study, the crypto-crystalline, conchoidal fracturing material, will be referred to as chert (Turner, 1949,

³A more detailed study of the geology of the Table Rock Reservoir has been made by the writer and this paragraph is a brief compendium of that study (Chapman, et. al., 1955, M.S.).

pp. 26-27; Keller, 1951, p. 34; and Skinner, 1956, p. 13). The immediate sources of this stone are the exposed and weathered geological formations of the Table Rock Reservoir locality (Fig. 1). Limestones and dolomites of Ordovician age are the dominant and basic outcrops. These are overlaid by younger strata of the Mississippian series. The exposed Ordovician system is characterized by cherty magnesium limestones and dolomites. From these deposits come characteristic cherts, frequently oolitic, usually brown to blue, but often white or light gray in color. The Ordovician is separated from overlaying deposits by an unconformity and the Sylamore sandstone which is probably basic Mississippian. Chert materials from the lower Mississippian deposits are not common. Starting with the Reeds Spring limestone and upwards, chert materials are frequently found which range in color from dark blue-black to brown, light gray and white. Most of the white chert is confined to the residual Mississippian cherts on the hill tops.

Many of the larger game animals and some of the smaller animals have become extinct in the time of historic occupation of the Table Rock Reservoir locality, though during early historic times the fauna was abundant and diversified (Sauer, 1920, pp. 59-60). The assumption is made that the fauna was similar in prehistoric times. The vegetation of prairie type has changed some since early historic times. Most of the hills are now predominately covered with oak and hickory and the prairie is crowded into near

extinction.⁴ The once large expanses of pine have been reduced to small isolated hill tops (State Board of Immigration, Handbook of Missouri, 1881, cited by Sauer, 1920, p. 53).

Occupations of the same locations by peoples of different cultures in the Table Rock Reservoir locality, at different time periods, has resulted in the mixture of their representative cultural materials. The separation of these materials, projectile points, scrapers, knives, axes, and other artifacts, into their proper cultural components is difficult and uncertain. Cultural materials or artifacts that occur repeatedly with archaeological patterns of behavior throughout a definable temporal and spatial distribution are known as an archaeological culture (Phillips and Willey, 1953, p. 617). The artifacts found in the Table Rock Reservoir locality had to be separated into their respective archaeological cultures or cultural complexes for a more complete understanding of the prehistory of the reservoir locality. In archaeological methodology there is an almost unlimited number of artifact types possible that may or may not be of value in differentiating one cultural complex from another. The artifact types of use for delimiting complexes must be abundant enough to reflect the particular cultural traits

⁴There is much controversy as to why the forests have taken over much of the prairie. One of the most feasible reasons is that at the time of the first settling, the river bottoms were choked with dense vegetation. The only available "cleared" land was on the hill tops, and it is here that the first cultivation began. These hill top fields offered little resistance to forest growth when abandoned for cleared bottom land.

or patterns of the manufacturers in their own cultural environments. If these traits in turn are distinctive enough they may be used to detect other traits of the archaeological culture by inference or association. The recognition and grouping of traditions and behavior traits into the cultural complexes is the first step in differentiating the archaeological cultures used in the reconstruction of the history of the Table Rock Reservoir locality. In the Table Rock Reservoir locality, pottery and projectile point types are the most distinctive artifacts to use for diagnostic purposes of separating complexes and establishing major cultural units because they are the most common. The term "projectile point" will be applied to all of those stone, stemmed and notched artifacts that may have been utilized as the tips of arrows, darts, and spears, or as knives. The projected study is of projectile points and will use references to pottery and other artifacts only as associations.

Further analysis of the Table Rock Reservoir archaeological materials is dependent to a large extent upon the association of the projectile points with the cultural complexes represented since projectile points are by far the most abundant and most distinctive artifacts making up most of the cultural complexes in the locality. The methodology used for this study fell basically into four parts. The first was to describe systematically the projectile point specimens obtained in the surface reconnaissance of Table Rock Reservoir. An examination of previous systems of classification, or categorization, was made in an attempt to set forth sound criteria

for establishing descriptive categories of projectile points. The descriptive categories were used as a basic step in accomplishing the second part of the study. The second part was the application of the typological concept (Krieger, 1944) to the projectile points in an attempt to delineate local cultural types. The types in this instance were determined by their recurrent association in particular levels or series of levels in different sites which in turn could be equated in the cultural sequence in the Table Rock Reservoir locality. The third part, and main purpose of the study was the tracing of components geographically within the Table Rock Reservoir locality, each at their particular point in time in the reservoir locality sequence. This was accomplished by using the projectile point types as a means of indicating the components of each complex on surface sites. Another problem taken up as part four, concerned the affiliation of Table Rock Reservoir cultural complexes with the surrounding contiguous region with the purpose of delimiting the locality within which the cultural complexes of the Reservoir ranged.

The projectile points and other stone artifacts from Table Rock Reservoir were described in categories by the writer for a section of "Preliminary Salvage Archaeology in the Table Rock Reservoir Area, Missouri" (Chapman, Bray and Marshall, 1955, MS). The descriptive categorization in that report has been revised and has been included in this study.

A more precise statement of the problems investigated

is as follows:

1. To devise descriptive categories of projectile points from Table Rock Reservoir.
2. To classify certain groups of projectile points from Table Rock Reservoir as types through their repeated association in specific cultural complexes.
3. To plot the distribution of components of the cultural complexes in Table Rock Reservoir.
4. To delimit the range of the region by the spread of the cultural complexes, found in it.

CHAPTER II

A REVIEW OF PREVIOUS DESCRIPTIVE SYSTEMS AND TYPOLOGIES

The literature studied appears to demonstrate that two approaches have been employed in archaeological methods for the description of projectile points and other cultural remains. These are categorization and typology. Both systems will be discussed in regard to their relative merits.

Categorization has been a commonly accepted procedure employed for many years in archaeological method. It has been used primarily for the reduction of masses of information into manageable terms. A brief review of some of the projectile point descriptive categorizations follows.

Wilson (1897, pp. 887-942) employed a categorization for the description of artifacts in the collection of the National Museum by dividing the projectile points and knives into a number of "divisions" and "classes". The divisions and classes were based on form and no other features were considered. His study, however, has been developed into a widely accepted descriptive categorization system. Strong (1935, pp. 87-89) perfected Wilson's system by making two major categories under which all of the projectile points and knives were described. The two categories were "stemmed" and "not stemmed". Each was divided into general shapes and subdivided again into specific shapes which were called "types". The shape-

outlines were used with complete disregard of the size or other characteristics of the specimens. Strong (p. 87) recognized the importance of size when he said size was important in distinguishing between arrow points on the one hand and spearheads and knives on the other. Krieger (Cressman, et. al., 1940, pp. 41-47) in describing projectile points from southcentral Oregon, parted from the system used by Strong because he could not disregard the wide range in size of certain projectile points. In the same study, along with the addition of size he added weight as a criterion for separation. Both Strong's and Krieger's system had a very complicated letter and number key for description that is difficult to follow. The descriptive system in the studies resulted in the placement of specimens in categories where there was neither sufficient description nor certainty of cultural implication.

Kidder (1932, pp. 13-24) in describing the flaked stone artifacts from Pecos, used two characteristics, the flake scars present on the artifacts, and form. The first separation, based on the flake scars, was divided into three "categories". Each category was in turn reduced to "types" according to form and each type then subdivided according to specific shape. The projectile points from Pecos fell into the first category which was separated from the others on the basis of secondary flaking. Haury (1950, pp. 260-301) used secondary flaking and form for the separation and description of projectile points from Ventana Cave. The categories were called "types". Size apparently played no part

in Haury's separation.

Webb (1946, pp. 251-255), in his description of the artifacts from the shell midden levels of Indian Knoll, divided the stone projectile point specimens into a simple classification using three divisions called "types" which were separated on the basis of the shape of the stem. Only the bases of the projectile points were considered so no account was taken of other features, other than length.

Another kind of categorization was based in part upon function. Function has been used for many years with varying degrees of success. The determination of function is a challenging problem and with careful study might become a far more useful tool (Chapman, 1954, pp. 26-27). The idea of applying functional terms to artifacts is commonly found in phrases and names applied to different groups of specimens, e.g. projectile points and knives. Lehmer (1954, p. 52) mentioned two ways of organizing descriptions of classes of artifacts but used the more popular system in which the assemblage was divided into "groups" under main divisions or categories of artifacts. After description, in a later section, and in the plates, an attempt was made to bring together all artifacts which were believed to have fulfilled the same function.

In summary it can be said that the study of projectile point assemblages has been carried to varying degrees of completion and perfection by different researchers, but no one study stands out as most useful. The most common procedure in categorization

has been to study the specimens and to determine a single or a combination of characteristics, usually form, flaking, size, or some other feature, which separated one group of artifacts from another. When this had been effected, the combination of characteristics were then set down and served as a description of each group. The terms "classes", "categories", and "types" were usually indiscriminately used with little attention given the procedure utilized in determining the different categories. Comparisons were frequently limited or confused by the designation symbols. The categorizations were not satisfactory for widespread comparisons nor were they entirely practicable for the demonstration of space-time relationships.

Typology apparently grew out of categorization not as an elaboration of the process but because of the incompleteness of such studies. To descriptively categorize an assemblage of artifacts was not all that could be done. Typology was slow in coming as many investigators were not looking, or willing to look, beyond their neat orderly systems. A few did realize that more could be accomplished with an assemblage than just description. They believed that artifacts could reveal more than casual shapes and individual characteristics.

A system was published by Ford (1936, pp. 4-26) in which pottery types were used to "develop a measure of time in terms of cultural changes". Three steps were followed in developing the chronology of the area. These were (1) as much material was

collected from as large an area as possible, (2) the material was classified in detail (the repeated occurrence of a certain decoration at individual sites determined whether or not the decoration was diagnostic or a local variation), and (3) collections were made from as many historic and pre-historic villages as could be located. During the classification it became apparent that "decoration complexes" (Ford, p. 24) existed of which some had been associated with historic Indian tribes and others appeared to be prehistoric. Because of this association of decoration complexes and historic Indian tribes, it was possible to work from the most recent (historic) back into earlier times (prehistoric). The pottery types were developed from decorative motifs with other features noted as "usual accompanying characteristics" (Ford, p. 14). Each decorative motif and its accompanying characteristics was called a type and given number symbols. Each type was traced throughout its geographical distribution.

In describing pottery from Florida, Willey (1949, p. 24) used a methodology very similar to the one used by Ford. He defined each type as having a recognizable time and space position in the reconstruction of the prehistory of that locality. The type was recognized as having a number of specific combinations of techniques in manufacture, materials, form, and decorative features. It was also pointed out in the study that not all of the features appeared on any one specimen but that all specimens tended to fall into a curve of normal frequency for the type.

Typology was referred to as the "conceptual scheme" by Rouse (1939, pp. 4-23). His methodology, using pottery, was divided into two parts, a series of concepts and a number of postulates. The concepts had two main purposes. They were the means by which he developed the descriptive classifications used in the reconstructions and were employed to detect the historical relationships between specimens. The postulates, on the other hand, did not bear on the reconstruction of the history but provided the theoretical basis for the study. Both the concepts and postulates were intended to do three things; (1) to form types (common characteristics of specimens of a certain kind of artifact) and modes (each of the characteristics), (2) to trace the distribution of the types and modes, in space and time, and (3) to develop a concept of the distribution of the types and modes in historical sequence. Rouse's concepts were the tools with which he reconstructed the prehistory of the locality he studied.

Cole and Deuel (1937, pp. 53-56) used a system of typology in which types were developed to describe certain groups of projectile points that tended to persist in association. The types were based on a combination of features which tended to fall within a pattern. These were size, flaking, finish flaking, shape, cross-sections, and thickness. The projectile points were placed into their respective types with some degree of liberality. This system was one of the earliest attempts to establish projectile point types.

Krieger (1944, pp. 271-288) summarized the work on projectile

point and pottery descriptive systems in his discussion of the typological concept. The typological method was explained as that in which "...each type is defined by a specific and cohesive combination of features... and furthermore includes what is believed to be individual variation within the technical pattern; the type as a whole is also understood to occupy a definable historical position, that is, its distribution is delimited in space, time, and association with other cultural material" (p. 277). The cohesiveness of features is demonstrated by their persistent occurrence on specimens.

The six steps of procedure in following the typological method as outlined by Krieger (p. 279) are:

(1) Sorting into working patterns of distinct structural plan; (2) Sorting into detailed working groups each consistently combining features in but one way; (3) Recombining working groups into tentative types on basis of comparative distribution and associations of working groups; (4) Consolidation of types through further testing for consistency in form and variation; (5) Description and illustration of types with full range of variations; and (6) Determination of series of linked types, determination of material cultural complexes, and determination of type relationships in related cultures. When a type was determined it was recommended that a name be applied to facilitate description and comparison.

Using projectile points from a group of sites in northeast Oklahoma, Baerreis (1951, pp. 12-13 and pp. 109-116) described the specimens in a typological manner. The points were described on the basis of a few specimens in each category from each site but "...the type itself was defined on the basis of a much larger series of implements..." from the vicinity (p. 13). Types were

designated by a letter and number system contrary to Krieger's preference because they were considered tentative. Types were not presented in full range of variations due to insufficient data. Each set of types from each site were compared and tentative cultural complexes devised.

Chapman (1954, pp. 26-55 and 98-106), using projectile point categories devised from the assemblage obtained in the Pomme de Terre Reservoir reconnaissance, followed the typological method in so far as the limited number of specimens allowed. The specimens were separated and described by a variety of component features. The features were then compared with specimen categories from local test excavations in an attempt to define cultural complexes. Through the relation of combined characteristics of surface collected projectile point categories, and excavated categories, several cultural complexes were tentatively established. Other component sites of these cultural complexes were tentatively recognized through comparisons.

Scully (1951) tentatively developed a series of projectile point types as a preliminary step to a more comprehensive study. The tentative typology was sent to a number of archaeologists for their comments. The paper was never intended as a final publication but has been used as such. The types were derived from information in previous publications, and were not adequately described in the way of characteristic flaking, shape, and variations. They were not demonstrated to be fully associated with a culture or cultural materials nor were they fully illustrated with the range of cultural

variations.

Bell and Hall (1953, pp. 1-11), in their descriptions of point types, selected named projectile point types from all over the country. Descriptions were reduced to a minimum as "based upon cited published accounts of the types or the authors' conception of what represents a particular type" (p. 1). The descriptions in some instances were made from "actual specimens considered as representing the type concerned." Types were not fully illustrated nor was the full range of cultural variation cited.

Krieger (1944, p. 272) summarized typologies nicely by saying that they are formulated for "...identifying distinct patterns of behavior or technology which can be acquired by one human being from another, and thus serve as tools for the retracing of cultural developments and interaction". Types theoretically are recognized as having distinctive characteristics such as specific combinations of techniques of manufacture, form, materials, and other features particular to that type, which may be considered to reflect cultural technology and behavior. Each type allows for subtle variations in size, manufacture and, occasionally, use. Before each type can be tentatively named it must be demonstrated to have specific associations and demonstrable time and space distributions.

It is interesting to note some deviations from the typological concept. Ford (1936) did not assign type names to the pottery types. His was an early study, however. Many of the types abstracted by Ford have been named in more recent studies (Phillips, et. al., 1951).

Suhm and Krieger (1954) in typing pottery vessels and projectile points from Texas, appear to have violated partially one of the steps of the concept when they liberally applied type names to a number of categories of points primarily obtained from surface collections. In these instances associations and cultural affiliations were lacking or were very tenuous, and any kind of type name should be no more than tentative. In other instances type names were given to groups of points showing considerable variability in size and form. The named types might better be separated and included under a series name as the size and form differences could mean entirely different concepts of function.

Bray's (1956, p. 123) application of the typological method to projectile points from Rice Shelter was tentative. The naming of types should, in addition to associations and temporal relations, take into consideration the spatial distribution. This was not followed by Bray in the naming of tentative types from the site. However, justification of this action was made on the basis of information obtained from other excavations, not yet reported upon, influencing the typing. Seven provisional types were postulated on condition that further information and study verify and consolidate them. This recommendation is in keeping with step four of Krieger's (1944, p. 279) typological method.

One of the greatest mistakes made with typologies is the use of types for wide-spread and distant comparisons. Types, when recognized and named from a series of sites in a locality, should be

used only in the determination of the geographical extent of that locality. The type throughout the locality should be representative of a particular time horizon but in larger areas there is no assurance of such a homogeneous time period. The use of local types for widespread comparisons should be undertaken with consideration, caution, and care. When types are similar, time horizons may not be and thus two or more types may be represented. The failure to recognize time differences, and associational differences as well, has been a serious omission in many recent archaeological reports of high standing. The error will continue until this point is fully recognized and understood.

The relative merits of descriptive categorizations and typologies in archaeological method are somewhat apparent and both have their uses. Typologies should be more than descriptive categories. Categorization is useful in reducing the masses of information to a comprehensible size but not for widespread comparisons, or time and associational relationships. Typologies are tools with which to conduct historical investigation and reconstruction - not description. Descriptive categorization allows the investigator to become acquainted with his material and is an integral part of the typological method.

CHAPTER III

THE DEVELOPMENT OF A DESCRIPTIVE SYSTEM FOR PROJECTILE POINTS FROM TABLE ROCK RESERVOIR

It may be assumed with some degree of certainty that each projectile point specimen is the product of a particular endeavor in which the manufacturer had a preconceived idea of what his efforts would produce. It can be further assumed that this idea conformed to culturally derived standards. In the event the finished specimen was not sufficiently like the manufacturer's concept and cultural standards, the specimen may have been discarded or reworked. The archaeologist must, therefore, deal with functional objects as well as discarded or rejected ones. The projectile points from Table Rock Reservoir were manufactured from a crypto-crystalline stone, and each manufacturer was acquainted with the fracturing qualities of the material (Chapter I, p. 4). He could, with reasonable accuracy, determine what course of action would produce the desired end.¹ As a result there were probably few unacceptable specimens, but perhaps a number were broken in the process of manufacture. The specimens broken in the manufacturing process may have been incomplete in several ways, depending upon the method and stage of

¹This is inferred from attempts at duplicating the flaking of specimens found in Table Rock Reservoir. The writer has spent considerable time in flaking experiments with some degree of success. See also Goodman, 1944, pp. 415-433, and Bixby, 1945, pp. 353-361.

manufacture at which time the breakage occurred. The personality and manual dexterity of the manufacturer might account for some slight variations in the appearance of individual specimens, but such variations would be difficult or impossible to trace to their origin and need not be taken into consideration. The overall shape of the specimen, the method of manufacture, size, stem shape, and other physical characteristics are assumed to have been determined by the traditions of the particular culture to which the manufacturer belonged, but are limited by the size and fracturability of the raw material. Assuming that projectile point form and manufacture are products and reflections of cultural norms and traditions that changed in the course of time, it would be possible to separate cultures in time and space by these artifacts. If these assumptions are correct, the projectile points found in site components can be used as indices of other components of comparable time and space relationships. Thus a collection of projectile points from the surface of a site should constitute data from which the components utilizing the site could be determined.²

Projectile points were doubtless present on sites in prehistoric times and may have been picked up by the next group of Indians utilizing the same site, perhaps hundreds of years later. Caution, therefore must be used in the foregoing assumption. All except the earliest cultural components at a site might well contain a few

² Assuming that representative specimens of all components have found their way to the surface through natural processes. Deeply buried components may not be represented by surface materials.

distinctive projectile point forms that were representative of cultural norms or traditions of an earlier time and space distribution. The "found" specimens were sometimes altered by the finders and can be viewed with some distrust on this basis. Alteration, however, is not always a sure criterion for setting aside such points, for broken or damaged projectile points made within the time and space of the particular component may also have been reworked. Altered specimens then must be searched out and evaluated separately if they are not to pose serious problems to historical reconstruction.

In utilizing the assumption that projectile points probably conform to cultural norms and are a product of human behavior that can be used to trace cultural complexes through temporal and spatial distributions, it is necessary to detect some of the distinctive patterns or traditions which comprise the horizon or complex markers. A tradition is defined as "...persistent configurations in single technologies or total (archaeological) culture, occupying a relatively long interval of time and a quantitatively variable but environmentally significant space" (Phillips and Willey, 1953, p. 628). If a tradition persists in time and space it must be a product of human behavior and interaction. In the definition of a tradition reference was made to "single technologies". Using a projectile point type as a single technology, a tradition could be determined, by the type itself, or its method of manufacture or a part thereof. For example, basal thinning, notching, flaking, smoothing of stem and or base edges, or beveling of the blade edges, and others could each, or in

combination, be a tradition. Total archaeological culture is much larger and more complex than a single technology. Total archaeological culture would be the association of all other cultural objects, temporal and spatial distribution, and the relationships of those technologies, and other cultural entities present or inferred which make up the complicated whole of a culture. To find out what traditions exist, and which ones are usable for historical reconstruction, it is necessary to gather archaeological material for study from as many sites and from as large an area as possible. The material must then be separated and categorized in detail according to distinct patterns of shape, function, method of manufacture, size, material, and others. Separation of cultural materials, for purpose of description, allows the investigator to become familiar with his material and to recognize patterns of human behavior alien to his own culture. The categories, groupings of the material according to recognized patterns, may have no cultural significance. The recognized patterns, however, separately or in combination, may be traditions and of cultural significance.

Projectile points collected on surface surveys in Table Rock Reservoir were separated from the other lithic material during the cataloging to facilitate the descriptive process. Separation into like forms began with no knowledge of the points at hand other than the site location. Some of the basic terminology had not been developed at this time (Fig. 2). The overall shape and the kind of notching of the specimen were the criteria used in the initial

separation. This accomplished nothing more than breaking the mass of specimens into general forms to facilitate handling. Specimens were then re-examined for particular characteristics which were used to separate individual points into categories. If specimens failed to have the necessary combinations of determined characteristics, they were tentatively assigned to the unclassified category. Specimens showing nonconformity with one another and lack of specific combinations of enough characteristics to be placed with developed categories were permanently placed into the unclassified category. Several times similar categories were studied closely for comparable characteristics and when a majority were similar they were combined. After the entire collection had been studied and grouped into categories each category was carefully re-examined for its specific combination of features.

Criteria for separation of the Table Rock Reservoir surface collection were evolved incorporating as many single characteristics as could be determined. Combinations of observed characteristics, when found in persistent association, were considered to be of cultural significance. After separation, a method of description and terminology (Whiteford, 1947, pp. 226-239) was used to set forth the characteristic criteria of each category in a way that these might be more easily understood (Table I).

Form, or shape, is one of the main features of a projectile

point and was commonly used in categorization. It was used only as a general criterion in this study but with five specific variations as a means of separation. These variations were based on the location of the notching in relation to the blade edge. In the manufacture of a projectile point there was a blank stage. The blank was finished into a projectile point according to a particular pattern. The blank was probably an ovate or triangular blade (Fig. 3). Sixty categories were separated as a result of the close examination of specimens and were divided into the five blade shapes; (1) Twenty-three corner-notched designated by the prefix letter "K"; (2) Six unnotched categories designated by the prefix letter "N"; (3) Twelve side-notched categories designated by the prefix letter "S"; (4) Nine square-stemmed designated by the prefix letter "B"; (5) Ten contracting-stemmed categories designated by the prefix letter "C".

Corner-notched pertains to the location of the notching in a blank form in such a manner as to remove the corners of the blank base and produce a flaring stem towards the base. Side-notching also produces a flaring stem, but since the notching is from the side the stem is usually as wide or wider than the shoulders of the blade. Basal-notching is done in such a manner as to leave the corners of the blank and the sides of the blade relatively unaltered. A square-stem is a product of basal-notching though more frequently a product of corner-notching. Contracting-stemmed specimens are often called

corner-notched or corner-removed due to the usual complete removal of the corners of a theorized blank (Fig. 3). Most of the projectile point forms have roughly symmetrical outlines. Some projectile points are markedly asymmetrical. Symmetry in this instance refers to the blade outline in relation to the long or central axis (Fig. 2).

Many of the characteristics of projectile point specimens were a result of the flaking process. Flaking, as a general feature of a projectile point, was not often taken into consideration in categorization but formed the largest single item in this study. The manufacturing of projectile points was noted to have produced two characteristic kinds of flaking. These were primary flaking, both sides of the blade being covered with large, often irregular flake scars, and secondary flaking, the edges of the blade, stem, base, and notching being evened and finished by the removal of a series of small flakes. The secondary flake scar did not necessarily occur on a projectile point, however, the primary always appeared. If the blade was finished with only primary flaking, here called primary finish flaking, the edges of the blade were generally uneven and often jagged. This unevenness should not be confused with serration, a feature that will be described later. Secondary finish flaking is a term applied to any flake scars which were produced after the primary flaking for the purpose of evening the edges. There were several varieties of secondary finish flaking. In general this flaking could produce different edges which were excellent criteria for accurate separation. As a result of secondary finish flaking,

the edges of a blade might be evened, beveled, or serrated. The specimens studied had the edges of the stem beveled or evened but never serrated. Beveling occurred along the alternate edges of the blade to produce the illusion of a spiral. The above types of flaking produced biconvex, flattened-biconvex, plano-convex, or beveled lateral blade cross-sections.

There appeared to have been two methods of serration. The first type of serration was produced by the removal of very small flakes from both sides of a blade to give a fine saw-toothed edge (Fig. 14, K22). The second method of serration was the result of the method of beveling and consisted of the removal of single, large flakes from alternate sides of the blade edges at near equi-distance (Fig. 14, N2) which produced large jagged serrations.

Blade outlines, also important but less so than most flaking criteria, could be separated into several varieties. In all references, the outline of the blade has been described as starting at the shoulders or the point of change from stem to blade edges and extending toward the tip. Blades sometimes were characterized by a long continuous convex curve to the tip which has been called ex-curved. The edges tended to become more strongly curved near the tip or point. In the longer, more narrow specimens the blade edges were often parallel near the shoulders. Other specimens had straight blade edges giving the entire blade a somewhat triangular shape. Another blade shape, though infrequently found, was incurvate and characterized by a long continuous concave curve. Still others had

recurved edges resulting in an incurvate-excurvate or excurvate-incurvate blade edge.

The shoulders of different projectile points frequently had distinctive shapes and outlines. Shoulders were completely lacking, slight, moderate, pronounced, or barbed. Barbs have been designated as long when they were 50 per cent or more of the length of the stem, medium when 25 per cent to 49 per cent the length of the stem and slight when barely discernable to 24 per cent the length of the stem. This was not an ideal classification as many of the barbs of specimens had been broken and there was no way to reconstruct their length. There did appear, however, to be some usefulness in this designation of barb length as a criterion.

Notches were very distinctive and useful criteria. All appeared to have been produced by secondary flaking and by one of the following methods; (1) through the removal of small flakes on both sides of the blank edge, recognizable by the many small flake scars, and (2) through the removal of large flakes which had broken away the blank edge resulting in a notch with several large flake scars along the stem and barb and a single large scar at the apex of the notch on both sides of the blade. It was not always possible to determine which method was used. Equally important aspects of notches were the placement on a theorized blank (Fig. 3), the angle of the notch in relation to the central axis (Fig. 2), and the notch size and shape. Notches have been referred to as deep when one and five tenths or more times as deep into the blade as wide, moderate when as deep to one and

five tenths times as wide, small when not as deep as wide, and shallow when two or more times wider than deep. This was not a sharp delineation and though used, was not included in Table I. The shoulders of a specimen when moderate, pronounced, or barbed were generally a direct result of the notching technique. Stems were produced by the notching process and have been described previously.

One of the most distinctive and useful features in classification was the base of the specimen. Base edges were rough or even. and were usually thinned in a variety of distinct manners which were useful criteria. Three varieties of thinning were included as characteristic as follows: (1) parallel, in which the flakes ran parallel to the central axis of the point; (2) random, in which the flakes went in almost any direction; and (3) flaring, in which the flakes radiated from a common center on the base edge. Categories which had flaring basal thinning were almost always concave based. Qualities of thinning have been described as poor, good, excellent, and fluted. Poor thinning referred to small, short secondary finish flaking which resulted in an even edge but thick base, and good thinning referred to large secondary finish flaking which produced a very symmetrical and well thinned base. Excellent thinning referred to long secondary flaking which produced a very symmetrical and well thinned base approaching that of fluting but involved more than a single flake from each side of the base. Fluting was the removal of a single long flake to form a scar that ran for some distance toward the tip and parallel with the axis of the point.

Thinning usually occurred on both sides of the base. The corners of the base, where the base edge joined the stem edge were also quite distinctive. Base corners were square, rounded, or pointed. Bases had a variety of shapes in addition to the corners. These were concave, straight, convex, rounded or pointed (Fig. 2).

Size was another characteristic found to be important as a criterion for separating the projectile points into descriptive categories. Among the projectile point categories there were several having similar shapes or forms which would be impossible to separate if it were not for their size. In some instances the size of the points was the primary criterion (compare Fig. 14, S12 and Fig. 15, S2 or S3). Various combinations of size features, described as maximum and minimum in millimeters were: (1) total length of the specimen, (2) length of the stem, (3) greatest width of the blade at the shoulders or tips of the barbs, (4) width of the base, and (5) thickness.

Smoothing was one of the most distinctive characteristics to be found on certain projectile point categories. Two kinds of smoothing were recognized. These were judged to be deliberate and accidental smoothing. Smoothing of a blade edge, stem, base, and the notches, singularly or in specific combination, were excellent criteria for the separation of certain categories. Accidental smoothing might be a clue to the particular use or function of the artifact.

Material from which the specimens have been manufactured was

still another of the five general features described. About 90 per cent of the projectile point specimens were of chert with the remainder predominately of quartzite. The chert was separated into two varieties on the basis of the surface luster present. One had a waxy luster and the other had a dull or low-reflective surface. Most of the material used in the manufacture of projectile points came indirectly from local geological strata. The primary source of the material was the gravel deposit along the main streams. There was no evidence on hand to indicate quarrying activities by the Indians who lived in the Table Rock Reservoir locality. Only one possible quarry site has been located and it is above the reservoir level. Evidence indicating the source of the material was overwhelming. Every site had large roughly flaked cores and flakes which exhibited a water worn patina on the original surface, a characteristic of siliceous stones seen in the river and along the gravel bars. Small, flat, river worn and patinated pebbles, from which flakes have been removed, were frequently found on sites and there was strong evidence that most of the stone artifacts were made from them (Fig. 4). Projectile points frequently had traces of this cortex on one side and occasionally specimens were found having spots of the original water worn surface of the pebble on both sides. A secondary source of material was the large deposit of residual chert on the tops of the hills. Most of the hill top material ranged in color from white to light gray and pink, and was rarely ever dark. Materials taken from the river and gravel bars

were of all color varieties.

Most of the criteria used in the classification of projectile points have been included in Table 1. Those few items used as criteria and not included in the Table have been described in the preceding. They were left out of the chart because no clear-cut means could be devised for readily measuring the differences noted. Discussion of apparent relationships and similarities of the specimens in the different descriptive categories has been made in Appendix A.

CHAPTER IV

THE FORMATION OF PROJECTILE POINT TYPES AND SERIES BY ASSOCIATION IN CULTURAL COMPLEXES

There was no certainty that the projectile point categories obtained by analysis of the surface collection had any integral relationship to the cultural complexes and their chronological sequence in the Table Rock Reservoir locality. In order to use the arbitrary classification of categories to best advantage, it first had to be determined how and if they correlated with projectile points found in controlled excavations in some integral relationship with a cultural assemblage. It was proposed then to study the projectile points that could be demonstrated to be a part of the cultural assemblages from excavations in the locality. Whenever the projectile points so demonstrated were in sufficient numbers or were sufficiently distinctive and occurred in similar complexes in three or more components they were judged to represent tentative cultural types and were named. When these types could be equated with a category or categories already classified, this category or these categories could then be utilized, perhaps by recombining, to establish tentative cultural complexes on surface sites.

The first part of the discussion will consist of a listing, in outline form, of the known cultural complexes and associated

projectile points. The second part will be the naming of projectile point types and series from these associations and a comparison of the projectile point types in each complex with the classified surface categories. The equation of these categories with tentative cultural types and series will be made whenever feasible. Type names have been derived from sites in which the type was prominent or from some feature in the vicinity or after local counties, and series names were derived from local communities. Detailed description of each type has been made in Appendix B.

The cultural sequence described is based upon the temporary descriptions made by Chapman (1956, pp. 25-41) with additional information provided by Bray (1956, pp. 57-74), from knowledge gained by working in the reservoir locality, and through more recent investigations which have not been fully analyzed and reported upon. Four sequential prehistoric periods have been postulated instead of the original seven made by Chapman. The three Woodland periods have been combined into a single complex due to a lack of sufficient information to make a finer separation (Chapman, 1956, p. 39). The terms "nonceramic" and "ceramic", which are self-explanatory, will be used to delineate the cultural periods or complexes in Table Rock Reservoir. Since ceramics appear in the latest two complexes it is consistent to call the two earlier complexes nonceramic. The two nonceramic complexes correspond very closely with Chapman's (1956, pp. 35-41) Paleo-Indian, Early Archaic, and Late Archaic periods and coincides with Bray's Early and Middle Complexes. The two ceramic

complexes correlate closely with Chapman's three Woodland periods and the Mississippi period, and Bray's Late Complex.

Information used in this study has been obtained from twenty-two archaeological sites excavated over a number of years by the University of Missouri Archaeological Research units operating in the Table Rock Reservoir locality. The following is a complete listing of sites from which information was obtained.

23 SN 99.	.....	Aunts Creek Shelter
23 SN 284.	.....	Bertha Dotson Shelter
23 BY 384.	.....	Crisp Shelter I
23 BY 383.	.....	Crisp Shelter II
23 BY 389.	.....	Crisp Shelter III
23 BY 364.	.....	Epperley Cave
23 SN 201.	.....	Fitzgerald Shelter I
23 BY 8.	.....	Hardman Cave
23 BY 388.	.....	Jakie Hollow Shelter
23 BY 380.	.....	Kimball Shelter
23 SN 189.	.....	Lander Shelter I
23 SN 245.	.....	Lander Shelter II
23 SN 211.	.....	Lewellyn II
23 SN 334.	.....	Mager's Cave
23 BY 324.	.....	Pettigrew Cave
23 TA 215.	.....	Pinkley Site
23 SN 200.	.....	Rice Shelter
23 BY 386.	.....	Standlee Shelter I
23 BY 385.	.....	Standlee Shelter II
23 SN 275.	.....	Townsend Shelter
23 SN 203.	.....	Vaughn I
23 SN 204.	.....	Vaughn II

An enumeration of components which have been excavated and which have provided information concerning the particular complex being described and a listing of the characteristic projectile point types and probable associated projectile point categories is made in Table II through V. The named projectile point types in the following are discussed in the next section as well as the evidence for naming them.

SELECTED LISTING OF TRAITS FOR THE TABLE ROCK RESERVOIR
CULTURAL COMPLEXES

THE EARLY NONCERAMIC COMPLEX

Stone:

Chipped Stone:

Projectile points: Viola Series

Rice Lobed (Bray, 1956, p. 128)

Rice Lanceolate

Jakie Stemmed

Stone Square Stemmed

Rice Contracting Stemmed

Rice Beveled Notched

White River Archaic (Chapman, 1948-b, p. 149)

Rice Corner-notched

Dalton Serrated (Scully, 1951, p. 8)

Knives:

Ovate

Triangular

Scrapers:

Altered projectile point (above types)

Broad snub nosed flake scrapers

Drills: Expanding base

Choppers: Large roughly shaped cores or blades

Smoothed Stone:

Manos: Unaltered pebbles (altered only by use)

Mortars

Hammerstones: Core Type

Axes: Full grooved

Ornamentation: Possibly rubbed hematite

Others:

Fragmentary secondary burials

Unprepared hearths

THE LATE NONCERAMIC COMPLEX

Stone:

Chipped Stone:

Projectile Points: Lampe Series

Table Rock Stemmed (Bray, 1956, p. 127)

Barry Square Stemmed

Standlee Contracting Stemmed

White River Corner-notched

Stone Corner-notched

Lander Contracting Stemmed

Kings Corner-notched

Rice Corner-notched

Knives:

Ovate

Triangular

Scrapers:

Altered projectile points (above types)

Ovate and circular bi-convex scrapers

Altered blade fragments

Hoes: Ovate flaked blades (large)

Drills:

Altered projectile points (above types)

Expanding base

Choppers: Large roughly shaped blades

Altered Flake Knives

Utilized Flakes

Blank Forms

Smoothed Stone:

Manos:

Shaped (frequently pitted)

Unaltered pebbles (altered only by use)

Mealing Stones

Axes: Full grooved

Hammerstones:

Core type

Pebble

Anvilstones: Pitted

Abrading Stones: Grooved

Ornamentation:

Rubbed Hematite

Bi-perforated reel-shaped limestone gorgets

Others:

Stone covered secondary burials (with or without grave goods)

Fragmentary secondary burials (with or without grave goods)

Rock filled hearths

THE EARLY CERAMIC COMPLEX

Stone:

Chipped Stone:

Projectile Points: Shell Knob Series

Table Rock Pointed Stemmed (Bray, 1956, p. 126)

Rice Side-notched (Bray, 1956, p. 127)

Lander Corner-notched

Lander Contracting Stemmed

Standlee Contracting Stemmed

Stone Corner-notched

White River Corner-notched

Kings Corner-notched

Knives:

Ovate

Triangle

Scrapers:

Altered projectile point (above types)

Ovate and circular bi-convex

Choppers: Large roughly flaked blades

Utilized flakes

Blank Forms

Smoothed Stone:

Manos:

Shaped

Unaltered pebbles (altered only by use)

Hammerstones:

Core type

Pebble

Anvilstones: Pitted

Abrading Stones: Grooved

Ceramics: Pottery is grit-and clay-tempered with cord roughening, dentate stamping, rouletting, bossing, curvilinear trailed lines, with conical and or round bases, constricted to slightly recurved rims with square to round lips.

Ornamentation: Rubbed Hematite

Bone:

Awls: Split bone

Beamers

Others: Rock filled hearths

THE LATE CERAMIC COMPLEX**Stone:****Chipped Stone:**

Projectile points: Golden Series

White River Triangular

Jakie Notched

White River Elliptical (Bray, 1956, p. 125)

Crisp Ovate

Rice Side-notched (Bray, 1956, p. 127)

Table Rock Corner-notched (Bray, 1956, p. 126)

Table Rock Pointed Stemmed (Bray, 1956, p. 126)

White River Corner-notched

Standlee Contracting Stemmed

Knives:

Stemmed knives

Ovate

Triangular

Scrapers:

Ovate and circular bi-convex

Snub nosed end scrapers

Drills: Expanding base

Choppers: Large roughly shaped blades

Cores

Pebble Saws

Utilized Flakes

Altered Flake Knives

Blank Forms

Smoothed Stone:

Celts

Full Grooved Maul

Manos:

Shaped

Unaltered pebbles (altered only by use)

Slab Metates

Milling Stones

Hammerstones:

Core type

Pebble

Anvilstones: Pitted

Abrading Stones: Grooved

Pipes: Bowl and stem holes drilled into an unaltered
stone

Boat Stone: Grooved keel

Ceramics:

Pottery:

Crushed shell tempered pottery with occasional chevron-like designs and some applique on the shoulders. Surface is usually plain. Bottoms are either flat or round. Basket impressions occur on some of the flat bottoms. Strap handles and lugs are not common. Rims are straight to recurved with lips usually square or flat.

Pipes: Elbow

Ornamentation:

Rubbed hematite

Ear spools

Stone and shell pendants and beads

Bone:

Cut bone:

Awls:

Split bone

Whole bone

Punches: Bone

Antler tip flaking tools

Antler handles

Fish hooks

Pierced bone

Shell:

Cut shell

Shell spoons

Utilized shell

Shell hoes

Others:

Primary fully flexed and semi-flexed burials with or without
grave goods

Hearths:

Unprepared

Rock filled

Rock encircled

Dug pits

THE EARLY NONCERAMIC COMPLEX PROJECTILE POINT TYPES

The projectile points associated with the Early Nonceramic Complex were generally large, thick, well made, usually had smoothing along the stem and basal edges, careful basal thinning, and frequently

were beveled and serrated along the blade edges. These characteristics, together or singly, were usually distinctive enough to be readily identified. To facilitate the discussion of and the evidence for naming the types the information has been put into outline form. In all instances where a reference does not follow the mention of the occurrence of an artifact, the information has been taken from the excavation notes and records at the University of Missouri.

I. Rice Lobed (Bray, 1956, p. 128)

A. Early Complex

1. Rice Shelter (Bray, 1956, p. 59)
2. Fitzgerald Shelter (Chapman, in Chapman, et. al., 1955, MS)

B. Early Horizon of Lander Shelter I (Bray, 1957, p. 48)

C. Lowest Levels of Standlee Shelter I

D. Surface Category K10 (Fig. 12)

II. Rice Lanceolate (Tentative)

A. Early Complex of Rice Shelter (Bray, 1956, p. 93)

B. Early Horizon of Lander Shelter I (Bray, 1957, p. 48)

C. Lowest levels

1. Standlee Shelter I
2. Jakie Hollow Shelter

D. Surface Category N2 (Fig. 14)

III. Jakie Stemmed (Tentative)

A. Early Complex of Standlee Shelter I

B. Lowest levels

1. Rice Shelter (Bray, 1956, p. 87)
2. Standlee Shelter I
3. Jakie Hollow Shelter
4. Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)

C. Surface Category K11 (Fig. 12)

IV. Stone Square Stemmed (Tentative)

- A. Early Complex of Fitzgerald Shelter (Chapman, in Chapman, et. al., 1955, MS)
- B. Early Horizon of Lander Shelter I (Bray, 1957, p. 48)

C. Lowest levels

1. Rice Shelter (Bray, 1956, p. 87)
2. Standlee Shelter I
3. Jakie Hollow Shelter

D. Surface Category B3 (Fig. 16)

V. Rice Contracting Stemmed (Tentative)

- A. Early Horizon of Lander Shelter I (Bray, 1957, p. 48)

B. Lowest levels

1. Rice Shelter (Bray, 1956, p. 81)
2. Standlee Shelter I
3. Jakie Hollow Shelter

C. Surface Category C9 (Fig. 19)

VI. Rice Beveled-notch (Tentative)

A. Lowest levels

1. Standlee Shelter I
2. Rice Shelter (Bray, 1956, p. 86 and 88)
3. Jakie Hollow Shelter
- B. Surface Categories S4 and S5 (Fig. 15)
- VII. White River Archaic (Chapman, 1948, p. 149)
 - A. Lowest levels
 1. Rice Shelter (Bray, 1956, p. 91)
 2. Standlee Shelter I
 3. Jakie Hollow Shelter
 - B. Surface Categories S2 and S3 (Fig. 15)
- VIII. Rice Corner-notched (Tentative)
 - A. Early Complex of Rice Shelter (Bray, 1956, p. 65)
 - B. Lowest levels
 1. Standlee Shelter I
 2. Jakie Hollow Shelter
 - C. Specimens in surface Categories K15 and K16
- IX. Dalton Serrated (Scully, 1951, p. 8) tentatively identified
(see Meserve Point, Wormington, 1957, pp. 113-114)
 - A. Early Complex of Rice Shelter (Bray, 1956, p. 65)
 - B. Lowest levels of Standlee Shelter I
 - C. Surface Category S7 (Fig. 15)

In all instances, except for the last tentatively identified type, the above named projectile point types occurred in three or more excavated sites (Table II) in the earliest complex. It thus appeared feasible to group them into a series, for easy reference,

which was called the Viola Series (Table II and IX, and Appendix B), named for a small community near Rice Shelter in the center of the Table Rock Reservoir locality.

In addition to the projectile point types in the Viola Series, there appear scattered in the lowest levels of Rice Shelter (Bray, 1956), Standlee Shelter I, Fitzgerald Shelter (Chapman, in Chapman, et. al., 1955, MS), and Jakie Hollow Shelter, a number of projectile points which are associated but so infrequently that it has not been possible or feasible to name them. The following is a brief discussion of these unnamed points.

In the lower levels at Rice Shelter (Bray, 1956) and at Standlee Shelter I were found projectile point specimens which had excurve edged triangular blades, slight shoulders, flaring stems with rough lobed bases and had flaking on the lobes not unlike that forming the lobes on the Rice Lobed type. These points resemble very closely specimens in Category K7 (Fig. 11) of the Table Rock Reservoir surface collection.

At Rice Shelter (Bray, 1956), one projectile point had a lanceolate shape and excellent basal thinning (p. 93) bearing a close resemblance to the specimens in Category N1 (Fig. 14) of the Table Rock Reservoir surface collection. The specimen came much higher in the deposits at Rice Shelter than most points of the Viola Series though it was in a disturbed area containing projectile point specimens of several of the types in the Viola Series (Bray, 1956, p. 57).

Two other projectile point specimens from the lower levels of Rice Shelter (Bray, 1956) are lanceolate in shape, have slight shoulders, and have square stems with a moderately convex base. Basal thinning was attempted in an identical pattern. The more complete specimen has a long beveled and serrated blade similar to specimens of the Rice Lobed, Rice Lanceolate, and Rice Contracting Stemmed types of the Viola Series. The basal section of a somewhat similar point was found in one of the lowest levels at Crisp Shelter I. There are no projectile points similar to these in the surface categories.

At Standlee Shelter I, a lanceolate projectile point, which had a parallel sided stem that was smoothed, occurred in the lowest level. The base was broken in such a manner that the corners of the stem remained but the rest was missing. Evidence on one side of the broken base indicated that it had been thinned in a manner which produced flake scars similar to those on the bases of specimens in surface Category N1 (Fig. 14). The flaking on the specimen was considerably different in that long narrow flakes had been removed perpendicular to the blade edge and tended to leave neat ripple marks across the blade surface. The blade edge appeared slightly serrated as a result of the flaking technique. This point has no parallel in the categories of the surface collection.

Bray (1956, p. 128) tentatively names a projectile point the White River Serrated which is similar to, but not equated with, the Graham Cave Notched (Scully, 1951, p. 8; and Bray, 1956, p. 131).

Three specimens were identified for Rice Shelter (Bray, 1956, p. 93, and 130), one of which has been tentatively identified as a specimen of the Rice Beveled Notched type. The two remaining specimens appear to be either possible variations of the Rice Lobed type, White River Archaic (Chapman, 1948, p. 148), or a variation of the Rice Beveled Notched Type. Similar specimens were found in the lowest levels of Standlee Shelter I. The few specimens in surface category S8 appear to be the same. It is best not to type these points until additional specimens can be identified from other excavations or a decision is made to include them as a variation of an already named type.

THE LATE NONCERAMIC COMPLEX PROJECTILE POINT TYPES

The projectile points belonging to the Late Nonceramic Complex represent a revolutionary change from those of the Early Nonceramic Complex. In the earlier part of the Late Nonceramic Complex the Stone Square Stemmed and White River Archaic projectile point types carried over briefly and the Rice Corner-notched type continued. New types were generally moderate in size, relatively thin, well made, occasionally had smoothing along the stem and base edges, had good basal thinning, and were never beveled or serrated along the blade edges. These characteristics, together or singly, are usually distinctive enough to be readily used as features for separating them from specimens of the Early Nonceramic Complex.

I. Table Rock Stemmed (Bray, 1956, p. 127)

A. Middle Complex of

1. Rice Shelter (Bray, 1956, p. 87)
 2. Vaughn I (Chapman, in Chapman, et. al., 1955, MS)
 3. Standlee Shelter I
 4. Jakie Hollow Shelter
 - B. Early Complex of Lander Shelter II
 1. Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
 2. Crisp Shelter I
 3. Crisp Shelter II
 - C. Non-pottery Complex at Lander Shelter I (Bray, 1957, p. 49)
 - D. Complex at Hardman Cave (Chapman, in Chapman, et. al., 1955, MS)
 - E. Surface Category K19 (Fig. 13)
- II. Barry Square-stemmed (Tentative)
- A. Middle Complex
 1. Rice Shelter (Bray, 1956, p. 87)
 2. Jakie Hollow Shelter
 3. Standlee Shelter I
 4. Vaughn I (Chapman, in Chapman, et. al., 1955, MS)
 5. Vaughn II (Chapman, in Chapman, et. al., 1955, MS)
 - B. Early Complex at Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
 - C. Surface Categories B4, B5, B6 (Fig. 16), B7 and B8 (Fig. 17)

III. Standlee Contracting Stemmed (Tentative)

A. Middle Complex

1. Rice Shelter (Bray, 1956, p. 79 and 81)
2. Fitzgerald Shelter (Chapman, in Chapman, et. al., 1955, MS)
3. Standlee Shelter I
4. Jakie Hollow Shelter

B. Early Complex

1. Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
2. Aunts Creek Shelter (Chapman, in Chapman, et. al., 1955, MS)
3. Crisp Shelter I
4. Crisp Shelter II
5. Standlee Shelter II

C. The suggested early complex at Hardman Cave (Chapman, MS)

D. Late horizon of the early complex at Lander Shelter (Bray, 1957, p. 49)

E. Surface Categories C4, C5, C6, (Fig. 18), and C7 (Fig. 19)

IV. White River Corner-notched (Tentative)

A. Middle Complex

1. Rice Shelter (Bray, 1956, pp. 81-83)
2. Fitzgerald Shelter (Chapman, in Chapman, et. al.,

1955, MS)

3. Vaughn II (Chapman, in Chapman, et. al., 1955, MS)
 4. Standlee Shelter I
 5. Crisp Shelter I
 6. Crisp Shelter II
 7. Jakie Hollow Shelter
- B. Non-pottery complex of Lander Shelter I (Bray, 1957, p. 49)
- C. The proposed early complex at Hardman Cave (Chapman, in Chapman, et. al., 1955, MS)
- D. The early complex at Aunts Creek Shelter (Chapman, in Chapman, et. al., 1955, MS)
- E. Surface Categories K5, K6 (Fig. 11), K12, K13 (Fig. 12)
- V. Stone Corner-notched (Tentative). Found in direct association with specimens of the White River Corner-notched type in almost every site in which the former is found.
- VI. Lander Contracting Stemmed (Tentative): (see also Gary Stemmed, Suhm and Krieger, p. 430)
- A. Middle Complex
 1. Rice Shelter (Bray, 1956, pp. 81-83)
 2. Fitzgerald Shelter (Chapman, in Chapman, et. al., 1955, MS)
 3. Standlee Shelter I
 4. Crisp Shelter I
 5. Crisp Shelter II

6. Jakie Hollow Shelter

- B. Non-pottery complex of Lander Shelter I (Bray, 1957, p. 49)
- C. The proposed early complex at Hardman Cave (Chapman, in Chapman, et. al., 1955, MS)
- D. The early complex of Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
- E. Surface Category C2 and C3 (Fig. 18)

VII. Kings Corner-notched (Tentative)

A. Middle Complex

- 1. Rice Shelter (Bray, 1956, p. 91)
- 2. Standlee Shelter I
- 3. Jakie Hollow Shelter
- 4. Crisp Shelter I
- 5. Fitzgerald Shelter (Chapman, in Chapman, et. al., 1955, MS)
- 6. Vaughn II (Chapman, in Chapman, et. al., 1955, MS)

- B. Late horizon of the non-pottery complex at Lander Shelter II (Bray, 1957, p. 49)
- C. Early complex at Crisp Shelter II.
- D. Surface Categories K1 and K2 (Fig. 11)

VIII. Rice Corner-notched (Tentative)

- A. Middle Complex of Rice Shelter (Bray, 1956)
- B. Lowest levels
 - 1. Standlee Shelter I
 - 2. Crisp Shelter II

C. Middle levels of Jakie Hollow Shelter

D. Surface Category K15 and K16 (Fig. 13)

Because of the persistent association of the above projectile point types in excavations it is proposed that the six be brought together under a series name called the Lampe Series (Table III and IX, and Appendix B) named for a small community near the center of the reservoir locality.

Another projectile point variety is associated with the Lampe Series though it usually occurred in such small numbers that it was not possible to determine if it was definitely associated with them. The variety resembles the Lander Contracting Stemmed projectile point type. The points of this description have short contracting-to-base stems and usually have slight to moderate barbs. Basal thinning was accomplished by the removal of one or two flakes from one or both sides of the stem, from the very convex base, in a pattern which resembles closely the thinning on the White River Corner-notched type. Specimens in Category C8 (Fig. 19) of the Table Rock Reservoir surface collection are very similar to points of this description.

Some consideration of a possible continuation into the Nonceramic Complex of three Early Nonceramic Complex projectile point types, Stone Square Stemmed, White River Archaic, and Rice Corner-notched, should be made. At one time it was thought possible to distinguish a middle non-ceramic complex, the first two types mentioned above being index types of the complex. Further study

of this problem indicated no more than a hint of the possibility of its presence and no definitive evidence could be gathered concerning it. The presence of the two types, Stone Square Stemmed and White River Archaic, at a site would probably indicate either a closing phase of the Early Nonceramic Complex or an opening phase of the Late Nonceramic Complex. The Rice Corner-notched probably continued almost until the close of the Late Nonceramic Complex.

THE EARLY CERAMIC COMPLEX PROJECTILE POINT TYPES

The projectile points of the Early Ceramic Complex remain basically those of the Late Nonceramic Complex; however, there are some important changes made. The Barry Square Stemmed, and Table Rock Stemmed projectile point types became less popular while the White River, Stone, and Kings Corner-notched, Standlee and Lander Contracting Stemmed projectile point types continued strongly. Four new projectile point types are clearly associated.

- I. Table Rock Pointed Stemmed (Bray, 1956, p. 126).
 - A. Upper levels or Marginal Mississippian horizon
 1. Rice Shelter (Bray, 1956, p. 70)
 2. Lander Shelter I (Bray, 1957, p. 51)
 - B. Ceramic Complex
 1. Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
 2. Standlee Shelter II
 3. Crisp Shelter II
 4. Crisp Shelter III
 5. Jakie Hollow Shelter
 - C. Middle Complex at Hardman Cave (Chapman, in Chapman, et. al., 1955, MS)
 - D. Late Complex
 1. Fitzgerald Shelter I (Chapman, in Chapman, et. al., 1955, MS)
 2. Epperley Cave (Marshall, MS)
 3. Bertha Dotson Shelter (Marshall, MS)

4. Mager's Cave (Marshall, MS)
5. Townsend Cave
- E. Top complex at Crisp Shelter I
- F. Surface Category C1 (Fig. 18)
- II. Rice Side-notched (Bray, 1956, p. 127)
 - A. Upper level of Rice Shelter (Bray, 1956, p. 91)
 - B. Ceramic complex
 1. Lander Shelter I (Bray, 1957, p. 51)
 2. Fitzgerald Shelter (Chapman, in Chapman, et. al., 1955, MS)
 3. Crisp Shelter I
 4. Crisp Shelter II
 5. Jakie Hollow Shelter
 - C. Late complex
 1. Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
 2. Standlee Shelter I
 - D. Surface Category S9 and S10 (Fig. 15)
- III. Lander Corner-notched (Tentative)
 - A. Middle Woodland Complex of Lander Shelter I (Bray, 1957, p. 49)
 - B. Late complex
 1. Standlee Shelter I
 2. Crisp Shelter I
 - C. Upper levels of Rice Shelter (Bray, 1956, p. 91)

D. Surface Category K17 and K18 (Fig. 13)

IV. Lander Contracting Stemmed (Tentative)

- A. Late Complex at Rice Shelter (Bray, 1956, p. 70)
- B. Ceramic Complex at Lander Shelter I (Bray, 1957, p. 51)
- C. Top Complex
 - 1. Standlee Shelter I
 - 2. Standlee Shelter II
 - 3. Crisp Shelter I
 - 4. Crisp Shelter II
 - 5. Lander Shelter II
 - 6. Epperly Cave
 - 7. Bertha Dotson Shelter
 - 8. Fitzgerald Shelter
- D. Upper levels of Jackie Hollow Shelter
- E. Surface Category C2 and C3 (Fig. 18)

V. White River, Kings, and Stone Corner-notched, and Standlee Contracting Stemmed types are found associated with the Lander Contracting Stemmed.

The eight projectile point types were associated with one another in the early ceramic complex of the Table Rock Reservoir locality. Because of the association, they have been grouped together for easy reference under a series name called the Shell Knob Series (Table IV and IX and Appendix B) named for a small community in the western end of the reservoir locality.

THE LATE CERAMIC COMPLEX PROJECTILE POINT TYPES

The projectile points of the Late Ceramic Complex are in general small in comparison with the points of the other complexes. The diagnostic points for the Late Ceramic Complex are all small, rather well manufactured and predominately associated with shell tempered pottery. Several of the earlier types, Lander Contracting Stemmed, Standlee Contracting Stemmed, and White River Corner-notched, carry over into the late Complex but not strongly.

- I. White River Triangular; (called Mississippian Triangular by Bray, 1956, p. 123)
 - A. Top complex of Lewellyn Site II (Chapman, in Chapman, et. al., 1955, MS)
 - B. Marginal Mississippian horizon of Lander Shelter I (Bray, 1957, p. 51)
 - C. Late complex
 1. Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
 2. Kimball Shelter (Chapman, in Chapman, et. al., 1955, MS)
 3. Hardman Cave (Chapman, in Chapman, et. al., 1955, MS)
 4. Aunts Creek Shelter (Chapman, in Chapman, et. al., 1955, MS)
 5. Fitzgerald Shelter (Chapman, in Chapman, et al., 1955, MS)

6. Standlee Shelter II
 7. Crisp Shelter I
 8. Crisp Shelter II
 9. Crisp Shelter III
 10. Jakie Hollow Shelter
- D. The Only Complex
1. Mager's Cave (Marshall, MS)
 2. Epperley Cave (Marshall, MS)
 3. Bertha Dotson Shelter (Marshall, MS)
- E. Surface Category N4 (Fig. 14)
- II. Jakie Notched (called Cahokia Double Notched by Bray, 1956, p. 123)
- A. Upper levels
1. Rice Shelter (Bray, 1956, p. 79)
 2. Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
 3. Fitzgerald Shelter (Chapman, in Chapman, et. al., 1955, MS)
 4. Standlee Shelter II
 5. Crisp Shelter I
 6. Crisp Shelter II
 7. Jakie Hollow Shelter
- B. Late Ceramic complex
1. Lander Shelter I (Bray, 1957, p. 51)
 2. Hardman Cave (Chapman, in Chapman, et. al., 1955, MS)

3. Aunts Creek Shelter (Chapman, in Chapman, et. al., 1955, MS)

C. The complex

1. Pettigrew Cave (Chapman, in Chapman, et. al., 1955, MS)

2. Crisp Shelter III

D. Surface Category S11 and S12 (Fig. 14)

III. White River Elliptical (Bray, 1956, p. 125)

A. Upper levels

1. Rice Shelter (Bray, 1956, p. 75)
2. Fitzgerald Shelter (Chapman, in Chapman, et. al., 1955, MS)

3. Crisp Shelter I

B. Late Ceramic complex

1. Lander Shelter I (Bray, 1957, p. 51)
2. Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
3. Hardman Cave (Chapman, in Chapman, et. al., 1955, MS)
4. Aunts Creek Shelter (Chapman, in Chapman, et. al., 1955, MS)

5. Standlee Shelter II

6. Crisp Shelter II

7. Jakie Hollow Shelter

C. In the complex

1. Crisp Shelter III

2. Epperley Cave (Marshall, MS)

D. Surface Category N5 (Fig. 14)

IV. Crisp Ovate (Tentative)

A. Upper levels

1. Rice Shelter (Bray, 1956, p. 79)
2. Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
3. Fitzgerald Shelter (Chapman, in Chapman, et. al., 1955, MS)

B. Late Ceramic complex

1. Lander Shelter I (Bray, 1957, p. 51)
2. Hardman Cave (Chapman, in Chapman, et. al., 1955, MS)
3. Crisp Shelter I
4. Crisp Shelter II
5. Standlee Shelter II

C. Surface Category N6, (Fig. 14)

V. Table Rock Corner-notched (Bray, 1956, p. 126)

A. Upper levels or Marginal Mississippian Horizon

1. Rice Shelter (Bray, 1956, p. 70)
2. Lander Shelter I (Bray, 1957, p. 51)

B. Late Complex

1. Lander Shelter II (Marshall, in Chapman, et. al., 1955, MS)
2. Standlee Shelter I
3. Kimball Shelter (Chapman, in Chapman, et. al., 1955, MS)

C. Ceramic complex

1. Hardman Cave (Chapman, in Chapman, et. al, 1955, MS)
2. Crisp Shelter I
3. Crisp Shelter II
4. Jakie Hollow Shelter

D. Top complex at the Lewellyn Site II (Chapman, in Chapman, et. al., 1955, MS)

E. Surface Category K22 (Fig. 14)

Because of the close association of the above four projectile point types, in addition to the Rice Side-notched, Table Rock Corner-notched, Table Rock Pointed-stemmed, White River Corner-notched, and Standlee Contracting Stemmed types, it is proposed that they be brought together under a series name called the Golden Series (Table V and IX, and Appendix B) for quicker reference, named for a small community in the western reservoir locality.

CHAPTER V

THE DISTRIBUTION OF COMPONENTS OF CULTURAL COMPLEXES ON THE BASIS OF PROJECTILE POINT TYPES

One of the most important steps in the definition of a cultural complex is the delineation of its spatial distribution. It is assumed that through the association of distinctive projectile point types and or series, common to the cultural complex, the distribution of its components can be followed. The Table Rock Reservoir projectile point types and series (Table II through V) will thus be used in tracing the cultural complexes of Table Rock Reservoir throughout the locality.

More than 840 prehistoric Indian sites have been located in the Table Rock Reservoir locality (Fig. 5) and of this number 754 were within the Reservoir proper. The sites were both open and shelter sites. Collections were more readily obtained from open sites. Shelter sites, though abundant evidence usually occurred on the surface, yielded very little in the way of diagnostic cultural material until they were excavated. Sample collections were obtained from nearly 600 sites, but an adequate collection for purposes of association with a particular complex or complexes was available from only seventy-eight sites (Table VI). An arbitrary number of fifteen to twenty-five projectile point specimens from an open site was considered an adequate sample for the determination of

cultural affiliation. The only exceptions to this were those sites from which samples of the distinctive projectile points or pottery of the Late Ceramic Complex were available. The samples from a number of sites were large (Table VI), though the average projectile point assemblage per Table Rock Reservoir site was relatively small. The limited number of projectile point assemblages has allowed only partial assignment of component sites to the complexes.

Private collections of projectile points from the Table Rock Reservoir locality were studied in a successful attempt to expand the samples from sites.¹ Several other collections examined were not cataloged and these were not used in the study. Several large collections were from sites from which adequate samples were already present. It is interesting to note that when these additional samples were studied for component determination, they confirmed the original findings.

Many sites had small numbers of projectile point specimens from the earliest and latest cultural complexes and larger numbers of specimens from the middle complexes. This pattern was rather characteristic of many of the sites and not confined to sites with large samples of specimens alone. Three explanations can be offered concerning this occurrence: (1) the small number of specimens of a particular complex was due to the non-existence of that complex on

¹The Lee Adams Collection, Monett, Missouri; the Leonard Bisby Collection, Aurora, Missouri; and the Allen Roth Collection, Joplin, Missouri.

the site, the specimens found having been brought in by the people of the other complex represented; (2) the people of the complex, of which the specimens were characteristic, did not utilize the site to any great extent; and (3) the specimens found perhaps belonged to the major complex represented but were less popular than others more characteristic. The sites under consideration may represent a long time span and contain different complexes. The occurrence of different complexes at different time levels is clearly demonstrated in some of the shelter investigations within the locality.

The component of a site was determined by a careful study of the projectile point assemblage collected from that site (Table VI), and this assemblage was compared with projectile point types or series (Table II through V) representing one or more of the cultural complexes. The number of specimens of each type to be used as a complex indicator was difficult to determine. This was a changing situation which bore directly upon the number of specimens of any one particular series present. Several specimens of a single type, not associated with other specimens of the same series, might not in some instances be considered a sufficient sample. However, the same number of specimens, when found with other associated types in the same series might be considered indicative of a component. There were special cases which had to be considered separately. The finding of several specimens of different types, but of the same series, from the Early Nonceramic Complex on a site having material belonging to no other complex, was considered sufficient data for

component determination. The finding of two specimens of the same type of the Early Nonceramic Complex series on a site, predominately associated with projectile points of a later series, was thought to be insufficient evidence to warrant assignment of the site as an Early Nonceramic Complex component. This situation was reversed when projectile point specimens belonging to the Late Ceramic Complex series were found on a site predominately an early complex. If specimens from a site were of types from a single complex series, the site was identified as a component of that complex of which the series was representative. Many sites had components of more than one cultural complex.

The projectile point assemblages from the surface sites chosen for this study (Table VI) were placed in categories at the time of the categorization of the Table Rock Reservoir surface collection by the writer (Chapman, et. al., 1955, MS, and ammended by more recent material collected.) Those categories which could be equated with named types (Tables II through V) were used for the identification of the components of the different cultural complexes. It was assumed that a total series represented on a site was definite evidence of occupation by a particular complex in which that series appeared. Fewer numbers of associated projectile point types or series belonging to other complexes represented less intense occupations. Later people may have brought in older material that they had picked up. Recent cultivation of the site, intermittent flooding, vegetation covering, the number of times the site was surveyed, and unknown factors may

also have affected the sample.

Sites, at which projectile point assemblages were large enough to affirm, or indicate the presence of components (Table VII) of the different cultural complexes were plotted on maps. A map, one for each cultural complex in the Table Rock Reservoir locality, shows the geographical distribution of the components of each complex (Fig. 6 through 9).

The Early Nonceramic Complex, represented by the Viola Series (Table II), is rather well distributed throughout the Table Rock Reservoir locality in spite of the small samples obtained from surface sites. Additional sites might possibly have been found but they probably were buried by more recent river silts as was suggested by Chapman (1956, p. 35) or were located on high prominences and hidden from discovery by vegetation.² A total of twenty-five components was suggested through the study of the surface collections (Table VII and Fig. 6). Excavations within the locality have revealed five more components and three others are suggested making a total of thirty-three components for the Early Nonceramic Complex in the Table Rock Reservoir locality (Fig. 6). Numerous surface sites have produced single projectile point specimens of the same types represented by the Viola Series and other specimens which have not been typed but which are probably associated with the complex. Because

²Excavations in northeast Oklahoma have revealed non-pottery deposits twelve feet in depth on river terraces (Baerreis, 1951, p. 9).

of such small numbers, their wide distribution, and lack of general Early Nonceramic Complex associations, points found under these conditions were not considered useful in the establishment of the components of the complex.

The Late Nonceramic Complex, indicated by the Lampe Series (Table III), is well represented and rather evenly distributed throughout the Table Rock Reservoir locality. A total of seventy-six components were determined through the study of the surface collection (Table VI and VII). Excavations within the locality have revealed seventeen components, three of which were also indicated on the surface, making a total of ninety components interpreted as the Late Nonceramic Complex in the Table Rock Reservoir locality (Fig. 7). Almost every site, from which a sample was obtained, yielded points common to the Lampe Series though few had enough specimens to be considered for component identification.

The Early Ceramic Complex, represented by the Shell Knob Series (Table VI), is rather evenly distributed throughout the Table Rock Reservoir locality. Thirty-one components were discovered through the study of surface collections (Table VI and VII). Excavations within the locality have revealed five components, one of which was indicated on the surface making a total of thirty-five Early Ceramic Components (Fig. 8). Grit-and clay-tempered pottery was found on the surface of three sites, 23 BY 164 (Chapman, 1956, p. 39), the site adjoining, 23 BY 165, and 23 SN 223 (Survey Reports, Museum of Anthropology, University of Missouri). The addition of these three

sites makes a total of thirty-six Early Ceramic Complex components. Because of the continuation of about half of the Late Nonceramic Complex projectile point types (Standlee, and Lander Contracting Stemmed, and White River, Kings, and Stone Corner-notched) into the Early Ceramic Complex Series, it could be assumed that the components determined as being Early Ceramic Complex were really components of the Late Nonceramic Complex. However, the characteristic projectile point types for the Shell Knob Series (Lander Corner-notched, Table Rock Pointed Stemmed, and Rice Side-notched) and grit-and clay-tempered pottery were found, in some instances, in addition to the earlier types. The grit and clay-tempered pottery possibly represents several different types or wares which have not been satisfactorily described or delineated due to insufficient samples and the lack of associations other than those in general.

The Late Ceramic Complex (Fig. 9), represented by the Golden Series (Table V), is barely present, when based on the surface collection (Table VI and VII). Only twenty-six components were identified by the study of projectile points from the surface collection. However, projectile points of the Golden Series were found in twenty-eight excavations, only four of which had surface indications (Table VII). Shell-tempered pottery appears to be the most common association with the Golden Series projectile point types and is as much an indicator of the Golden Series as the most characteristic types in the series. Because of the lateness in the sequence of the Golden Series, it may be assumed that on surface sites, where either the Golden Series projectile point types or shell-tempered

pottery occur, there is a component of the Late Ceramic Complex. This, then, would allow the addition of eleven more sites, over and above those listed in Tables VI and VII. These sites are 23 SN 214 (having only shell tempered pottery), 23 SN 94, 23 SN 163, 23 SN 181, 23 SN 225, 23 SN 331, 23 SN 361, 23 BY 162, 23 BY 164, 23 BY 329, having only projectile points, and 23 SN 106 having both shell tempered pottery and projectile points. This makes a total of sixty-one components judged to be the Late Ceramic Complex in the Table Rock Reservoir locality (Fig. 9). At many of the excavated shelter sites there is associated in small quantities a crushed limestone and grit-tempered, cord roughened pottery. This has occurred on two open sites, one excavated (23 SN 137, Cantrell II) and one surveyed (23 BY 189).

CHAPTER VI

THE BROADER AFFILIATIONS OF TABLE ROCK RESERVOIR CULTURAL COMPLEXES

Comparisons of the Table Rock Reservoir projectile point types with those of other possible localities and regions were made in an attempt to show some of the broader cultural affiliations of the local complexes and to determine their limits beyond the boundary of the reservoir. Detailed comparisons of individual types, grouped in their respective series, have been attempted, but only within a fairly restricted area (Fig. 10). The projectile point types associated with the local complexes have provided relatively distinct features with which to make comparisons.

The study of each type has been made in such a manner as to consider its geographical and temporal distribution. A number of sites and localities were chosen for comparisons. In several instances, comparisons had to be made with projectile points from a single site or a collection in a region little known archaeologically. In other instances comparisons were made with cultural complexes in localities rather well known archaeologically. This, no doubt, distorts the comparative picture but does serve to illustrate the wide spread distribution of comparable specimens to Table Rock Reservoir types.

To reduce the bulk of the comparative section, the information

has been placed in tabular form. In Table VIII the Table Rock Reservoir projectile point types have been grouped by respective series and compared with specimens from sites or collections in nearby or contiguous areas. An "x" indicates that there was adequate correlation to denote probable similarity between a Table Rock Reservoir type and a specimen or group of specimens in one of the sites elsewhere. The absence of an "x" in the column does not necessarily mean that there is an absence of a comparable specimen in the locality, but does mean that no specimens were observed. Specimens that were unquestionably the same as Table Rock types were indicated by a capital "X" and specimens with some variation or questionably the same type were indicated by a lower case "x". Comparisons were made from Table Rock Reservoir in the four directions, sites in each direction being clustered in such a manner as to place the geographically nearest site next to the column of projectile point types.

The presentation in Table VIII seemed to indicate that there was a great similarity in projectile points of each sequential period in an area encompassing northeast Oklahoma, the upper James River, Bull Shoals Reservoir, and extending into Arkansas for an unknown distance. There did seem to be some difference at certain periods, however.

There is no question about specimens in the Table Rock Purchase Unit, at Rockhouse Cave (Adams, 1941 and 1950), at the Cox Site (Tong, 1954) and at the Jenkins Site (Bisby and Adams Collection) as they are integral parts of the Reservoir area.

As one looks west from Table Rock (Fig. 10), comparable specimens to the four Table Rock Reservoir projectile point series are found for a considerable distance. The assemblage found on the Staggs Site (Staggs Collection), about thirty miles northwest of Table Rock Reservoir and in a different drainage, has part of the Viola Series, and a full series of the Lampe, Shell Knob, and Golden projectile points. These can be equated with the Table Rock Reservoir projectile points.

The assemblage from the Brown site near Noel, Missouri, though quite small, appears to be representative of the Early and Late Non-ceramic Complexes. There was a suggestion of a ceramic complex and, had the assemblage been larger, it very possibly would have contained specimens representative of all of the Table Rock Reservoir Series. Supporting this view is much of the material from Bluff Dweller Sites (Harrington, 1924) which were in the vicinity of the Brown Site. The similarity of the Bluff Dweller material to that of northeast Oklahoma has been noted by Baerreis (1951). Much of the Brown Site material is comparable to material from northeast Oklahoma, some of which was found less than twenty miles distant.

In northeast Oklahoma, projectile points are comparable to nearly all of the Table Rock Reservoir types. Specimens comparable to the Viola Series of the Early Nonceramic Complex are found in the Grove Focus A and B periods (Bell and Baerreis, 1951). Grove Focus B and C points are comparable to the Lampe Series projectile point types of the Late Nonceramic Complex. Projectile points comparable to the Early Ceramic Complex in Table Rock Reservoir,

represented by the Shell Knob Series, are also found in northeast Oklahoma. There seem to be only some minor type differences. As for the projectile points of the Late Ceramic Complex indicated by the Golden Series types, there is practically no difference. On the basis of projectile point types then, the Table Rock Reservoir cultural complexes can be extended westward for about one hundred miles to include northeast Oklahoma. It is also possible to extend this area southward about thirty-five to forty miles to include Ck-44, a large bluff shelter just north of Tahlequah (Hall, 1954) where comparable specimens of most of the Viola Series, all of the Lampe and Shell Knob Series, and some of the Golden Series types are represented.

Looking northward from Table Rock Reservoir (Fig. 10), there are a series of sites which readily lend themselves for comparison. In the upper James River Valley, identical projectile points are found (Brown and Haswell Collections; and Marshall, 1955). Between there and Table Rock Reservoir are several sites, which also contain specimens comparable to those in the Table Rock projectile point series.

At Parched Corn Hollow Shelter (Haswell, excavation notes) on the Finley River, a tributary of the James River, an almost complete series belonging to the Early Nonceramic Complex has been found. At this site some of the earlier deposits were eight feet below the surface and under large fall-rocks which unfortunately limited the investigation of all of the deposits. Had these deposits been fully

excavated, the sample might have been more representative of the full Viola Series. Comparable specimens to all of the types of the Lampe, Shell Knob, and Golden Series projectile points were found in Parched Corn Hollow Shelter. The finding of so many specimens comparable to the four projectile point series of the Table Rock Reservoir cultural complexes allows an extension of those complexes northward from the Reservoir for about fifty-five miles.

A few miles north of the upper James River Valley, in the upper Pomme de Terre River and Sac River drainages (Fig. 10), a subtle change occurs (Vinton Collection). Though certain specimens similar to the Viola Series appear to be unquestionably comparable, others similar in outline and flaking appear to be variations which do not occur in Table Rock.

East of the Table Rock Reservoir (Fig. 10), it is found that all of the projectile point types of the four Table Rock Reservoir series exist in the Bull Shoals Reservoir. It has not been indicated in Table VIII but as one studies the material from the western portion of Bull Shoals Reservoir and works eastward, some of the types, which were unquestionably similar in the nearer part become questionable. By the time comparisons are made with material from Norfolk Reservoir (Marshall and Tong, MS) the relationships have become quite questionable. In the Norfolk Reservoir several of the types are comparable to the Viola Series. Although there are some specimens that appear to be similar to the Lampe and Shell Knob series these are of typical wide-spread varieties and may be quite different. For example, there

is some tendency for variation in shape size. The pattern for Norfolk Reservoir is denoted by the study of other small sites in the same general vicinity. At the Isom Corp and Tecumseh Sites (Tong, 1951 a and b) there are three Table Rock Reservoir types, two of which are comparable to Viola Series types. At the Seawright Site (Morrison and Tong, 1953) both of the early types may be considered comparable to Table Rock types, Rice Lobed and White River Archaic. At Hurricane Hollow (Tong, 1953) there are no comparable types present. A type, occurring at Hurricane Hollow, and also appearing to be present in Table Rock (Dalton Serrated), is comparable but is of such widespread occurrence that its significance for comparative purposes is in doubt. The information from Bull Shoals and Norfolk Reservoirs indicates a feasible extension of the Table Rock Reservoir cultural complexes for at least fifty miles with a tentative additional extension of about twenty-five miles.

The following of the Table Rock Reservoir cultural complexes southward is difficult due to a lack of information on sites (Fig. 10). At Cave Hollow (Miner, 1950) south of Bull Shoals Reservoir the assemblage was very small and not representative of the complexes in Table Rock Reservoir. Any extension of the cultural complexes in Table Rock Reservoir to the south on the basis of information available is not feasible at this time.

As a check against the projectile point comparisons, ceramic comparisons can be made for the two latest complexes in Table Rock Reservoir. The study indicates that there was a similarity in ceramic

wares of the two main ceramic periods in an area encompassing northeast Oklahoma, the upper James River, and into Arkansas for a short distance. Information was not available on Bull Shoals ceramics. There do appear to be certain differences in the first three comparative areas, probably reflecting influences from regions closer to them than to the others.

The ceramic wares attributed to the Early Ceramic Complex in Table Rock Reservoir appear to be of two main varieties. One is clay-tempered or grit-tempered with a smoothed surface and decorated with dentate stamping in bands and/or curvilinear trailed or incised designs. The other is a crushed rock-or-grit-and crushed limestone-tempered pottery with cord roughened surface. Both appear to be associated with a Middle Woodland complex present at 23SN189 (Lander Shelter I), 23SN137 (Cantrell Site II), 23BY164 (Chapman, 1956, p. 34), and 23BY386 (Standlee Shelter I). The pottery is associated with the Early Ceramic Complex.

Ceramics of the Woodland pattern represented in northeast Oklahoma are quite comparable to those of Table Rock Reservoir locality. Most of the ceramic wares are used for the identification of the cultures (Bell and Baerreis, 1951) and are characterized by coarse fragments of crushed chert or limestone for tempering. These are decorated primarily by coarse-toothed dentate stamping, cord-wrapped stick, and rarely by fine-toothed dentate stamping, suggesting a Middle Woodland pattern predominately. A Middle Woodland complex is found at the Cooper Site (D1CoI and D1CoVI) in Delaware

County, Oklahoma, and is indicated at the Evans Site (DLEvIII) and the McClonkey Site (DLMcVIII) (Baerreis, 1951). At Ck-44, in Cherokee County, Oklahoma (Hall, 1954), a Middle Woodland pottery was found but it had combinations of features² different from those found at other sites in northeast Oklahoma.

A Middle Woodland complex, very similar to the northeast Oklahoma complex, appears to be present on several sites in Jasper County, Missouri, to the northwest of Table Rock Reservoir and just northeast of northeast Oklahoma (Palmer Collection). On these sites there is a high percentage of cord roughened pottery having some clay and coarsely crushed limestone or chert for tempering. A similar pottery to Woodward Plain also occurs in several shelter and open sites in the same area. These similarities indicate a close relationship in later prehistoric times of the Jasper County area with northeast Oklahoma and perhaps to Table Rock Reservoir.

At Parched Corn Hollow Shelter (Haswell, excavation notes) the ceramic pattern is somewhat similar to that of the Early Ceramic Complex in Table Rock Reservoir. There does appear to be some pottery which might be attributed to an Early Woodland pattern but there is so little of it that a mention only should be made. A Middle Woodland pottery is fairly well represented, some of which appears to be contemporaneous with the later shell-tempered pottery. It is cord roughened and is crushed grit-or limestone-and sand-tempered. This appears to be associated with the Highland Aspect of the Central Ozark Highlands.

The Late Ceramic Complex, which as been termed Marginal Mississippi (Bray, 1956, p. 74) and characterized by the Golden Series projectile points may actually represent two separate late complexes. This is strongly indicated by the ceramic wares and has been suggested by Chapman (1956, p. 41). The Reservoir could have received influence from two directions, the southeast (southeast Missouri and northeast Arkansas) and the southwest (northeast Oklahoma). Most of the ceramics found in shelters, and on the few open sites containing Late Ceramic Complex pottery, has been of a variety having flat disc-like, occasionally basket impressed, or rounded bottoms, with recurved rims with square to flattened lips, occasional strap handles or lugs, and with occasional incised chevron-like designs on the shoulders of the vessels. Pottery of this description has been found in some quantity in the Table Rock shelters. Most of the Ozark Bluff Dweller top level pottery described by Dellinger and Dickinson (1942) appears to correlate closely with the pottery found in the Reservoir locality. This suggests an inclusion of the Ozark Bluff Dweller top level pottery into the Late Ceramic Complex.

A late Mississippian complex in the Table Rock Reservoir, characterized by pottery having strip applique and nodes may be present. Pottery, having strip applique has been found at 23SN200 (Rice Shelter) and at 23SN201 (Fitzgerald Shelter). Pottery having nodes has been found at 23By324 (Pettigrew Cave). These characteristics appear to be more closely related to the Walls Focus

(Griffin, 1952) of northeast Arkansas.

Comparisons of the Table Rock Reservoir Late Ceramic Complex with the northeastern Oklahoma region introduces some interesting problems. Bell and Baerreis (1951) graphically represent three different cultural groups as occupying northeastern Oklahoma in late prehistoric times. They are the Gibson and Fulton Aspects and the Neosho Focus. There are found a great number of pottery types, most of which are deep flat bottomed jars, round to flat bottomed bowls, and narrow-necked water bottles, many of which are elaborately decorated with incised, engraved, or punctate decorations and are frequently non-shell-tempered. In the Neosho Focus is found a shell-tempered pottery having flat bottoms, occasionally basket impressed, with recurved rims with square or flat lips, strap handles or lugs occasionally, and with chevron-like designs, or punctate designs on the shoulders. These vessels are deep jar or bowl shaped forms. Much of this latter pottery is Woodward Plain (Hall, MA Thesis) and Neosho Punctate (Baerreis, 1939). The Woodward Plain appears to be closely related to the more common Table Rock Late Ceramic Complex pottery.

Pottery from the Parched Corn Shelter associated with similar projectile point types to the Golden Series of the Late Ceramic Complex is comparable to the Table Rock Reservoir shell-tempered pottery and might well be included as the same. Another small shelter in the same locality, Garrison Cave (Bray, MS), also has comparable shell-tempered pottery in the top levels with similar projectile points

to those in the Golden Series.

Chapman collected shell-tempered pottery from both shelters and open sites from the Bull Shoals Reservoir area, however, information on this material is not available at this time. Information concerning shell-tempered pottery from north Arkansas is not available other than that reported by Dellinger and Dickinson which can be related to that in Table Rock Reservoir.

Pottery in the Early Ceramic and Late Ceramic Complex appears to have the same distribution as the projectile point series throughout the proposed cultural locality which includes northeastern Oklahoma, northwestern Arkansas and southwestern Missouri.

CHAPTER VII

SUMMARY AND CONCLUSIONS

The principal problems in this study have been little different from those of most archaeological reports. Foremost of these has been tracing the distribution of components of the different cultural complexes in an attempt to delimit the locality in which they ranged. The study was completed in four steps. The first was detailed study of surface collections from sites in the Reservoir locality in order to devise a sound method of descriptive categorization of projectile points. Reviews were made of different classifications and typologies in an attempt to gain a firm background for completing the first step and initiating the second. The second was the development of a typology for projectile points in the locality under study. A review of the information and material from recent excavations in the Reservoir allowed the formulation and naming of a number of projectile point types. Surface categories were used to expand the number of specimens, which were then grouped into projectile point series according to the established cultural complexes. The third step was the tracing of the geographical distribution of components of the cultural complexes throughout the limits of the Reservoir. The last part was the use of the comparative method to determine the cultural affiliation of complexes beyond Table Rock Reservoir (Table

VIII and Fig. 10), and thus to get a better approximation of the probable limits of the cultural locality.

In the review of previous descriptive systems and typologies, it was found that both have their place in archaeological methodology and if utilized within their respective limits will serve as useful tools for laboratory analysis of cultural remains. The benefits derived from categorization of projectile points are the reduction of masses of descriptive material and the familiarization of the researcher with his material. Typologies, on the other hand, identify different patterns of technology which have been learned culturally. Types are thus necessarily established within definite descriptions so that they may be used as tools for the measurement of cultural change, similarity or dissimilarity. It appears that one of the common misuses of typology is the assumption of cultural relationship through type similarity alone. This is especially evident when material from widely separated sites is closely compared.

The development of a descriptive system for projectile points from Table Rock Reservoir entailed the determination of five main features by which each projectile point specimen was categorized. These features were (1) form or shape, (2) flaking, (3) size, (4) smoothing of base, stem, and blade edges, and (5) material. The criteria for the first four were believed to have been culturally derived. The availability of local materials determined the fifth feature. On the basis of these features, sixty descriptive categories were established (Table I and Appendix A). After types were

established by their association with cultural complexes in excavated sites the sixty categories were then equated with the types in so far as possible and used in determining the spread of cultural complexes throughout the area.

A review of information from twenty-two archaeological sites excavated by the University of Missouri in the course of six years of research in the Table Rock Reservoir locality provided the basic steps in the establishment of cultural types of projectile points. First, four cultural complexes were derived, two nonceramic and two ceramic. Each complex was characterized by a number of distinctive projectile point types which were grouped into a series, a total of twenty-four point types being suggested (Appendix B). Many of the types persist through two or more of the complexes (Table IX). These were then utilized in conjunction with the categories (Tables II through V) that could be equated with them to determine the distribution of cultural complexes in the area. The small number of sample specimens per site made it difficult to follow the distribution of components by sites. Seventy-eight surface sites out of 754 (Fig. 5) were considered to have a sufficient sample for the determination of components (Tables VI and VII). As a result of this study, using additional components from excavations, thirty-three components were Early Nonceramic Complex, ninety were Late Nonceramic Complex, thirty-six were Early Ceramic Complex, and sixty-one were Late Ceramic Complex (Fig. 6 through 9). These were somewhat evenly distributed throughout the Reservoir locality.

A comparative study using projectile point series and types was then made to determine the broader cultural affiliations of each of the four cultural complexes. This study was made in an attempt to establish the geographical limits of each complex. The study was seriously hampered by the lack of detailed comparative information on archaeological sequences in the area immediately surrounding Table Rock Reservoir. It was possible through comparisons with surface collections to follow the complexes beyond the Reservoir boundary for a short distance in every instance (Table VIII and Fig. 10). However, as information was lacking on temporal and cultural relationships any conclusions would necessarily be tentative without further archaeological research in the surrounding regions.

It was learned with some certainty that a comparable sequence of complexes existed in northeast Oklahoma in the James River Valley just north of Table Rock Reservoir, at Parched Corn Hollow Shelter and probably in the western portion of Bull Shoals Reservoir. At two of these localities (northeast Oklahoma and Parched Corn Hollow) the cultural sequence is almost wholly similar. The earliest archaeological complexes in both places contain projectile point types of the Viola Series that are Early Nonceramic Complex in the Table Rock Reservoir locality. These complexes in all probability are closely contemporaneous with one another. No clearly defined separation occurs between the Early Nonceramic and Late Nonceramic Complexes in southwest Missouri and northeast Oklahoma which suggests a continuous occupation over a broad area for a very long time span.

The same three localities have cultural complexes closely comparable to the Late Nonceramic Complex of Table Rock Reservoir. Projectile point types in these are the same as those in the Lampe Series which are diagnostic of the Late Nonceramic Complex of Table Rock Reservoir. In northeast Oklahoma and Parched Corn Hollow, as well as in Table Rock, there is a sudden increase of ground stone objects such as mealing stones, manos, and full grooved axes in this level above the Early Nonceramic Complex.

Woodland influence appeared to be present in Table Rock Reservoir and the complex represented by it was designated Early Ceramic. A check against the projectile point series and type comparisons was made by a comparison of associated pottery types in the same area. It appears related, both in projectile points and ceramics to a complex on the Cooper Site, Evans Site, and the McClonkey Site in northeastern Oklahoma that is probably coeval. A similar complex also exists at Parched Corn Hollow Shelter on the Finley River north of Table Rock Reservoir.

The Late Ceramic Complex (called Marginal Mississippi by Bray, 1956, p. 74), characterized by the Golden Series projectile point types, was found to have a much greater distribution than the other complexes. It appears that the Reservoir locality may have received influence from two directions, the southeast (southeast Missouri and northeast Arkansas) and the southwest (northeast Oklahoma). The closer relationship appears to be with the southwest in northeast Oklahoma where there is a relatively long occupation

and more varied foci, the traits of which identify them with the "Caddoan Area" (Orr, 1952, p. 239). These are divided into the Gibson and Fulton Aspects (Bell and Baerreis, 1951), and the Neosho Focus. Golden Series projectile point types are found both to the west and to the east. Such types as the White River Triangular, Jakie Notched, Crisp Ovate, and Table Rock Corner-notched would fit well in many of the late site components to the southwest in Oklahoma. The White River Triangular, Table Rock Corner-notched, and White River Elliptical appear to be common, however, in sites in the Mississippi Valley in the later complexes. Pottery of the Late Ceramic Complex also shows close relationships to both directions.

The Table Rock Reservoir Late Ceramic Complex pottery appears to be predominately related to much of the Neosho Focus Woodward Plain (Hall, MA Thesis). There are also some similarities with Gibson and Fulton Aspect pottery though this appears to be only in vessel form. Strap applique and noded pottery bears close relationships with the Walls Focus pottery of the southeast. Other evidence for closer southwest relationships are a grooved keel boat stone (Lander Shelter II, Marshall, MS), pulley type ear spools (Rice Shelter, Bray, 1956; Fitzgerald Shelter, Chapman, MS), Gibson and or Fulton Aspects house types (Loftin I), and thin-bowled equal-armed pottery pipes (Lander Shelter II, Crisp Shelters I and II).

The study has provided what appears to be a feasible method by which components of several cultural complexes were traced from site to site through a space-time continuum through the use of characteristic projectile point types associated with each of the complexes.

This was especially useful for showing the spread of complexes in the area. Perhaps most valuable was the use of the point types as an added means to show the relationships of cultural complexes and sequences in a wider area, which is more accurately described as a locality within which similar if not the same cultures existed through a long time span.

Projectile points, typed and the types associated with complexes in archaeological sites and then the types grouped into series, become useful markers for comparative studies of cultural complexes in space and time distributions. Such projectile point types grouped into series, when used with discretion and within contiguous areas or in conjunction with other characteristic traits, can become almost as useful and as important as the use of pottery types. They are of special value when dealing with nonceramic complexes.

BIBLIOGRAPHY

ADAMS, LEE

1941. Rockhouse Cave. The Missouri Archaeologist, Vol. 7, No. 2. Columbia.

1950. The Table Rock Basin In Barry County, Missouri. Memoir of the Missouri Archaeological Society, No. 1. Columbia.

BAERREIS, DAVID A.

1939. Two New Cultures in Delaware County, Oklahoma. The Oklahoma Prehistorian, Vol. 2, No. 1, pp. 2-5. Norman.

1951. The Preceramic Horizons of Northeastern Oklahoma. Anthropological Papers, Museum of Anthropology, University of Michigan, No. 6. Ann Arbor.

BELL, ROBERT E., and DAVID A. BAERREIS

1951. A Survey of Oklahoma Archaeology. Bulletin of the Texas Archaeological and Paleontological Society, Vol. 20, pp. 7-100. Lubbock.

BELL, ROBERT E., and ROLAND SCOTT HALL

1953. Selected Projectile Point Types of the United States. Bulletin of the Oklahoma Anthropological Society, Vol. 1, pp. 1-16. Norman.

BIXBY, COL. LAWRENCE B.

1945. Flint Chipping. American Antiquity, Vol. 10, No. 4, pp. 353-361. Menasha.

BRAY, ROBERT T.

1956. The Culture-Complexes and Sequence at the Rice Site (23SN200) Stone County, Missouri. The Missouri Archaeologist, Vol. 18, Numbers 1 and 2, pp. 47-132. Columbia.

1957. Lander Shelter Number I, 23SN189, Stone County, Missouri. The Missouri Archaeologist, Vol. 19, Numbers 1 and 2, pp. 22-47. Columbia.

CHAPMAN, CARL H.

1948-a. A Preliminary Survey of Missouri Archaeology, Part III, Woodland Cultures and the Ozark Bluff Dwellers. The Missouri Archaeologist, Vol. 10, No. 3, pp. 99-130. Columbia.

- 1948-b. A Preliminary Survey of Missouri Archaeology, Part IV, Ancient Cultures and Sequence. The Missouri Archaeologist, Vol. 10, No. 4, pp. 136-162. Columbia.
1954. Preliminary Salvage Archaeology In The Pomme de Terre Reservoir Area, Missouri. The Missouri Archaeologist, Vol. 16, Numbers 3 and 4, pp. 1-112. Columbia.
1956. Preliminary Salvage Archaeology In The Table Rock Reservoir Area, Missouri. The Missouri Archaeologist, Vol. 18, Numbers 1 and 2, pp. 15-43. Columbia.
- CHAPMAN, CARL H., and LEO O. ANDERSON
1955. The Campbell Site, A Late Mississippi Town Site and Cemetery in Southeast Missouri. The Missouri Archaeologist, Vol. 17, Numbers 2 and 3, pp. 11-105. Columbia.
- COLE, FAY-COOPER, and THORNE DEUEL
1937. Rediscovering Illinois. University of Chicago Press. Chicago.
- CRESSMAN, L. S., HOWELL WILLIAMS, and ALEX D. KRIEGER
1940. Early Man In Oregon. Archaeological Studies in the Northern Great Basin, University of Oregon Press. Eugene.
- DELLINGER, S. C., and S. D. DICKINSON
1942. Pottery from the Ozark Bluff Shelters. American Antiquity, Vol. 7, No. 3, pp. 276-289. Menasha.
- FORD, JAMES A.
1936. Analysis of Indian Village Site Collections From Louisiana and Mississippi. Anthropological Study Number II, Department of Conservation, Louisiana Geological Survey. New Orleans.
- GOODMAN, MARY E.
1944. The Physical Properties of Stone Tool Materials. American Antiquity, Vol. 9, No. 4, pp. 415-433. Menasha.
- GRIFFIN, JAMES B. (editor)
1952. Prehistoric Cultures of the Central Mississippi Valley. Archaeology of Eastern United States, pp. 226-238, University of Chicago Press. Chicago.
- HALL, ROWLAND SCOTT
1954. Ck-44: A Bluff Shelter Site From Northeast Oklahoma. Bulletin of the Oklahoma Anthropological Society, Vol. 2, pp. 49-67. Norman.

HARRINGTON, MARK R.

1924. The Ozark Bluff Dwellers. American Anthropologist, Vol. 26, No. 1, pp. 1-23. Menasha.

HAURY, EMIL W.

1950. The Stratigraphy and Archaeology of Ventana Cave, Arizona. University of New Mexico Press. Albuquerque.

KELLER, WALTER D.

1951. Common Rocks and Minerals of Missouri. The University of Missouri Bulletin. Missouri Handbook No. 1.

KIDDER, ALFRED V.

1932. The Artifacts of Pecos. Papers of the Phillips Academy Southwestern Expedition, No. 6, Robert S. Peabody Foundation for Archaeology, Yale University Press. New Haven.

KRIEGER, ALEX D.

1944. The Typological Concept. American Antiquity, Vol. 9 No. 3, pp. 271-288. Menasha.

KROEBER, ALFRED L.

1939. Cultural and Natural Areas of Native North America. University of California Publications in American Archaeology and Ethnology, Vol. 38, University of California Press. Berkeley.

LEHMER, DONALD J.

1954. Archaeological Investigations in the Oahe Dam Area, South Dakota, 1950-51. River Basin Surveys Papers, Number 7, Smithsonian Institution, Bureau of American Ethnology, Bulletin 158. Washington, D.C.

MARSHALL, RICHARD A.

1955. Salvaged Sites in Greene County, Missouri. The Missouri Archaeologist, Vol. 17, No. 4, pp. 7-30. Columbia.

1956. Lab Notes. Missouri Archaeological Society News Letter, Number 100. The Missouri Archaeological Society. Columbia.

MINER, HORACE

1950. Cave Hollow, An Ozark Bluff Dweller Site. Anthropological Papers, Museum of Anthropology, University of Michigan, No. 3. Ann Arbor.

MORRISON, WILLIAM M., and MARVIN E. TONG, JR.

1953. The Seawright Site. The Missouri Archaeologist,

Vol. 15, No. 4, pp. 10-17. Columbia.

ORR, KENNETH G.

1952. Survey of Caddoan Area Archaeology. Archaeology of Eastern United States, edited by James B. Griffin, pp. 239-255, University of Chicago Press. Chicago.

PHILLIPS, PHILIP, JAMES A. FORD, and JAMES B. GRIFFIN

1951. Archaeological Survey In The Lower Mississippi Alluvial Valley, 1940-47. Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, Vol. 25. Published by the Museum. Cambridge.

PHILLIPS, PHILIP, and GORDON R. WILLEY

1953. Method and Theory In American Archaeology: An Operational Basis For Cultural Historical Integration. American Anthropologist, Vol. 55, No. 5, Pt. 1, pp. 615-633. Menasha.

ROUSE, IRVING

1939. Prehistory In Haiti. Yale University Publications In Anthropology, Number 21, Yale University Press. New Haven.

SAUER, CARL O.

1920. The Geography Of The Ozark Highland Of Missouri. The Geographic Society of Chicago, Bulletin 17. Chicago.

SCULLY, EDWARD G.

1951. Some Central Mississippi Valley Projectile Point Types, Museum of Anthropology, University of Michigan. Ann Arbor.

SKINNER, HUBERT C.

1956. Nomenclature, Origin, and Occurrence of Flint. Bulletin Of The Oklahoma Anthropological Society, Vol. 4, pp. Norman.

STRONG, WILLIAM D.

1935. An Introduction To Nebraska Archaeology. Smithsonian Miscellaneous Collection, Vol. 93, No. 10, Smithsonian Institution, Washington, D.C.

SUHM, DEE ANN, and ALEX D. KRIEGER

1954. An Introductory Handbook of Texas Archaeology. Bulletin Of The Texas Archaeological Society, Vol. 25. Abilene.

TONG, MARVIN E., JR.

- 1951-a. The Tecumseh Site. The Missouri Archaeologist, Vol. 13, No. 1, pp. 21-26. Columbia.

1951-b. The Isom Corp Site. The Missouri Archaeologist, Vol. 13, No. 1, pp. 27-31. Columbia.

1953. An Archaic Manifestation at the Mouth of Hurricane Hollow, Ozark County, Missouri. The Missouri Archaeologist, Vol. 17, No. 4, pp. 7-29. Columbia.

1954. Cox, An Archaic Site In The Ozarks. American Antiquity, Vol. 20, No. 2, pp. 124-129. Salt Lake City.

TURNER, C. HELMER

1949. Flint. The Missouri Archaeologist, Vol. 11, No. 2, pp. 26-27. Columbia.

WEBB, WILLIAM S.

1946. Indian Knoll. Reports in Anthropology and Archaeology, Vol. 4, No. 3, Pt. 1, pp. 251-255. University of Kentucky. Lexington.

WHITEFORD, ANDREW H.

1947. Description For Artifact Analysis. American Antiquity, Vol. 12, No. 4, pp. 226-239. Menasha.

WILLEY, GORDON S.

1949. Archaeology of the Florida Gulf Coast. Smithsonian Miscellaneous Collections, Vol. 113, The Smithsonian Institution. Washington, D.C.

WILSON, THOMAS.

1897. Arrowpoints, Spearheads, and Knives of Prehistoric Times. United States National Museum, Annual Report, Part II. The Smithsonian Institution. Washington, D.C.

WORMINGTON, H. M.

1957. Ancient Man in North America. Denver Museum of Natural History, Popular Series No. 4, fourth edition, fully revised, pp. 113-114. Denver.

OTHER SOURCES

A. Manuscripts

BRAY, ROBERT T.
Garrison Cave.

CHAPMAN, CARL H., ROBERT T. BRAY, and RICHARD A. MARSHALL
1955. Preliminary Salvage Archaeology In The Table Rock
Reservoir Area, Missouri. National Park Service Report,
Museum of Anthropology, University of Missouri, Parts 2
and 3. Columbia.

HALL, ROBERT L.
1951. The Late Prehistoric Occupation of Northeastern
Oklahoma As Seen From The Smith Site. M. A. Thesis,
University of Wisconsin. Madison.

MARSHALL, RICHARD A.
Four Small Archaeological Sites In The Table Rock Reservoir
Area, Missouri (tentative title).

MARSHALL, RICHARD A., and MARVIN E. TONG, JR.
An Archaeological Survey Of The Norfolk Reservoir Area,
Missouri.

B. Field Notes and Collections

ADAMS, LEE
Collection, Monett, Missouri.

BISBY, LEONARD H.
Collection, Aurora, Missouri.

BROWN, C. M.
Collection, Noel, Missouri.

BROWN, LARRY, and MAX BROWN
Collection, Springfield, Missouri.

CRISP SHELTER I, II, and III
Field and excavation notes.

HASWELL, RICHARD E.
Collection, Springfield, Missouri.

JAKIE HOLLOW SHELTER

Field and excavation notes.

PALMER, ERNEST J.

Collection, Webb City, Missouri

ROTH, J. ALLEN

Collection, Joplin, Missouri

STAGGS, ROBERT

Collection from Stark City, Newton County, Missouri (now at the Museum of Anthropology, University of Missouri).

STANDLEE SHELTER I and II

Field and excavation notes.

TOWNSEND SHELTER

Field and excavation notes.

VINTON, JOHN C.

Collection, Strafford, Missouri.

APPENDIX A

TABLE ROCK RESERVOIR PROJECTILE POINT CATEGORIES

The description of individual categories of Table Rock Reservoir projectile points would take a large amount of space and time. In the place of a verbal description, Table I was devised which set forth the criteria or distinctive features of each category. In addition to the table there are illustrations of a typical specimen of each category showing characteristic flaking patterns and outlines (Figures 11 through 19).

Since a tabular listing of characteristics and illustrations cannot convey a wholly clear picture of the categories, below are a number of brief remarks concerning physical comparisons, probable relationships, and comparable points previously named as types.

Category K1 and K2 are closely related, in all probability the same type, K1 being a reworked variety of K2 (Fig. 11). Categories K1 and K19 (Fig. 13) are very similar in outline and flaking. Because of this, the two categories are difficult to separate. The most characteristic features for separation are stem and basal smoothing and a longer stem which is generally less flaring for Category K19 than K1. Category K1 and K2 grade imperceptibly into K3 and K4, size and the quality of flaking being the only features useful in separating them.

Categories K5 and K6 are related to one another, K6 appearing to be a reworked variety of K5. Flaking on these two categories is very well controlled. Material is always a waxy lustered chert, pink, light gray, or white in color. The K5 and K6 categories are very similar to K12 and K13 (Fig. 12). Category K13 is a reworked variety of K12. The major differences between the K5 and K6 and K12 and K13 categories is in the flaking and the shape of the stems. Flaking on categories K12 and K13 is usually less carefully controlled, often rough. Categories K12 and K13 are usually manufactured from a darker colored material than are specimens of K5 and K6. The stems, as well as the flaking and material, are different in the shapes of the corners of the base. In categories K5 and K6, the corners of the base are usually squared, there being a definite angle from a straight sided stem to a convex base. On the K12 and K13 categories, the corners of the base are rounded from a straight or incurvate stem edge to a convex base. Basal thinning on categories K12 and K13 is usually better than on K5 and K6.

Some consideration of the possibility of Category K7 being a reworked variety of K8 has been made (Fig. 11). There are close similarities in the base, however, Category K7 bases appear to be more carefully finished and the edges are occasionally smoothed. The bases on Category K8 specimens appear to be finished by small, short pressure flakes. The size of Category K7 stems are as large as those of K8 but frequently range to a much smaller size, indicating possible manufacture with a different idea. The bases of Categories K7 and K8

are thinned in identical patterns.

Category K9 (Fig. 12) is a composite category containing a number of barbed and shouldered specimens all having a concave base and rounded corners where the base and stem edges join. Stem and base edges are often smoothed. There is so wide a range of shapes and flaking patterns that it is difficult to presume that they represent a single point tradition.

Category K10 (Fig. 12) tentatively names the Rice Lobed Point (Bray, 1956, p. 128) appears to be closely related typologically and culturally to categories K15 and K16 (Fig. 13). All three categories frequently have the same characteristics except the concave base of category K10. Smoothed stem and base edges, and slightly beveled and serrated blade edges are commonly present on both Categories K15 and K16. Category K10 always has a beveled and usually a serrated blade edge, concave base, and smoothed stem and base edges.

Categories K17 and K18 (Fig. 13) may be comparable specimens. Category K18, however, is never barbed and resembles Category S10 (Fig. 15) more closely in every respect except for the beveled notching which forms the stem. Category K18 is almost always straight based, another feature making it comparable to S10. Category K17 occurs with a straight base about as often as with a convex base.

Category K19 (Fig. 13) appears to be similar to K1 (Fig. 11). It has been named the Table Rock Stemmed Point by Bray (1956, p. 127).

Category K20 (Fig. 13) appears related to Category K19, however, the blade of K20 is often wider and frequently beveled,

though never serrated. The carefully thinned and concave base of Category K20 makes it strikingly different than K19.

Category N1 (Fig. 14) is similar to the Clovis Point (Suhm and Krieger, 1954, p. 412).

Two blade varieties occur for category N2 (Fig. 14). One is a beveled and serrated blade edge as illustrated and the other is an unbeveled and carefully evened blade edge. The latter blade form resembles the Angostura Point (Suhm and Krieger, 1954, p. 402).

Category N4 (Fig. 14) is closely comparable to the Madison Point (Scully, 1951, p. 12) and has been tentatively named the Mississippian Triangular Point by Bray (1956, p. 132). It is referred to in this paper as the White River Triangular. It occurs in a concave, convex, and straight based form. Some are well made and others are crudely fashioned from flakes.

Category S11 and S12 (Fig. 14) appear to be related, however, S11 is often made from a flake and a notch appears at the base more often than a concave base. Category S11 specimens are comparable to the Morris Point (Bell and Hall, 1953, p. 10). Category S12 is usually well manufactured by careful flaking and tends to run a little larger in size than does S11. The two together have been tentatively identified as Cahokia Double Notched Points by Bray (1956, p. 132) and are referred to as the Jakie Notched type in this paper.

Category N5 (Fig. 14) is comparable to the Nodena Point (Chapman and Anderson, 1955, p. 15) and has been tentatively named the White River Elliptical Point by Bray (1956, p. 125).

Category N6 (Fig. 14) is a small, ovate, crudely manufactured point. It is larger than most of the other small points. There are several specimens in Category N4 which are as large as most of the specimens in N6.

Category K22 (Fig. 14) has been tentatively named the Table Rock Corner-notched Point by Bray (1956, p. 126).

Category S1 (Fig. 14), as a category, is either a distinctive projectile point type or representative of a variety of either Categories S2 (Fig. 15) or K12 and K13 (Fig. 12). The side-notching makes it appear related to category S2, though the flaking and material has little resemblance. Because of the flaking, thinning, and material, the resemblance is more like categories K12 and K13, though the notching is not comparable. There are only a few specimens in the category which may indicate that the specimens are only a variety of some other type.

Categories S2 and S3 (Fig. 15) are probably related and grade imperceptibly into one another. Bray (1956, p. 132) tentatively equated them with the Graham Cave Notched of Scully (1951, p. 8).

Categories S4 and S5 (Fig. 15) may be closely related, S5 appearing to be a reworked variety of S4. They are very distinct in that the side notching, usually long and forming the stem, is strongly beveled. Category S6 (Fig. 15) may be closely related as the side notching is also beveled and appears to be similar to the San Patrice Points (Suhm and Krieger, 1956, p. 477). Category S7 (Fig. 11) is comparable to the Dalton Serrated Point (Chapman, 1948, p. 138; and

Scully, 1951, p. 6) and, does not have the beveled side notching characteristic of Categories S4, S5, and S6. It may be related and perhaps is the same type as Category S5.

Category S8 (Fig. 15), tentatively named the White River Serrated Point by Bray (1956, p. 128), appears to be related to Category S5 and S7 but also is very much like Categories K10, S2 and S3.

Categories S9 and S10 (Fig. 15) have been tentatively named the Rice Side-notched Point by Bray (1956, p. 127). Category S10 is similar to Category K18 (Fig. 13).

Categories B1 and B2 (Fig. 16) appear to be related, B2 being a reworked variety. Category B1 occasionally occurs with a serrated blade edge similar to B2. The long stem on both is distinctively thinned.

Category B3 (Fig. 16) is a square stemmed form, which occurs with a smoothed stem and base edges. It does not appear to have any direct relationship to other points in Table Rock Reservoir.

Categories B4, B5, and B6 (Fig. 16) probably are related, B6 being a reworked variety of B4 and B5. Category B5 is often a reworked variety of B4. Categories B7 and B8 (Fig. 17) also appear to be related, perhaps differing only in blade shape. Category B9 (Fig. 17) frequently found on the same sites with specimens of Categories B4, B5, B6, B7 and B8, also appears to be related. Category B9 specimens are occasionally found with long barbs similar to Category B4 but are more often shouldered. Category B9 differs from those

above related categories in its smaller size, its often contracting stem and frequently rounded base. All have a very characteristic careful reworking of the blade edges, thick lateral cross-section, and basal thinning from usually one side of the base.

Category K23 (Fig. 17) appears to be a blank form for some of the "K" category projectile points. It might be a completed point, but it is quite rough and crudely finished. Category S10 (Fig. 17) also appears to be a blank form except for some of the contracting or square stemmed categories. The stem is often well finished and occasionally smoothed.

Category C1 and C3 (Fig. 18) appear to be closely related both typologically and culturally. They may have served different functions, however. Category C1 is usually smaller and a little differently shaped in the stem area than is C3. Category C1 has been tentatively named the Table Rock Pointed Stemmed by Bray (1956, p. 126). Category C2 (Fig. 18) appears to be related to Categories C1 and C3. Category C2 has a smoothed stem and base edge and is usually much more carefully made than either C1 or C3. Categories C1, C2, and C3 have comparable specimens in northeast Oklahoma where they are referred to as the Gary Stemmed Point (Suhm and Krieger, 1954, p. 430).

Category C4 and C5 (Fig. 18) are probably the same type, C5 being a reworked variety of C4. Category C6 (Fig. 18) may also be related to C4 and C5. Category C6 blades are usually crudely finished but bases and stem edges are almost always smoothed and carefully finished.

Category C7 (Fig. 19) is closely comparable to the points identified as Langtry Stemmed Points by Bell and Hall (1953, p. 5). Suhm and Krieger (1954, p. 438) redefine the Langtry Stemmed Points and these are not closely related to Category C7. Category C7 may be related to C4 and C5.

Specimens in Category C8 (Fig. 19) have presented a problem. There are but a few specimens, which, because of barbed shoulders, should perhaps be placed in another stemmed category. Basal thinning on this category is usually good and resembles that of Category C2. Smoothing frequently occurs along base and stem edges.

Category C9 (Fig. 19), a contracting stemmed point which has many of the characteristics of the earlier types of points, may be related to N2. The shoulders are only slight on many of the specimens and blade edges are always bevelled and serrated.

In the unclassified category there are a number of different points which could not be or were not categorized. Illustrated are some of the more outstanding specimens, which might have been placed into categories had more than just one specimen or a few specimens been present.

Specimen U1 (Fig. 19), a single, large, well flaked point with smoothing along the stem and base edges, resembles and falls within the larger range of the Scottsbluff Point (Suhm and Krieger, 1954, p. 478).

Specimen U2 (Fig. 19), another single specimen, is a well flaked base which resembles a Folsom Point, though it is fluted only

on one side (Chapman, 1956, p. 35).

Specimen U3 (Fig. 19), the only specimen of its kind, may be related to Category K4, though the concave base does not conform to the description of the former. It appears to be a reworked point.

Specimen U4 (Fig. 19), was represented by several bases in the collection. It appears to have been a blade broken at the stem and renotched, the ruptured area of the stem being worked into a thick base.

Specimen U5 (Fig. 19), is representative of seven specimens that appear to be related to either Category K2 or K4 except for the concave base, widely flaring and very short stem, and greatly reworked blade.

Specimen U6 (Fig. 19) is apparently a long lanceolate-like blade. Stem edges are slightly smoothed, flaking appears to be collateral like that on Specimen U1, and both sides of the base have been thinned in a manner closely resembling the fluting process on the Folsom-like point (U2).

Other unclassified specimens more closely resembling specimens already categorized, except for some minor features, have not been described.

APPENDIX B

TABLE ROCK RESERVOIR PROJECTILE POINT TYPE DESCRIPTIONS

In accordance with step five of Krieger's Typological Concept (1944, p. 279) each newly established projectile point type must be fully and accurately described and illustrated to show the full range of variations. In Chapter III of this study considerable time was devoted to the development of a descriptive system through which the projectile point specimens collected from surface sites could be categorized for accurate description. In Chapter IV further steps were taken, using information from a number of excavations within the Reservoir locality to name projectile point types for the four established cultural complexes. Since Chapter IV was long and detailed, it was decided not to describe the types in the text, but to place the descriptions in an appendix. This appendix then, is the descriptive information concerning the projectile point types established for the Table Rock Reservoir cultural complexes.

The projectile point types are described individually and grouped by series. The descriptions follow a set pattern of form, flaking, dimensional range, smoothing, material, method of manufacture, and probable use. Types have been fully illustrated by line drawings (Figures 11 through 28).

THE VIOLA SERIES PROJECTILE POINT TYPES

I RICE LOBED TYPE (Fig. 12, K10; and Figure 20).

Form: Corner-notched. Symmetrical blade shape with excurve to straight and occasionally incurvate-excurvate blade edge.

Flaking: Blade - edges serrated and beveled with secondary finish flaking. Rarely blade edges are evened.

Beveled lateral cross-section.

Shoulders - pronounced and slightly to strongly barbed.

Barbs - small and usually rounded to pointed on tips.

Notches - moderate with 4-6 flake scars from both sides of the stem.

Stem - edges evened with secondary finish flaking, widely flaring.

Base - edges evened with secondary finish flaking and thinning by 3 to 8 flakes from both sides which produces a straight to, more commonly, concave base.

Corners are rounded and finished with secondary flaking.

Dimensional Range: Total length ranges from 45 to 70 mm.

Length of stem ranges from 15 to 20 mm.

Width of base ranges from 23 to 38 mm.

Greatest width of blade (at shoulders or tips of barbs) ranges from 28 to 47 mm.

Thickness ranges from 7 to 11 mm.

Smoothing: Stem sides around and across base smoothed deliberately.

Material: Tan to dark gray waxy chert, and quartzite.

Method of Manufacture: From an ovate or triangular blank.

Probable Use: A spearpoint or a knife.

Cultural Affiliation: Early and perhaps Middle Archaic.

II RICE LANCEOLATE TYPE, Tentative (Fig. 14, N2; and Fig. 21).

Form: Unnotched. Symmetrical blade shape with excurve blade edges.

Flaking: Blade - edges evened to beveled and serrated by secondary finish flaking. Blade has a biconvex to beveled lateral cross-section. Flaking on blade ranges from almost collateral to careless. Secondary finish flaking usually administered carefully. Most beveled specimens are serrated and this may be the result of reworking.

Shoulders - lacking. Occasionally there is a slight broadening of the blade at the point where stem smoothing ends.

Stem - contracting to base with edges evened with secondary finish flaking.

Base - straight to concave with secondary finish flaking.

Base corners are slightly rounded to square. Base is thinned by one to three usually long flakes removed

from both sides.

Dimensional Range: Total length ranges from 60 to 90 mm.

Length of stem ranges from 21 to 32 mm.

Width at point where smoothing ends ranges from 20 to 31 mm.

Width at base ranges from 17 to 23 mm.

Greatest width of blade ranges from 23 to 34 mm.

Thickness ranges from 5 to 12 mm.

Smoothing: Along the edges of the stem and across the base.

Material: White to dark blue waxy lustered chert, quartzite, and black low-reflective chert.

Method of Manufacture: From a long triangular or ovate blank.

Probable Use: A knife or a spear point.

Cultural Affiliation: Early to possibly Middle Archaic.

III JAKIE STEMMED TYPE (Fig. 12, K11; and Figure 20).

Form: Corner-notched. Symmetrical blade shape with excurve to straight blade edge.

Flaking: Blade - edges not infrequently finely serrated along the edges next to the shoulders. Occasionally slightly beveled with secondary finish flaking. Biconvex or beveled lateral cross-section.

Shoulders - slight to pronounced but never barbed.

Notches - moderate with 4 to 8 flake scars along both sides of the stem.

Stem - edges evened with secondary finish flaking.

Slightly to greatly flaring.

Base - edges evened with secondary finish flaking and thinning by 3 to 7 flakes from both sides. This thinning produces a convex to deeply notched base. Corners are rounded to pointed and finished with secondary flaking.

Dimensional Range: Total length ranges from 55 to 80 mm.

Width of base ranges from 25 to 34 mm.

Length of stem ranges from 19 to 27 mm.

Greatest width of blade (at shoulder) ranges from 25 to 46 mm.

Thickness ranges from 6 to 11 mm.

Smoothing: Stem sides around and across base smoothed deliberately.

Material: White to light tan or gray waxy chert, pink to dark gray and tan waxy chert.

Method of Manufacture: From an ovate or triangular blank.

Probable Use: A dart or spear point.

Cultural Affiliation: Early and perhaps Middle Archaic.

IV STONE SQUARE STEMMED, Tentative (Fig. 16, B3; and Figure 22).

Form: Square stemmed. Symmetrical blade shape with excursive blade edges.

Flaking: Blade - edges evened with secondary finish flaking and fairly often finely serrated along the edges next to the shoulders. Biconvex lateral cross-section. Serration formed by the removal of small flakes from

both sides of the blade.

Shoulders - pronounced and occasionally barbed.

Barbs - slight and usually pointed.

Notches - moderate with 4 to 8 flake scars along both sides of the stem.

Stem - edges evened with secondary finish flaking or by the notching process. Stem may be slightly contracting to the base.

Base - edges evened with secondary finish flaking and ranges from slightly concave to slightly convex but the norm is straight. Base is thinned by a series of small flakes parallel to the axis from both sides and generally is rather thick. Corners of the base are usually square but occur slightly rounded.

Dimensional Range: Total length ranges from 45 to more than 80 mm.

Length of stem ranges from 18 to 24 mm.

Width of base ranges from 22 to 28 mm.

Greatest width of blade (at shoulders ranges from 33 to 45 mm.

Thickness ranges from 7 to 12 mm.

Smoothing: Along both stem edges and across the base. Sometimes only slight smoothing.

Material: Gray to tan and dark blue waxy chert.

Method of Manufacture: From an ovate or triangular blank.

Probable Use: A knife or a spear point.

Cultural Affiliation: Early and Middle Archaic.

V RICE CONTRACTING STEMMED, Tentative (Fig. 19, 20; and Figure 21).

Form: Contracting stemmed. Symmetrical blade shape with
excurvate to straight blade edges.

Flaking: Blade - edges alternately beveled and serrated by
secondary finish flaking. Blade has a beveled lateral
cross-section. Flaking on blade ranges from carefully
controlled to fairly careless.

Shoulders - pronounced but never barbed.

Stem - contracting to the base with edges evened with
secondary finish flaking. Occasionally specimens have
parallel sided stems.

Base - straight to concave with secondary finish flaking.

Corners of the base are square. Base is thinned by two
to five relatively long flakes removed from both sides.

Dimensional Range: Total length ranges from 50 to 75 mm.

Length of stem ranges from 15 to 24 mm.

Width at shoulders ranges from 27 to 43 mm.

Width at base ranges from 13 to 20 mm.

Thickness ranges from 8 to 10 mm.

Smoothing: Along the edges of the stem and across the base.

Material: White to light gray waxy lustered chert.

Method of Manufacture: Probably from a triangular or ovate blank.

Probable Use: A dart or spear point.

Cultural Affiliation: Early to Middle Archaic.

VI RICE BEVELED NOTCHED, Tentative (Fig. 15, S4, and S5; and Figure 22).

Form: Side notched. Symmetrical blade with excurvate to straight blade edges.

Flaking: Blade - edges evened and occasionally serrated with secondary finish flaking giving the blade a biconvex lateral cross-section. Blades occasionally reworked and beveled and coarsely serrated with secondary finish flaking giving the blade a beveled lateral cross-section.

Shoulders - lacking on some reworked specimens but usually slight to moderate on unaltered specimens.

Notches - slight and up to 3 times as wide as deep.

Notches always alternately beveled. Notching forms the stem.

Stem - slightly flaring toward the base and finished by secondary finish flaking or as a result of the notching process.

Base - very convex and thinning varies from nearly fluted to excellent by two or three long flakes running parallel to the axis on both sides. Corners are usually pointed to rounded and flaring outward.

Dimensional Range: Total length ranges from slightly less than to greater than 53 mm.

Length of stem ranges from 15 to 24 mm.

Width at shoulders ranges from 18 to 35 mm.

Width at base ranges from 18 to 35 mm.

Thickness ranges from 5 to 8 mm.

Smoothing: From shoulder around the notch and across the base.

Material: White to light gray or tan waxy chert.

Method of Manufacture: Probably from a long ovate or triangular blank.

Probable Use: A knife, dart or spear point.

Cultural Affiliation: Early Archaic.

VII WHITE RIVER ARCHAIC (Fig. 15, S2, and S3; and Figure 23).

Form: Side notched. Symmetrical blade with excurve blade edges.

Flaking: Blade - edges evened and occasionally finely serrated with secondary finish flaking. Biconvex lateral cross-section. One specimen from Table Rock Reservoir is beveled.

Shoulders - slight to pronounced but never barbed.

Notches - usually semi-circular and $3/4$ as deep as wide.

Stem - flaring toward the base and finished by secondary finish flaking or as a result of the notching process.

Base - convex and thinned from both sides of the base by three to six flakes. Corners are usually square to rounded.

Dimensional Range: Total length ranges from 30 to 70 mm.

Length of stem (measured from the center of the notch)
ranges from 11 to 20 mm.

Width at shoulders ranges from 15 to 35 mm.

Width at base ranges from 15 to 35 mm.

Thickness ranges from 6 to 11 mm.

Smoothing: From shoulder around the notch and across the base.

Frequently from the lower edge of the notch to the corner
of the base and then across the base.

Material: White to gray and tan to dark blue waxy chert.

Method of Manufacture: Probably from a triangular or ovate
blank.

Probable Use: A dart or spear point or a knife.

Cultural Affiliation: Early through Middle Archaic.

VIII RICE CORNER-NOTCHED, Tentative (Fig. 13, K15 and K16; and
Figure 22).

Form: Corner-notched. Symmetrical blade shape with excurve
blade edges. Often reworked into a triangular shape
with straight edges.

Flaking: Blade - edges occasionally evened with considerable
secondary flaking, often leaving blade edges slightly
serrated and occasionally slightly beveled.

Shoulders - pronounced and almost always slightly
barbed.

Barbs - small to slight, usually rounded to pointed
at tips.

Notches - moderate with 4-6 flake scars from both sides of the stem.

Stem - edges evened with secondary finish flaking, widely flaring.

Base - edges evened with secondary finish flaking and thinned by 3 to 8 flakes from both sides which produces a straight to slightly convex base. Corners are rounded and finished with secondary flaking.

Dimensional Range: Total length ranges from 40 to 75 mm.

Length of stem ranges from 9 to 12 mm.

Width of base ranges from 27 to 37 mm.

Greatest width of blade (at shoulders or tips of barbs) ranges from 27 to 48 mm.

Thickness ranges from 6 to 10 mm.

Smoothing: Stem and base edges are rarely smoothed.

Material: Tan to dark gray waxy chert, and quartzite.

Method of Manufacture: From an ovate or triangular blank.

Probable Use: A spearpoint or a knife.

Cultural Affiliation: Early and Late Archaic.

IX DALTON SERRATED (Fig. 15, S7; and Figure 23).

Form: Side-notched. Symmetrical blade with excurve to straight blade edges.

Flaking: Blade - edges coarsely serrated and beveled.

Beveled lateral cross-section.

Shoulders - entirely lacking to slightly discernible.

Notches - slight and up to six times as wide as deep.

Stem - flaring toward the base slightly and finished by secondary flaking or as a result of the notching process.

Base - usually very convex and thinned by excellent removal of long narrow flakes from the base. Corners are usually pointed to rounded and slightly flaring.

Dimensional Range: Total length ranges from 45 to 78 mm.

Length of stem ranges from 13 to 20 mm.

Width at shoulders ranges from 20 to 24 mm.

Width at base ranges from 19 to 24 mm.

Thickness ranges from 6 to 8 mm.

Smoothing: From shoulder around the stem and across the base.

Material: White to tan waxy chert and quartzite.

Method of Manufacture: Probably from a long ovoid or triangular blank.

Probable Use: A knife, dart or spear point.

Cultural Affiliation: Early Archaic.

THE LAMPE SERIES PROJECTILE POINT TYPES

I TABLE ROCK STEMMED, (Fig. 13, K19; and Figure 26).

Form: Corner-notched. Symmetrical blade shape with excursive blade edges.

Flaking: Blade - edges even and finished with secondary flaking. Biconvex lateral cross-section. Often reworked.

Shoulders - slight to pronounced and usually rounded.

Notches - formed by 4 to 7 flakes from both sides of the stem.

Stem - edges evened with secondary finish flaking or produced by the notching process.

Base - convex to slightly concave, the latter rare.

Base thinned by one to four flakes from one or both sides. Bases usually not very thin. Corners are rounded to square.

Dimensional Range: Total length ranges from 30 to 77 mm.

Length of stem ranges from 16 to 23 mm.

Greatest width (at the shoulders or slightly above) ranges from 20 to 34 mm.

Width of the base ranges from 12 to 18 mm.

Thickness ranges from 5 to 11 mm.

Smoothing: Stem sides around and across base almost always deliberately smoothed.

Material: White to light gray and dark blue waxy chert.

Method of Manufacture: Probably from an ovate blank.

Probable Use: A dart point.

Cultural Affiliation: Middle to Late Archaic.

II BARRY SQUARE STEMMED, Tentative (Fig. 16, B4, B5, B6, Fig. 17, B7 and B8; and Figure 24).

Form: Square stemmed. Symmetrical blade shape with straight or excurvate to incurvate-excurvate or excurvate-

incurvate blade edges.

Flaking: Blade - edges always evened with fine secondary finish

flaking. Blade has a biconvex to flattened-biconvex

lateral cross-section. Blade frequently reworked.

Shoulders - occasionally moderate but usually pronounced and often barbed.

Barbs - generally small to moderate but frequently long and occasionally as long as the stem. Tips of barbs usually rounded.

Notches - form the stem and usually extend into the blade from the base parallel to the long axis. Each notch is characterized by a single large concoidal flake scar at the apex on both sides.

Stem - edges evened with fine secondary finish flaking or by the notching process. Stem may be slightly flaring or contracting but norm is parallel sided.

Base - edges evened with secondary finish and thinned by one to five long flakes removed usually from one side of the base. Corners of base are normally square. Base is usually slightly concave to straight.

Dimensional Range: Total length ranges from 50 to 123 mm.

Length of the stem ranges from 17 to 24 mm.

Width of the blade ranges from 25 to 65 mm.

Width of base ranges from 16 to 26 mm.

Thickness ranges from 8 to 14 mm.

Smoothing: None usually but occasionally some around the base and in the notches. Rare smoothing along the blade edge.

Material: White to dark blue waxy-lustered chert, tan low-reflective chert, and quartzite.

Method of Manufacture: From a triangular or ovate blank, notched from the base.

Probable Use: A knife or spear point.

Cultural Affiliations: Middle to Late Archaic.

III STANDLEE CONTRACTING STEMMED, Tentative (Fig. 18, C4, C5, C6, Fig. 19, C7; and Figure 24).

Form: Contracting Stemmed. Symmetrical blade shape with straight to excurve blade edges.

Flaring: Blade - edges evened with secondary finish flaking. Rarely ever finished with primary flaking though there is often little secondary finish flaking. Biconvex to plano-convex lateral cross-section.

Shoulders - slight to pronounced but never barbed.

Stem - edges evened with secondary finish flaking.

Contracting toward the base in a smooth curve or indented toward the long axis of the point and then turns sharply toward the base and contracts in a straight line.

Base - straight to slightly concave. Base usually thinned by one to three flakes removed from the base parallel to long axis of the point.

Dimensional Range: Total length ranges from 43 to 85 mm.

Length of the stem ranges from 20 to 29 mm.

Greatest width of blade (at shoulders) ranges from 23 to 40 mm.

Thickness ranges from 5 to 12 mm.

Smoothing: Usually none but occasional smoothing along the edges of the stem and across the base.

Material: White to light gray and dark blue waxy chert and some light tan low-reflective chert.

Method of Manufacture: From a long ovate or triangular blank.

Probable Use: A dart or spear point but possibly used as a knife.

Cultural Affiliation: Starts in later phase of Early Archaic and continues through Woodland period and into the Marginal Mississippi period.

IV WHITE RIVER CORNER-NOTCHED, Tentative (Fig. 11, K3 and K4; and Figure 25).

Form: Corner-notched. Symmetrical blade shape with excurve blade edges. Often reworked into a triangular shape with straight edges.

Flaking: Blade - edges evened and occasionally slightly serrated with secondary finish flaking. Biconvex lateral cross-section.

Shoulders - pronounced and usually barbed.

Barbs - generally small to moderately long and usually

round to pointed.

Notches - form the stem and usually are in the blade near the corners of the blank at approximately 30° to 45°. Usually large and frequently circular on barbed specimens.

Stem - edges evened with secondary finish flaking or by the notching process. Stem may be parallel sided to slightly flaring near the base.

Base - edges evened with secondary finish flaking and thinned by short pressure flakes placed at random, to careful, long narrow percussion flakes from the base. Corners are usually square to slightly pointed but do occur rounded. Base usually slightly convex but often straight.

Dimensional Range: Total length ranges from 21 to 66 mm.

Length of stem ranges from 8 to 13 mm.

Greatest width (at shoulders or tips of barbs) ranges from 15 to 33 mm.

Base width ranges from 13 to 20 mm.

Thickness ranges from 5 to 9 mm.

Smoothing: None except occasionally across the base of the reworked specimens.

Material: Usually a gray to dark blue waxy chert ranging to a white or light tan.

Method of Manufacture: Probably from an ovate blank.

Probable Use: Probably a dart point but may have been used as a knife. Smaller specimens could have been arrow-points.

Cultural Affiliation: Starts in later phase of Early Archaic and continues through Woodland period and into the Marginal Mississippi period.

V STONE CORNER-NOTCHED, Tentative (Fig. 11, K5 and K6; Fig. 12, K12 and K13; and Figure 25).

Form: Corner-notched. Symmetrical blade shape with excurve blade edges. Often reworked into a triangular shape with straight edges.

Flaking: Blade - edges occasionally roughly evened with little or no secondary flaking, to carefully evened edges. Much secondary finish flaking on reworked specimens. Shoulders - pronounced and almost always barbed. Barbs - generally small to moderately long but occasionally very long and at times as long as the stem. Notches - form the stem and usually are in the blade near the corners of the blank at approximately 30° to 45° . Each notch is characterized by one to several concoidal flake scars at the apex on both sides. Stem - edges evened with secondary finish flaking or by the notching process. Stem may be parallel sided to generally flaring.

Base - edges evened with secondary finish and thinned by three to six long narrow flake scars from one or both sides of the base. Corners of base are normally square to pointed. Base usually slightly convex but often straight.

Dimensional Range: Total length ranges from 46 mm. on reworked specimens to 78 mm.

Length of stem ranges from 10 to 14 mm.

Width of blade (at shoulders or tips of barbs) ranges from 21 to 41 mm.

Width of the stem ranges from 16 to 26 mm.

Thickness ranges from 6 to 9 mm.

Smoothing: None usually but occasionally some around the base and in the notches.

Material: White to dark blue waxy-lustered chert, tan and gray low reflective chert.

Method of Manufacture: From a triangular or ovate blank.

Probable Use: A spear or dart point but possibly a knife.

Cultural Affiliations: Starts in later phase of Early Archaic and continues through Woodland period.

VI LANDER CONTRACTING STEMMED, Tentative (Fig. 18, C2 and C3; and Figure 26).

Form: Contracting Stemmed. Symmetrical blade shape with straight to excurvate blade edges.

Flaking: Blade - edges evened with secondary finish flaking with a plano-convex or more commonly biconvex cross-section.

Shoulders - slight to pronounced but never barbed.

Stem - edges evened with secondary finish. Contracting from shoulders to base.

Base - rounded to very convex and with secondary finish flaking. Base carefully finished by removal of one to four flakes from one or both sides of the base.

Dimensional Range: Total length ranges from 47 to 80 mm.

Length of the stem ranges from 16 to 23 mm.

Greatest width of blade (at shoulders) ranges from 27 to 40 mm.

Thickness ranges from 5 to 9 mm.

Smoothing: Often along both stem edges and around the base.

Material: White to dark blue waxy chert.

Method of Manufacture: From a long ovate or triangular blank.

Probable Use: A dart or spear point but possibly used as a knife.

Cultural Affiliation: Starts in early part of Late Archaic and continues through the Woodland into the Mississippian.

VI - KINGS CORNER-NOTCHED, Tentative (Fig. 11, K1 and K2; and Figure 26).

Form: Corner-notched. Symmetrical blade shape with excurve

blade edges. Often reworked into a short stubby triangular shape with straight edges.

Flaking: Blade - edges even, to slightly serrated, with secondary finish flaking. Biconvex to flattened biconvex lateral cross-section.

Shoulders - slight on reworked specimens to pronounced and often barbed.

Barbs - small to medium and occasionally long and rounded or more commonly pointed.

Stem - edges evened with secondary finish flaking.

Base - edges evened with secondary finish flaking and thinned by two to five long flakes from one or both sides.

Corners pointed to slightly rounded. Base straight to slightly concave.

Dimensional Range: Total length ranges from 22 mm. on reworked specimens to 66 mm.

Length of the stem ranges from 12 to 19 mm.

Width of the blade (at shoulders or tips of the barbs) ranges from 15 mm. on reworked specimens to 33 mm.

Width of the base ranges from 15 to 21 mm.

Thickness ranges from 5 to 9 mm.

Smoothing: None except occasional wear in notches and sides of stem and on base.

Material: White to light gray waxy chert mostly but some light tan dull non-reflective chert.

Method of Manufacture: Probably from a triangular or ovate blank.

Probable Use: An arrow or dart point.

Cultural Affiliations: Middle to Late Archaic and through the Woodland period and perhaps into Marginal Mississippi period.

THE SHELL KNOB SERIES PROJECTILE POINT TYPES

I TABLE ROCK POINTED STEMMED (Fig. 18, C1 and C3; and Figure 28).

Form: Contracting stemmed. Symmetrical blade shape with straight or excurvate to incurvate-excurvate blade edges.

Flaking: Blade - edges even, with secondary finish flaking,

with biconvex to plano-convex lateral cross-section.

Shoulders - slight to pronounced but never barbed.

Stem - edges even, with secondary finish flaking, and contracting toward the base.

Base - pointed to slightly rounded, with secondary finish flaking, and often has a cross-section which is nearly round.

Dimensional Range: Total length ranges from 43 to 75 mm.

Length of stem ranges from 17 to 23 mm.

Greatest width of blade (at shoulders) ranges from 19 to 26 mm.

Thickness ranges from 5 to 9 mm.

Smoothing: Usually none but occasional smoothing, probably from wear, along the edges of the stem.

Material: White to light gray and dark blue waxy chert and some light tan low-reflective chert.

Method of Manufacture: From a long ovate or triangular blank.

Probable Use: A dart or arrowpoint but possibly used as a knife.

Cultural Affiliation: Later part of Late Archaic, Woodland, and Marginal Mississippi.

II RICE SIDE NOTCHED (Fig. 15, S9 and S10; and Figure 27).

Form: Side-notched. Symmetrical to asymmetrical blade with excurvate to straight blade edges.

Flaking: Blade - frequently roughly flaked with only primary finish flaking, but usually evened with secondary finish flaking. Blade has a biconvex, plano-convex, or flattened biconvex lateral cross-section.

Shoulders - Usually slight to moderate but occasionally pronounced. Frequently wider at the shoulders than at the base. Shoulders never barbed.

Notching - commonly 8 to 12 times as wide as deep.

Flaking from both sides of the edge by secondary finish flaking on specimens having very shallow notch.

Moderately notched specimens tend to be alternately beveled about 75% of the time.

Stem - Flaring to parallel sided. Notching forms the stem.

Base - straight to concave. Base thinned usually from

one side by three to six flakes running parallel to the long axis of the point.

Dimensional Range: Total length ranges from 33 to 75 mm.

Length of stem ranges from 20 to 34 mm.

Width at the shoulders, ranges from 21 to 41 mm.

Width at the base ranges from 21 to 37 mm.

Thickness ranges from 6 to 12 mm.

Smoothing: Frequent smoothing along the stem sides and across the base. Occasionally smoothing along one or both edges of the blade.

Material: White to dark blue waxy lustered chert.

Method of Manufacture: From a triangular or ovate blank.

Probable Use: A spear point but more likely a knife.

Cultural Affiliation: Later part of Late Archaic, Woodland, and Marginal Mississippi.

III LANDER CORNER-NOTCHED, Tentative (Fig. 13, K17 and K18; and Figure 27).

Form: Corner-notched. Symmetrical blade shape with excurve blade edges. Often reworked into a triangular shaped blade. Bi-convex lateral cross-section.

Flaking: Blade - edges evened and occasionally slightly serrated with secondary finish flaking. Blade often reworked. Shoulders - pronounced and usually barbed. Barbs - generally moderate to large, and usually somewhat rounded.

Notches - form the stem and usually are in the blade at or near the corners of the blank at approximately a 45° angle. Usually large and frequently circular.

Stem - edges evened with secondary finish flaking or by the notching process. Stem widely flaring, usually in a curve.

Base - edges evened with secondary finish flaking and thinned by short pressure flakes placed at random.

Corners are usually square to pointed but do occur with a rounded outline. Base ranges from usually convex to straight.

Dimensional Range: Total length ranges from 30 to 77 mm.

Length of stem ranges from 10 to 20 mm.

Greatest width (measured at shoulders or tips of barbs) ranges from 20 to 39 mm.

Base width ranges from 13 to 30 mm.

Thickness ranges from 5 to 11 mm.

Smoothing: None except occasional wear in notches and along stem sides.

Material: White to dark gray waxy chert and some quartzite.

Method of Manufacture: Probably from an ovate blank.

Probable Use: A dart point but may have been used as a knife.

Cultural Affiliations: Appears to start in later part of Late Archaic and continues into the Mississippian.

IV LANDER CONTRACTING STEMMED (See Lampe Series).

- V STANDLEE CONTRACTING STEMMED (See Lampe Series).
- VI STONE CORNER-NOTCHED (See Lampe Series).
- VII WHITE RIVER CORNER-NOTCHED (See Lampe Series).
- VIII KINGS CORNER-NOTCHED (See Lampe Series).
- IX RICE CORNER-NOTCHED (See Viola Series).

THE GOLDEN SERIES PROJECTILE POINT TYPES

- I WHITE RIVER TRIANGULAR (Fig. 14, N4; and Figure 28).

Form: Unnotched. Symmetrical triangular blade shape with straight to excurve blade edges.

Flaking: Blade - edges evened to slightly serrated by secondary finish flaking. Blade often shows surface of original flake from which it was made. Flaking ranges from biconvex to plano-convex.

Base - ranges from slightly concave to slightly convex.

Corners rounded to slightly pointed or squared.

Dimensional Range: Total length ranges from 18 to 40 mm.

Width of point (at base) ranges from 10 to 21 mm.

Thickness ranges from 2 to 5 mm.

Smoothing: None

Material: White to light gray and blue waxy lustered chert and occasionally a white to light gray dull finished chert.

Method of Manufacture: From flakes frequently only trimmed around the edges, but often carefully finished with flaking across both sides of the blade.

Probable Use: An arrowpoint.

Cultural Affiliations: Marginal Mississippi.

II JAKES NOTCHED (Fig. 14, S11 and S12; and Figure 28).

Form: Side-notched. Symmetrical blade shape with excurve edges.

Flaking: Blade - edges evened to slightly serrated by secondary finish flaking. Blade often shows surface of original flake from which it was made. Flaking generally good to excellent.

Shoulders - pronounced, never barbed.

Stem - widely flaring. Produced by the notching process.

Notches - small to large. Usually made by the removal of several small flakes from either side of the blade.

Base - slightly concave to very concave and sometimes notched.

Dimensional Range: Total length ranges from 15 to 35 mm.

Width of point at shoulders ranges from 9 to 14 mm.

Width of base ranges from 10 to 16 mm.

Thickness ranges from 2 to 6 mm.

Smoothing: None.

Material: Usually a white to light gray waxy lustered chert, and occasionally a white to light gray dull lustered chert.

Method of Manufacture. From small flakes usually trimmed around the edges and often carefully finished with

flaking across both sides of the blade.

Probable Use: An arrowpoint.

Cultural Affiliations: Marginal Mississippi.

III WHITE RIVER ELLIPTICAL (Fig. 14, N5; and Figure 28).

Form: Unnotched. Symmetrical blade shape with excurve blade edges.

Flaking: Blade - edges evened to slightly serrated by secondary finish flaking. Blade often shows surface of original flake scars from which it was made. Flaking ranges from excellent to very crude.

Shoulders - lacking.

Stem and base - frequently indistinguishable from the tip though base is more often somewhat rounded rather than pointed.

Dimensional Range: Total length ranges from 22 to 46 mm.

Width of point (taken near the center of the blade at the widest point) ranges from 7 to 16 mm.

Thickness ranges from 2 to 6 mm.

Smoothing: None.

Material: White to light gray and blue waxy lustered chert.

Method of Manufacture: From small flakes usually trimmed around the edges and often carefully finished with flaking across both sides of the blade.

Probable Use: An arrowpoint.

Cultural Affiliation: Marginal Mississippi.

IV CRISP OVATE (Fig. 14, N6; and Figure 28).

Form: Un~~notched~~ched. Roughly symmetrical ovate blade shape with excurve blade edges.

Flaking: Blade - edges roughly evened but not serrated (by secondary finish flaking). Blade does not often show surface of original flake scar. Flaking ranges from good to very crude. Generally a biconvex to plano-convex lateral cross-section.

Shoulders - lacking.

Stem - lacking as the edges of the blade join the base in an even curve.

Base - usually rounded to occasionally convex, never straight.

Dimensional Range: Total length ranges from 35 to 59 mm.

Width (near the base) ranges from 14 to 23 mm.

Thickness ranges from 4 to 10 mm.

Smoothing: None.

Material: White to light gray and blue waxy lustered chert.

Method of Manufacture: Probably from large flakes trimmed around, but frequently made from a core.

Probable Use: An arrow or dart point but possibly a knife.

Cultural Affiliation: Late Woodland and Marginal Mississippi.

V TABLE ROCK CORNER-NOTCHED (Fig. 14, K22 and Figure 28).

Form: Corner-notched. Symmetrical blade shape with excurve to straight blade edges.

Flaking: Blade - edges evened and often carefully serrated by secondary finish flaking. Blade often has a plano-convex to biconvex lateral cross-section.

Shoulders - pronounced and almost always barbed.

Barbs - slight though occasional specimens have barbs almost as long as the stem.

Notches - moderate to deep with two to four flakes from both sides of the blade and stem.

Stem - edges evened with secondary finish. Flaring and usually rather thick in relation to width.

Base - edges sometimes evened with secondary finish, but rarely thinned as the point is small and thin in the first place.

Dimensional Range: Total length ranges from 17 to 32 mm.

Length of stem ranges from 5 to 10 mm.

Greatest width ranges from 9 to 17 mm. (at shoulders or the tips of the barbs).

Width of base ranges from 4 to 8 mm.

Thickness ranges from 2 to 5 mm.

Smoothing: None.

Material: White to dark blue waxy lustered chert.

Method of Manufacture: Usually from flakes trimmed around the edges but often carefully finished with flake scars

running across both sides of the blade.

Probable Use: An arrowpoint.

Cultural Affiliation: Woodland and Marginal Mississippi.

- VI RICE SIDE NOTCHED (See Shell Knob Series)
- VII TABLE ROCK POINTED STEMMED (See Shell Knob Series)
- VIII WHITE RIVER CORNER-NOTCHED
- IX STANDLEE CONTRACTING STEMMED

THE VIOLA SERIES PROJECTILE POINT TYPES AND CATEGORIES

139

THE SHELL KNOB SERIES PROJECTILE POINT TYPES AND CATEGORIES

[illegible]

TABLE V

THE GOLDEN SERIES PROJECTILE POINT TYPES AND CATEGORIES

Point Type	Component Sites and Number of Specimens												Associated Category
	23	23	23	23	23	23	23	23	23	23	23	23	
	TA	BY	BY	BY	BY	BY	BY	BY	BY	BY	BY	TA	
	215	389	388	386	385	384	383	380	364	324	8	334	
	284	275	245	211	204	203	201	200	189	99			
White River Triangular	12	88	1	8	2	2	21	4	2	4			N4
Jakie Notched	2	18	5		10	2			1	1	1	21	S11 S12
White River Elliptical	12	60	4		12	2		4	2			28	N5
Crisp Ovate		43				1	2		2			7	N6
Rice Side-Notched		27	3		7	1			2	1		26	S9 S10
Table Rock Corner-notched		78	4		14	3			6			65	K22
Table Rock Pointed Stemmed		21	4		18	1			4			25	C1 C3

TABLE VI

DISTRIBUTION OF THE NUMBER OF PROJECTILE POINT CATEGORY SPECIMENS ON SEVENTY-EIGHT SITES IN TABLE ROCK RESERVOIR

[illegible]

TABLE VI (Continued)

	TABLE ROCK SURFACE SITES:																				TANEY CO.																
	STONE COUNTY:										BARRY CO.																										
	270	271	272	288	297	313	314	320	326	369	506	513	535	561	562	563	564	162	164	161	169	183	206	212A	212B	213	216	340	356	359	200	201	202A	202B	204-207	215	
C10						1	2	1					1					1	1	1				2		2					2	3	4		2		
C9	1									1								1		1												1					
C8		5				1				1	1		2					2	1	3		1											8	2		1	
C7		2				1	1			1	1	2	3			2		2	1	5					1								1	2	2		
C6	1	1	4															1														1	2	2			
C5		2								7	1		1																				1	1			
C4		3	3	1	2	3	1	2		14	4	1	6	3				5	3	2	1	4	1									9	6	1			
C3		2	1		2	2				3		1						2	2	2	6	1	1									3	1				
C2		1								10		2	2						6		2	1										1					
C1		1	1		3	2				10		4						2	2	6	1	12								1	2						
B9		7			2	1	2	1	4			1	1	1				7	1					1	2	2	1	1	1	2		2	3	1	2		
B8		1				2				2			1	1																							
B7						1				1																											
B6	1	7	4			3	3	1	7			2	5	3				5	2	3		3	1	1	1	2	3	2				2	1	2	1		
B5	2	5	2	5	1	4	2	1	2	3	4	2	2	9	9	1	3	7	8	3		3	1	5	2	1	2	1	2			2	7	3	4	3	
B4	1	9	2	3	1	1				9			2	3	2			1	1	1		1											5	4	3		
B3										7								2	1															1	2	1	
B2		1								2																											
B1	1	3	1							5								1																		1	
S12																																					
S11	1									1																											
S10		2	1				2	2		7	2	1	1	2																							
S9			3			3	5			5	2		3																								
S8																																					
S7										2																											
S6																																					
S5																																					
S4										1																											
S3		7	3							5	3	1						1	2		6	9											4	1	2	2	
S2		2	1							6			2					3	3		7	1	1	1									3	4	1	6	
S1										2																									3	1	1
N6										5		2									2																
N5	1									3											1																
N4										4			1								2	1															
N3																																					
N2										3																											
N1										1																											
K23						1	1	2		10		1						1	1	1					1	2						2	1	1	1		
K22	1						1			5	1	1	3	2																							
K21			1	3						3		2																									
K20																																					
K19		2				2	2			11	3	1	12	2				7	5		4	1					2	2					2	5	1	1	
K18		2	1							1	1		5					1	1	2		2						1	1				1	3			
K17	1	1	4							1	9	1	3	1				1	2		1												5	2	1		
K16			3							3	4	3	1					7	6		2	1											1	1	2	1	
K15			2							19		2						1	3	3		1	1	1									1	3	1		
K14																																					
K13	2	3	6	3	4	1	2	1	6	6	7	3	10	2	7	12	4	3	2	15	4	4				1	1	1			1	1	2	7	8	8	7
K12	2	7	4	4	3	1				1	6	1	4	7	7	4	8	15	1	3	2	1	1	6	4	7	1	3	2	1		2	1	8	1	3	3
K11			2							3																											
K10										6																											
K9										6		1	1	1	1	1		1																			
K8	1	1	1							2								1	4		1					1	1							5	1	2	
K7		1									3	3		2	1	1	3		6															6	1	2	
K6	1	5	6	1						10	1	4	6					4	5	17		2	1	6	7								1	8	3	8	4
K5			5							6	2	4	5					3	3	9	1	2	9	3	2									2	4	3	2
K4	2	20	4	1	6	1	2	2	3	1	7	2	2	5	2	4	3	4	20	4	20	7	7	5	9	1	3	2	7	4	5	3	5	2	6	5	7
K3	1					1	3			50	1	3	60	1	2	3	2																	2	2	1	1
K2	1	3	1	2						2	2	1	3	1		5	1	2	3	1	3				1	2	2							1	1	2	3
K1	1	2	2	1	1					1	5	1	1	1	1	4	2	6	1	2	3	2			1	5	1	1	3			4	4	3	1	1	

TABLE VII

COMPONENTS OF CULTURAL COMPLEXES INDICATED BY THE DISTRIBUTION OF TABLE ROCK RESERVOIR SURFACE CATEGORIES ASSOCIATED WITH NAMED PROJECTILE POINT TYPES

Projectile Point Type	Surface Category	Sites (Stone County)									
		42	48	79	92	93	97	113	117	120	122
White River Triangular	N4	3									
Jakie Notched	S11 & S12	4									
White River Elliptical	N5										
Crisp Ovate	N6	1									
Table Rock Corner-notched	K22	1		1		1					
Table Rock Pointed Stemmed	C1 & C3	5	1	1		1				2	
Rice Side-notched	S9 & S10	14	6	3	2	9		1		8	
Lander Corner-notched	K17 & K18	7	1	1	1	1		1	1	3	
Lander Contracting Stemmed	C2	1			1	1			1		2
Kings Corner-notched	K1 & K2	20	1	4	2	7	1	3	14	3	2
Stone Corner-notched	K5, 6, 12, 13	7	4	1	1	3	2	7	33	28	4
White River Corner-notched	K3 & K4	17	3	6	4	5	3	12	17	8	3
Standlee Contracting Stemmed	C4, 5, 6, 7	5	6		4	1	3		2	11	3
Barry Square Stemmed	B4, 5, 6, 7, 8	7	1	1		1	11	4	5	9	18
Table Rock Stemmed	K19	2			1		5		1	5	
Rice Corner-notched	K15 & K16					1		3		4	1
White River Archaic	S2 & S3		1					1	2	1	1
Stone Square Stemmed	B3										
Rice Beveled-notch	S4 & S5										
Rice Contracting Stemmed	C9						1				
Jakie Stemmed	K11							1	1		
Rice Lanceolate	N2										1
Rice Lobed	K10								1		
Dalton Serrated	S7						1				

TABLE VII (Continued)

Projectile Point Type	Sites (Stone County)											
	137	141	144	147	150	153	155	157	159	160	161	162
White River Triangular				1	1					4		
Jakie Notched										1		
White River Elliptical		1	1				1			1		
Crisp Ovate										2		
Table Rock Corner-notched	3					2				2		
Table Rock Pointed Stemmed				1		5		1		4		1
Rice Side-notched		1	6	3	7	15	2	4	1	26	1	2
Lander Corner-notched	1				1	1	3	1				
Lander Contracting Stemmed	1					1						1
Kings Corner-notched	2	3	4		6	10	4	9	2	11		3
Stone Corner-notched	4	2		8	3	6	14	13	2	1	16	4
White River Corner-notched	2	5	2	4	4	6	13	2	1	22	7	6
Standlee Contracting Stemmed	5	4	4		11	14	5	3	4	2	4	3
Barry Square Stemmed	1	4		1	2	4	8	10	1	4	4	
Table Rock Stemmed	2	2			1	1		1			2	1
Rice Corner-notched	1										1	
White River Archaic	2	1				2	3					
Stone Square Stemmed		1	1						1		1	
Rice Beveled-notch												
Rice Contracting Stemmed												
Jakie Stemmed					1		1				1	
Rice Lanceolate												
Rice Lobed											1	
Dalton Serrated												

TABLE VII (Continued)

Projectile Point Type	Sites (Stone County)											
	165	167	177	185	198	203	205	207	210	218	226	227
White River Triangular												
Jakie Notched												
White River Elliptical					1		1					
Crisp Ovate												
Table Rock Corner-notched							3					
Table Rock Pointed Stemmed		4	1		1		9		3			
Rice Side-notched	1	7	3	1	2	11	49	6		1		2
Lander Corner-notched		10	3	1	7		4				3	2
Lander Contracting Stemmed	1	3	1			3						
Kings Corner-notched	9	43		6	9	2	6	10	5	2	1	3
Stone Corner-notched	13	80	22	5	11		5	9	3	2	46	31
White River Corner-notched	7	28	8	2	7	2	8	15		2	7	9
Standlee Contracting Stemmed	6	23	6	5		3	3	4		2	5	1
Barry Square Stemmed	14	27	2	6	1	2	5	11	11	3	5	11
Table Rock Stemmed	1	10		2	2	1	5	2	1			1
Rice Corner-notched	4	10	4					1	1		7	4
White River Archaic	3	7	1	3			1	4	3	2	7	5
Stone Square Stemmed		1							1	6		
Rice Beveled-notch								1			1	
Rice Contracting Stemmed		4										
Jakie Stemmed		3						2			6	3
Rice Lanceolate		4		1	1					1		
Rice Lobed		1								1		
Dalton Serrated											1	

TABLE VII (Continued)

Projectile Point Type	Sites (Stone County)										
	228	234	237	247	255	269	270	271	272	289	297 313
White River Triangular						3				1	
Jakie Notched						8	1			2	
White River Elliptical		1				2	1				
Crisp Ovate						1					
Table Rock Corner-notched						25	1			1	
Table Rock Pointed Stemmed			1		1	1			3	2	5
Rice Sided-notched					2	1			2	4	5
Lander Corner-notched	1	1				6			3	5	
Lander Contracting Stemmed						1			1		
Kings Corner-notched	4	2	1		3	27		2	5	3	3
Stone Corner-notched	3	12		9	1	9	1	5	21	20	6
White River Corner-notched	3	7	8		2	21	3		20	5	9
Standlee Contracting Stemmed	1	1				24		1	9	7	2
Barry Square Stemmed	5	19	2	2	5	3	4	5	43	11	1
Table Rock Stemmed	2		3			1			2		
Rice Corner-notched	1	2		1						5	
White River Archaic		3	1		1			9	4		
Stone Square Stemmed		1				1				1	
Rice Beveled-notch											
Rice Contracting Stemmed								1			
Jakie Stemmed		2								2	
Rice Lanceolate		1									
Rice Lobed			1								
Dalton Serrated		1									

TABLE VII (Continued)

Projectile Point Type	Sites (Stone County)										
	314	320	336	353	368	506	513	535	561	562	563 564
White River Triangular					4				1		
Jakie Notched					1						
White River Elliptical					3						
Crisp Ovate					5				2		
Table Rock Corner-notched	1	1			5	1		1	3	2	
Table Rock Pointed Stemmed	4				13			1	4		1
Rice Side-notched	7				12	4	1	1	5		
Lander Corner-notched		1		2	9	1	2	3	5		
Lander Contracting Stemmed					10			2	2		
Kings Corner-notched	1		1	3	49	3	2		50	1	7
Stone Corner-notched	1	5	1	1	477	10	15	21	128		6 22
White River Corner-notched	1	3	2	3	181	7	3	28	132	4	4 6
Standlee Contracting Stemmed	4	4	2	42	6	1	11	9			3
Barry Square Stemmed	11	5	2	3	53	2		6	18	16	1 3
Table Rock Stemmed	2	2			11	3	1		17		2
Rice Contracting Stemmed				3	64			5		1	1
White River Archaic					11	3	1		2		1
Stone Square Stemmed					7						
Rice Beveled-notch			1		1						
Rice Contracting Stemmed					1						1
Jakie Stemmed					3						
Rice Lanceolate					3						
Rice Lobed					6						1
Dalton Serrated					2						

TABLE VII (Continued)

Projectile Point Type	Sites (Barry County)					193	206	212A	212B	213	216	340
	162	164	181	188	189							
White River Triangular					2	1						
Jakie Notched					5							
White River Elliptical					1							
Crisp Ovate						2						
Table Rock Corner-notched					11	5						
Table Rock Pointed Stemmed	4	2	8		3	18		1	1			
Rice Side-notched			1			7						
Lander Corner-notched	2	1	4			2					1	
Lander Contracting Stemmed			6			2	1					
Kings Corner-notched	7		3	5	4	3	2	1	2	7	1	2
Stone Corner-notched	36	1	124	5	3	61	18	14	1		6	2
White River Corner-notched	23	6	29	7	7	7	9	2	3	2	8	4
Standlee Contracting Stemmed	5	4	10		2	11	3		1			
Barry Square Stemmed	13	2	10	4	1	6	3	1	6	4	5	5
Table Rock Stemmed	7		5				4					1
Rice Corner-notched	10		9			3	2	1				1
White River Archaic	4		5			13	10		1		3	
Stone Square Stemmed	2		1									
Rice Beveled-notch							1					
Rice Contracting Stemmed	1				1	1			1			
Jakie Stemmed	1	1	3	1								1
Rice Lanceolate												
Rice Lobed						2						
Dalton Serrated												

TABLE VII (Continued)

Projectile Point Type	Sites (356 and 359 are Barry County, remainder are Taney County)							
	356	359	200	201	202A	202B	206-207	215
White River Triangular								
Jakie Notched								
White River Elliptical								
Crisp Ovate								
Table Rock Corner-notched	1							
Table Rock Pointed Stemmed	2	2		3		1		
Rice Side-notched		1		1				
Lander Corner-notched	1			6	5			
Lander Contracting Stemmed	1			1				
Kings Corner-notched	1	3	1	5	2	5	1	4
Stone Corner-notched	4	1	4	35	32	32	17	16
White River Corner-notched	5	5	5	27	4	7	6	7
Standlee Contracting Stemmed	2	2		3		1		
Barry Square Stemmed	1	2	2	14	8	9	4	1
Table Rock Stemmed				2	1	4	3	
Rice Corner-notched				2	4	3	2	
White River Archaic		2		7	5	3	8	
Stone Square Stemmed						1	2	1
Rice Beveled-notch					1			
Rice Contracting Stemmed				1				
Jakie Stemmed				2	1	4	3	
Rice Lanceolate								
Rice Lobed						1		
Dalton Serrated				1			1	

2

TABLE IX

PROJECTILE POINT TYPES OF ESTABLISHED CULTURAL COMPLEXES OF TABLE ROCK RESERVOIR SHOWING A POSSIBLE RANGE OF POPULARITY

Projectile Point Types	Early N.	Late N.	Early C.	Late C.
White River Triangular			-----	*****
Jakie Notched			-----	*****
White River Elliptical			-----	*****
Crisp Ovate			-----	*****
Table Rock Corner-notched			-----	*****
Table Rock Pointed Stemmed		-----	*****	*****
Rice Side-notched		-----	*****	*****
Lander Corner-notched		-----	*****	-----
Lander Contracting Stemmed		-----	*****	-----
Kings Corner-notched		-----	*****	-----
Stone Corner-notched	-----	*****	*****	-----
White River Corner-notched	-----	*****	*****	-----
Standlee Contracting Stemmed	-----	*****	*****	-----
Barry Square Stemmed	-----	*****	-----	-----
Table Rock Stemmed	-----	*****	-----	-----
Rice Corner-notched	*****	*****	-----	-----
White River Archaic	*****	-----	-----	-----
Stone Square Stemmed	*****	-----	-----	-----
Rice Beveled-notch	*****	-----	-----	-----
Rice Contracting Stemmed	*****	-----	-----	-----
Jakie Stemmed	*****	-----	-----	-----
Rice Lanceolate	*****	-----	-----	-----
Rice Lobed	*****	-----	-----	-----
Dalton Serrated	*****	-----	-----	-----

1. PIERSON LM. 2. NORTHVIEW SH. 3. COMPTON LM.
4. ST. JOE 5. SYLAMORE SS. 6. KINDERHOOKIAN

FIGURE 1

DIAGRAMMED CROSS-SECTION OF EXPOSED GEOLOGIC
COLUMN AT TABLE ROCK DAM SITE

FIGURE 2

DIAGRAM OF PROJECTILE POINT TERMINOLOGY
AND POSSIBLE VARIATIONS

**TRIANGULAR AND OVATE BLANK
OUTLINES.**

**INCOMPLETE PROJECTILE POINTS INDICATING MANUFACTURE
FROM TRIANGULAR AND OVATE BLANKS.**

FIGURE 3

**BLANK OUTLINES AND INCOMPLETE PROJECTILE POINTS
INDICATING MANUFACTURE FROM BLANKS**

FIGURE 4

ARTIFACTS MADE FROM WATER PATINATED CHERT

FIGURE 10
LOCATION OF SITES USED IN COMPARISONS

1. Table Rock Purchase Unit
2. C. M. Brown Site
3. Sites in Northeast Oklahoma
4. CK-44 Bluff Shelter
5. Cox Site
6. Jenkins Site
7. Stages Site
8. Parched Corn Hollow Shelter
9. Sites along Upper James River
10. Vinton Collection Sites
11. 23PO107
12. Pomme de Terre Reservoir
13. Bull Shoals Reservoir
14. Tecumseh and Isom Corp Sites
15. Seawright Site
16. Hurricane Hollow
17. Norfork Reservoir
18. Cave Hollow Site
19. Bisby Collection Sites

FIGURE 10
LOCATION OF SITES USED IN COMPARISONS

FIGURE 11
SURFACE CATEGORIES K1 THROUGH K8

K9 **K10** **K11** **K12** **K13** **K14**

FIGURE 12

SURFACE CATEGORIES K9 THROUGH K14

FIGURE 13

SURFACE CATEGORIES K15 THROUGH K21

FIGURE 14

SURFACE CATEGORIES N1 THROUGH N6,
K22, S1, AND S12

S2 **S3** **S4** **S5** **S6** **S7** **S8** **S9** **S10**

FIGURE 15

SURFACE CATEGORIES S2 THROUGH S10

FIGURE 16

SURFACE CATEGORIES B1 THROUGH B6

B7 **B8** **B9** **K23** **C10**

FIGURE 17

SURFACE CATEGORIES B7 THROUGH B9
K23, AND C10

C1 **C2** **C3** **C4** **C5** **C6****FIGURE 18**

SURFACE CATEGORIES C1 THROUGH C6

FIGURE 20

RICE LOBED AND JAKIE STEMMED PROJECTILE POINT TYPES

FIGURE 21

RICE LANCEOLATE AND RICE CONTRACTING STEMMED
PROJECTILE POINT TYPES

FIGURE 22

STONE SQUARE STEM AND RICE CORNER-NOTCHED
PROJECTILE POINT TYPES

FIGURE 23

RICE BEVELED-NOTCH, DALTON SERRATED, AND WHITE RIVER
ARCHAIC PROJECTILE POINT TYPES

FIGURE 24

BARRY SQUARE STEM AND STANDLEE CONTRACTING STEM
PROJECTILE POINT TYPES

FIGURE 25

STONE CORNER-NOTCHED AND WHITE RIVER CORNER-NOTCHED
PROJECTILE POINT TYPES

FIGURE 26

TABLE ROCK STEMMED, KINGS CORNER-NOTCHED AND LANDER
CONTRACTING STEM PROJECTILE POINT TYPES

FIGURE 27

LANDER CORNER-NOTCHED AND RICE SIDE-NOTCHED
PROJECTILE POINT TYPES

TABLE ROCK POINTED STEM

JAKIE NOTCHED

CRISP OVATE

WHITE RIVER TRIANGULAR

TABLE ROCK CORNER-NOTCHED

WHITE RIVER ELLIPTICAL

FIGURE 28

TABLE ROCK POINTED STEM, JAKIE NOTCHED, WHITE RIVER TRIANGULAR,
TABLE ROCK CORNER-NOTCH, AND WHITE RIVER ELLIPTICAL
PROJECTILE POINT TYPES

↑
N

University Libraries
University of Missouri

Digitization Information for Theses and Dissertations project.
Scanned from microfilm; no subsequent editing done.

Local identifier Marshall1958

Source information

Identifier	Microfilm reel# T1958-52-T1958-58
Format	Microfilm
Content type	Text
Notes	

Capture information

Date captured	2019
Scanner manufacturer/model	ScanPro 3000 /e-ImageData
Scanning software	PowerScan 3000(TM) v5.341
Optical resolution	600 dpi
Compression	LZW
Color settings	bitonal
File types	tiff
Notes	Scanned from microfilm; no editing done.

Derivatives - Access copy

Editing software	Photoshop
Resolution	600 dpi
Color	grayscale
File types	pdf
Notes	Converted from tiff to pdf using Adobe Acrobat Pro DC.