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# HANDBOOK

# OF

# ALABAMA

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# ARCHAEOLOGY

#### PART I POINT TYPES

by JAMES W. CAMBRON DAVID C. HULSE

Edited by DAVID L. DEJARNETTE

#### SPONSORED by

James H. McCary III Philip C. Jackson, Jr. E. Milton Harris Brittain Thompson

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HANDBOOK

OF

#### ALABAMA

#### ARCHAEOLOGY

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#### PREFACE

For many years there has been a need in the Southeast for a workable system of projectile point classification. Any number of people working in archaeology have attempted various taxonomic schemes from time to time in response to this long felt need. In the past, most of these systems of classification have been based on certain look-alike characteristics, with an utter disregard for the cultural provenience of the objects being classified. Archaeology has been reasonably successful in its classification of pottery. Great progress has been made during the past three decades in unravelling the prehistory of the various ceramic cultures in our area. During this same period, however, very little has been ascertained about the several thousand years of preceramic occupations of which the major cultural determinants and diagnostic traits are stone implements, chiefly projectile points of flint.

Tom and Madeline Kneberg Lewis, with the help of interested amateurs within the Tennessee Valley, took the first steps in the ordering of projectile points and other flint artifacts and made plans for the publication of a point type handbook. The retirement in 1961 of Tom and Madeline Lewis halted this project. James W. Cambron, a collaborator and chief contributor to the Lewises' proposed publication, continued his interest and undertook, with the help of David Hulse, the job of producing this handbook.

We have had the pleasure during the past of working very closely with Cambron and Hulse. We have observed how painstaking and careful they are in their evaluations and how they have often refused to place a specimen in a type if all the type attributes were not present. We have also observed in the course of field investigation that, as a result of this taxonomic system, the occurrence of certain types in certain cultural contexts could be predicted with a high degree of accuracy. In other words, this taxonomic system not only allows communication between workers by supplying names for certain classes of artifacts, but it also enables the prehistorian to establish event which took place in time and space. This, after all, is the real test of any artifact taxonomy.

In all systems of taxonomy, whether it is the naming and classifying of cave beetles, land snails, snakes, or arrowheads, there are two schools of thought. These can be termed the "splitters" and the "lumpers," and if we might classify ourself without splitting or lumping we would type ourself as a "lumper." However, we are thankful that the authors would be typed as "splitters," because without meticulous splitting, lumping or meaningful generalization would be impossible. This is the reason we have been tolerant of the fine divisions and the hairline cases which have often made variants of what looked like to us one and the same type. Like all such systems, this one has its limitations. We do feel, however, that it is a practical classification system which has already demonstrated its usefulness in archaeological interpretations.

The senior author, James Cambron, began his interest in archaeology years ago. He is a native of North Carolina and made his first collections in that state. He is a printer by profession and has been connected with the Decatur Daily for over ten years. Most of his fruitful years as a "part time" archaeologist have been spent in the Tennessee Valley near Decatur, Alabama. He has contributed articles to the publications of both the Alabama Archaeological Society and the Tennessee Archaeological Society. He is recognized by both professionals and amateurs for his specialty in the classification of flint artifacts.

David Hulse, junior author, is a native of Decatur, and his interest in archaeology is as longstanding as Cambron's. By vocation he is an illustrator. His best known illustrations are the colored paintings of the water fowl in Birds of Alabama. His work in the illustration of wild life has kept him much of the time on Wheeler Lake near his home in Decatur, and his "part time" archaeological ventures have been in surface collecting on the mud flats which are exposed when the lake level is lowered. Not only has he provided the excellent illustrations in this publication, but he has also collaborated in all other aspects of the handbook.

It has been our satisfaction as editor during the past twelve years to see the efforts of these two authors come to fruition as descriptions of point type after point type came into our hands for the comparatively small job of editing. We think you are going to find this handbook a tremendous tool for extracting a great deal of information and pleasure from your collections. Since some readers may want to consult primary sources to find out more about specific types, each point

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type is given with the name of the classifier and the name of the publication in which the type was first described and classified. In the text concerning each type, other bibliographic references are cited.

A word of caution—do not try to fit everything into this system. The authors themselves, in classifying our material from summer excavations, would class only about 25 per cent. Read the full description of the point type and do not rely entirely on the illustration for comparison since certain diagnostic characteristics do not lend themselves to illustration. Since it would have been impractical to show the full range of each type, you will see in each illustration a classic example which usually falls in the middle of the range.

David L. DeJarnette, Editor Mound State Monument Moundville, AL 35474

For additional copies of this book and information on other publications of the Archaeological Research Association of Alabama, Inc., contact Editor at the above address.

#### ACKNOWLEDGMENTS

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The preparation of the material presented in this book was made possible by many individuals and institutions. To them the authors express their gratitude with particular thanks to those listed.

Mrs. T. M. N. (Madeline Kneberg) Lewis is responsible for the basic methods of procedure in classification of these point types, many of which the authors identified by working with the Lewises before their retirement from the University of Tennessee.

The principal job of editing the original manuscript was done by David L. DeJarnette with the help of Mrs. Eleanor Smith Brock and Mrs. Valerie Scarritt, all the University of Alabama. This current revision was edited by David L. DeJarnette with the assistance of Mrs. Valerie Scarritt and Mrs. Judith Nielsen. The University made available to the authors projectile points from the Tennessee Valley shell mound excavations which were classified and used as a chronological control for the original compilation of this manuscript.

Dr. James B. Griffin of the University of Michigan and Dr. Joffre Coe of the University of North Carolina furnished materials from their areas and contributed information for this study.

Mr. and Mrs. E. Milton Harris, Philip C. Jackson, Jr., James H. McCary III and Brittain Thompson of Birmingham sponsored the original printing of the manuscript. The Archaeological Research Association of Alabama, Inc. has continued the sponsorship through two additional printings and this revision. Brittain Thompson also accepted the tasks of design, preparation and production of all three printings of the original manuscript and this revision. The Harrises compiled the information for the distributional chart which appeared in the first three printings.

This study has drawn heavily upon "A Survey of Paleo-Indian Sites and Artifacts in the Tennessee River Valley," an unpublished report on three years of field work by Dr. Frank J. Soday and James W. Cambron.

H. B. Dowell, Mrs. James W. Cambron, Rodger Schaefer and Mrs. Don Mayhall, all of Decatur, Alabama, were most helpful in reading, typing, and duplicating manuscript copy.

Many members of the Alabama Archaeological Society and other individuals loaned their collections, from over the state of Alabama, for classification. This material helped establish point type and provided information on the distribution of types.

James W. Cambron

David C. Hulse

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#### INTRODUCTION

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The purpose of this book is to fill a need for the identification of artifacts and to contribute to a unified nomenclature, especially concerning projectile point types in Alabama and adjoining areas.

Considerable material was classified and used to determine types. This includes approximately: 150,000 catalogued artifacts in the collections of the authors from 400 sites, mostly from the Tennessee Valley; about 5,000 Paleo, Transitional Paleo, and early Archaic artifacts from 281 sites classified in "A survey of Paleo-Indian Sites and Artifacts in the Tennessee River Valley;"

and artifacts from over 250 sites in 27 Alabama counties, 7 Tennessee counties, 1 North Carolina county, 3 Georgia counties and 1 New York county (see distribution tables of state survey) loaned by Alabama Archaeological Society members and others.

Names and code numbers were assigned to each type of artifact. Combinations of characteristics both cultural and physical, including measurements, shapes, flaking, and materials, were taken from a series of each type and were used to determine each new type. Typical examples were selected to be illustrated and the illustrations were drawn with great accuracy and are considered superior to photographs, and all named points are drawn actual size. Cultural associations were determined by artifacts from excavated control sites. These control sites include Stanfield-Worley Bluff Shelter, Quad Site, University of Alabama Site Ms 201 (Rock House), Flint Creek Rock Shelter, Little Bear Creek Site Ct 8, and Flint River Mound Ma 48. All artifacts from these sites used in this paper were classified by the authors; thus a uniform interpretation of types was assured. Surface collections from more or less culturally isolated sites were also of value in determining cultural associations.

Some projectile points are not distinctive enough to be defined as a type. Provisional types of categories were set up and assigned code numbers in order to place these points in separated groups. Points are not "pushed" into a named type; if the type could not accurately be determined the point was placed in a provisional type. In classifying point types it is well to consider that broken points, points with missing parts, and reworked points can be misleading and can make the example appear to be of another type. Differences in patination and flaking technique of the reworked area of a point are helpful in determining the extent of reworking. In classifying reworked points if the original type can be identified the point is placed in that type. If a point is reworked into a tool it is still classified as a point.

The hafting method and flaking can be helpful in determining point type associations in general as the hafting method nearly always determines the shape of the projectile point. Most Paleo Indian types, including fluted points, are auriculate. With exceptions, Transitional Paleo types were still hafted in much the same way. Side notching and beveling of the blade apparently started in this period. Notching and beveling seems to reach a climax on larger points in the early Archaic period. Stemmed points also became important in this period and persisted in importance through Shellmound Archaic and Woodland periods. Auriculate and notched types reappear in the Woodland period. Pentagonal and triangular types persist through all cultural periods. Small triangular points become important in the Mississippian period.

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#### **BASIC POINT SHAPES AND FEATURES**







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#### **Explanation of Code Numbers**

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Code numbers were assigned each point type as they were defined for the purpose of convenience in classification and to eventually be used to computerize types for distribution purposes.

Projectile points are divided into two parts: hafting area and blade. The following outline was [Pg xxii] used in describing each point type:

I Name—<u>Named by</u> (described by, and date)

II General Description: Size, type according to hafting area—auriculate, stemmed, notched, lanceolate, triangular, pentagonal—diagnostic features.

**III Measurements** 

IV Form: Cross section, shoulders, blade type, blade edge features, distal end; hafting area (type and features).

V Flaking: Type and materials.

VI Comments: Derivation of name, location of specimens, cultural associations, etc.

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#### ABBEY, Hulse (This paper): A-122

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GENERAL DESCRIPTION: This is a medium sized, stemmed point with incurvate blade edges that are beveled on each side of both faces.

MEASUREMENTS: Measurements of 12 cotypes (including the illustrated example) from which features were taken ranged as follows: length—maximum, 51 mm.; minimum, 38 mm.; average, 42 mm.: width at shoulders—maximum, 49 mm.; minimum, 32 mm.; average, 41 mm.: stem width maximum, 21 mm.; minimum, 14 mm.; average, 18 mm.: stem, length—maximum 12 mm.; minimum 7 mm.; average, 9 mm.: thickness—maximum, 9 mm.; minimum, 6 mm.; average, 7 mm.

FORM: The cross-section is flattened. The shoulders are expanded and are usually horizontal, but may be inversely tapered. The blade is incurvate, beveled on each side of both faces, and is in rare instances serrated. The distal end is acute. The stem is usually straight but may be expanded. The basal edge may be either slightly excurvate or straight and is usually thinned.

FLAKING: This type displays well controlled, broad, shallow,

random flaking. The blade and stem edges were retouched by shallow, regular, pressure flaking. Good local materials were used. All examples are patinated.

COMMENTS: The type was named from sites near Abbey Creek in Henry and Houston counties, Alabama. They were associated with Elora and Maples points and probably were used during the Archaic period.

GENERAL DESCRIPTION: This is a medium to large point with a long, very broad, sometimes rounded stem.

MEASUREMENTS: The measurements of seven homotypes from which traits and measurements were taken are: length-maximum, 65 mm.; minimum, 50 mm.; average, 56 mm.: shoulder width-maximum, 35 mm.; minimum, 32 mm.; average, 34 mm.: stem width-maximum, 27 mm.; minimum, 18 mm.; average, 24 mm.: stem length-maximum, 30 mm.; minimum, 15 mm.; average, 21 mm.: thickness-maximum, 9 mm.; minimum, 7 mm.; average, 8 mm.

FORM: The cross-section is biconvex with wide proportions. The shoulders may be horizontal or tapered, with an occasional weak barb. The blade shape is excurvate. The distal end is usually acute. The stem may be straight, contracted or slightly expanded. Some examples can be described as having a rounded stem. The stem base is either straight or excurvate. The basal edges may be lightly ground.

FLAKING: The blade and stem are shaped with strong random flaking, with some retouch along most edges.

COMMENTS: The name Adena is derived from the point's association with the Adena culture. The illustrated specimen is from Cambron Site

48, Lincoln County, Tennessee. The measured examples are from this site and Cambron Site 50, Limestone County, Alabama. Most examples are made from local materials. The type is associated with early Woodland in the eastern United States. Kneberg (1956) indicates an Archaic association in Tennessee. In Alabama, the Adena point seems to appear on both Archaic and Woodland sites. One example was found in Level 1, Zone A, and one example in Zone C at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). One example was found in Stratum II (Archaic) at the Flint Creek Rock Shelter (Cambron and Waters, 1961). Scattered examples are known from most of North Alabama. The Alabama points closely resemble examples from Ohio, illustrated by Bell (1958) and Webb and Baby (1957), as well as some examples from an Adena mound at Natrium, West Virginia (Solecki, 1953). Examples from New York with unground bases are described by Ritchie (1961). Radiocarbon dates from Adena sites in Ohio and Kentucky (Webb and Baby, 1957) suggest an age of from 800 B. C. to 800 A. D.

#### ADENA NARROW STEMMED, Cambron (This Paper): A-1-a

GENERAL DESCRIPTION: This is a medium to large point with a long, rounded stem and a long, excurvate blade.

MEASUREMENTS: The illustrated example measures 92 mm. in length, 32 mm. in width, 19 mm. in stem width, 21 mm. in stem length, 9 mm. in thickness.

FORM: The cross-section is biconvex. The shoulders may be horizontal or slightly tapered. The blade shape is excurvate but may be almost straight with an acute distal end. The stem is long and is usually rounded, but it may have straight side edges with an excurvate basal edge. A slightly expanded stem occurs rarely.

FLAKING: The blade and stem were produced by broad percussion flaking, which results in rather uniform flake scars. The technique may be described as random flaking, but may approach collateral flaking on some examples. The blade edges are finished by secondary flaking with some fine retouching. The stem edges were treated in a manner similar to that of the blade.

COMMENTS: The type is described as a variant of the classic Adena point. The illustrated example is from Cambron Site 76 (Pine Tree). Some sites have produced only one of the two Adena variants, which may simply indicate a high degree of variation of the Adena point or may, upon further

investigation, prove to be an indication that the two types are associated with somewhat different cultures. Several good examples from Natrium Mound in West Virginia are illustrated by Solecki (1953). Some of his points shown in Plate 28, Figures R, T, and U, were found arranged in association with a burial. Classic Adena points (Figures V and W, Plate 28) and other artifacts were also found with this burial. Closely associated with another burial and accompanying artifacts were points illustrated as Figures X and Y, Plate 28. At this site, the types were contemporaneous.

An Adena Narrow Stemmed point was recovered from a feature pit in Stratum I at the Danley Site (Cambron, Dowell and O'Mahoney, 1962) along with a Wheeler Punctate sherd, a Cotaco Creek point, one polished and three flaked flint celts, and other artifacts. The Flint Creek Rock Shelter (Cambron and Waters, 1961) and Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) produced classic Adena but no Adena Narrow Stemmed points. The narrow, stemmed type is probably coeval with the classic Adena type on most Alabama sites.

#### AFTON, (Sub-Variety), Bell and Hall (Bell, 1958): A-2

GENERAL DESCRIPTION: The Afton point is a medium to large, stemmed point with an angular





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blade outline.

MEASUREMENTS: The illustrated example (plesiotype) measures 45 mm. in length, 25 mm. in shoulder width, 15 mm. in stem width, 12 mm. in stem length, 6 mm. in maximum thickness.

FORM: The cross-section is flattened. The shoulders are tapered. The blade is parallel angular; the distal end, apiculate. The stem is straight.

FLAKING: The faces of the blade and stem are shaped by broad percussion flaking with some fine retouch along the edges.

COMMENTS: The type was named from specimens found near Afton, Oklahoma. The illustrated example is from Cambron Site 43 in Madison County, Alabama. Another example of the same size and material and comparable characteristics was found on Cambron Site 48 across a small mountain pass in Lincoln County, Tennessee. To date (September, 1975) these are the only examples classified from Alabama and adjacent areas. Both of these examples fall into a category described by Bell (1958) as a sub-variety, since they have straight—rather than expanded—stems and no shoulder barbs.

Bell gives the general distribution as throughout northeastern Oklahoma and the adjacent regions of Arkansas, Kansas and Missouri, as well as various sections of the Ohio Valley, particularly Ohio. He also indicates a pre-pottery cultural association.

#### ANGOSTURA, <u>Suhm</u> and <u>Krieger</u> (Suhm, Krieger and Jelks, 1954): A-4

GENERAL DESCRIPTION: The Angostura point is a medium to large, auriculate point with an excurvate blade.

MEASUREMENTS: Twelve specimens from nine Tennessee Valley sites (Soday and Cambron, n. d.) average 76 mm. in length, 28 mm. in width, and 8 mm. in thickness. The longest point (Quad Site, Limestone County, Alabama) measures 101 mm. and the shortest point (Sweiger 1, Meigs County, Tennessee) measures 54 mm. The illustrated example measures 67 mm. long, 30 mm. wide, 9 mm. thick.

FORM: The cross-section is biconvex. Some examples have a faint shoulder at the terminal end of the hafting area. The blade shape is excurvate; the distal end, acute. Several local examples are beveled on one edge of each face. Most examples have auriculated bases with contracted, pointed, or rounded basal edges. Although an incurvate base is one of the distinguishing characteristics of the type, some bases may be straight or even slightly excurvate. The base is usually thinned and may be ground.

FLAKING: The blade may be shaped by broad random flaking, crude collateral flaking or, in some examples from the west, fine oblique transverse flaking. Random flaking is by far the predominant type. Most blades are finished by secondary flaking, which appears in some examples

to have been done by the percussion method. As a final finishing step, fine retouch, carried out in order to remove irregularities from the blade edges, is present.

COMMENTS: The type was first described by Hughes (1949) as Long points from the Long Site in Angostura Reservoir, South Dakota. Hughes accepted all of Suhm's illustrated examples (Suhm, Krieger and Jelks, 1954) except the beveled ones. Several beveled examples were illustrated by Suhm, Krieger and Jelks, 1954. The example shown here is from Cambron Site 116, Limestone County, Alabama. Suhm, Krieger and Jelks (1954) estimate the age between 6000 B. C. and 4000 B. C. or later. An Angostura point was recovered from the lower levels at Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), and what appears to be an Angostura point was associated, along with a pointed-base Lerma and a biface knife, with the second mammoth found at Santa Isabel Iztapan, Mexico (Wormington, 1957). This example resembles some Tennessee Valley specimens which may be late Paleo or early Archaic (Cambron and Hulse, 1960b).

#### APPALACHIAN, <u>Kneberg</u> (Kneberg, 1957): A-5

GENERAL DESCRIPTION: The Appalachian point is a medium to large, stemmed point with concave base, made of quartzite.

MEASUREMENTS: The illustrated example measures 85 mm. in length, 38 mm. in shoulder width, 27 mm. in stem width, 16 mm. in stem length, and 16 mm. in thickness. The length for the type ranges from 60 mm. to 110 mm. (Harwood, 1959).

FORM: The cross-section is usually flattened. The shoulders are usually tapered and narrow. The blade is usually excurvate, but may be straight with an acute distal end. The stem is broad and may be straight, slightly contracted, or expanded, with an incurvate basal edge that may be thinned. The hafting area is usually ground along the edges.

FLAKING: This point displays well-controlled percussion flaking with







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some retouch along the edges.

COMMENTS: The point is named for the Southern Appalachian region, where the type is widely distributed (Kneberg, 1957). Several examples were recovered at the Camp Creek Site, where they may be associated with Early Woodland (Kneberg, 1957). The illustrated example is from Harwood Site 6A on Hominy Creek in Buncombe County, North Carolina. The part of the site designated 6A by Harwood (1959) is pre-ceramic. Large, biface, quartzite tools are in association with the points, which are all made from quartzite. Examples from Cowee Creek, Macon County, North Carolina, were recovered below the ceramic zone. This type is associated with Savannah River points on several sites. It appears that the point is associated with the middle to late Archaic and early Woodland cultures.



#### AUTAUGA, Cambron (This paper): A-123

GENERAL DESCRIPTION: The Autauga is a small, corner-notched, serrated point with straight blade and base.

MEASUREMENTS: Twelve cotypes, including the illustrated example, from sites in Autauga County, Alabama, provided traits and the following measurements: length—maximum, 38 mm.; minimum, 23 mm.; average, 32 mm.: shoulder width maximum, 21 mm.; minimum, 15 mm.; average, 19 mm.: stem width—maximum, 21 mm.; minimum, 16 mm.; average, 18 mm.: stem length—maximum, 7 mm.; minimum, 5 mm.; average, 6 mm.: thickness—maximum, 8 mm.; minimum, 6 mm.; average, 7 mm.

FORM: The cross-section may be either rhomboid or biconvex. The shoulders are usually either horizontal or inversely tapered. The blade is straight. Blade edges are usually serrated and are steeply beveled on half of the examples. The distal end is acute. The corner notches are usually ground and range in width from 2 mm. to 4 mm. and in depth from 5 mm. to 7 mm. The expanded stem has straight or incurvate side edges. The base is straight and thinned. It is lightly ground on nearly all examples.



FLAKING: Narrow, shallow, random flaking was used to form the blade and stem. Notching, to form the expanded stem, was accomplished by removal of fairly deep flakes and finished by light grinding.

COMMENTS: The type was named for Autauga County, Alabama, where the examples, used in this paper, were recovered. All of these points are made of vein quartz. This type is found in surface collections with Dalton, Big Sandy, Kirk Corner Notched, and Crawford Creek points. This association and the fact that the type has features similar to Decatur, Big Sandy, Palmer, and Crawford Creek points indicates an Early Archaic or Transitional Paleo-Indian provenience.

#### BAKERS CREEK, Cambron (DeJarnette, Kurjack and Cambron, 1962): A-6

GENERAL DESCRIPTION: This is a medium-sized, expanded-stem point.

MEASUREMENTS: Eleven cotypes, including the illustrated example, provide traits and the following measurements: length—maximum, 78 mm.; minimum, 43 mm.; average, 55 mm.: shoulder width—maximum, 28 mm.; minimum, 23 mm.; average, 26 mm.: stem width—maximum, 27 mm.; minimum, 21 mm.; average, 23 mm.: stem length—maximum, 18 mm.; minimum, 12 mm.; average, 16 mm.: thickness—maximum, 10 mm.; minimum, 7 mm.; average, 8 mm.

FORM: The cross-section is biconvex. The shoulders are narrow and may be horizontal or tapered. The blade is usually straight but may be excurvate. The distal end is usually sharply acute, but may approach an acuminate type. The hafting area consists of an expanded stem formed by notching into the blade about one-third of the way from the base to the distal end. This diagonal notch tapers from the basal edge, which is usually unmodified in width. The basal edge is thinned and usually straight, but it may be excurvate and lightly ground. Many examples are patinated.

FLAKING: The blade and stem are shaped by broad, random, percussion flaking. Flake scars indicate a strong percussion method was used to notch the hafting area to form the expanded stem. All edges appear to have been retouched as a final step in shaping

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#### the point.

COMMENTS: The illustrated specimen is from Cambron Site 53, the type site, at the mouth of Bakers Creek in Morgan County, Alabama. This type is described by Cambron (1958a) as Stemmed Copena. It appears in surface collections along with Copena and triangular Copena points. Two examples were recovered from the lower two-thirds of Stratum I (Woodland) at Flint Creek Rock Shelter and were illustrated as Bakers Creek points (Cambron and Waters, 1961). One example was recovered from Level 7, Zone A, at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). One example was recovered from the 2-foot level at Little Bear Creek, Ct 8 (Webb and DeJarnette, 1948b). At this site Copena points were also recovered from Zone C. This evidence indicates an early to middle Woodland cultural association and an estimated age of somewhere between 1500 B.C. and early centuries A.D.



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#### BEACON ISLAND, <u>Allen and Hulse</u> (This Paper): A-131

GENERAL DESCRIPTION: This is a medium-sized point with expanded-rounded stem, straight blade edges and weak to strong shoulder barbs.

MEASUREMENTS: Seven cotypes, two from Franklin County, Alabama, three from Beacon Island and two from Bear Creek along the Tennessee River below Florence, Alabama, provided the following measurements: length—maximum, 73 mm.; minimum, 48 mm.; average, 61 mm.: shoulder width—maximum, 28 mm.; minimum, 22 mm.; average, 24 mm.: stem width at shoulder—maximum, 14 mm.; minimum, 12 mm.; average, 13 mm.: stem width at widest point—maximum, 19 mm.; minimum, 15 mm.; average, 17 mm.: stem length—maximum, 18 mm.; minimum, 12 mm.; average, 15 mm.: thickness—maximum, 7 mm.; minimum, 6 mm.; average, 7 mm.

FORM: The cross-section is biconvex. Shoulders may be barbed or inversely tapered. Blade edges are straight and may be finely serrated. The stem is expanded-rounded with diagonal notches at the shoulders. The distal end is acute.

FLAKING: Shallow random flaking was employed to shape the faces of the blade and stem. Careful pressure flaking was used to finish the blade edges and to thin the base.

COMMENTS: The type was named from Ralph Allen Site 41 on Beacon Island and was associated with Cotaco Creek, Flint Creek and Wade points on this site. Several examples are illustrated as Type 8, Plate 159 (Webb and DeJarnette, 1952). A suggested placement is in late Archaic and early Woodland times.

# BEAVER LAKE, <u>Cambron and Hulse</u> (DeJarnette, Kurjack and Cambron, 1962): A-7

GENERAL DESCRIPTION: This is a medium-sized, auriculate point with recurvate blade edges.

MEASUREMENTS: The lengths of 23 points from 23 sites in the Tennessee Valley range from a maximum of 86 mm. to a minimum of 47 mm. (average length, 64 mm.). The average width of these points is 24 mm. and the average thickness is 8 mm. (Soday and Cambron, n. d.). The measurements of the illustrated (autotype) specimen are: length, 61 mm.; width of blade, 26 mm.; width at base, 25 mm.; width of hafting constriction, 21 mm.; thickness, 9 mm.; basal concavity, 3 mm.

FORM: The cross-section is usually biconvex, but one or both faces may be median ridged. The blade is recurvate—constricted in the hafting area above the auricles. The distal end is usually acute. The auriculated hafting area is expanded-rounded. The basal edge is usually thinned and incurvate, but may be straight. The hafting constriction and basal edge are usually ground.

FLAKING: The shallow random flaking usually employed to shape the faces sometimes produces a median ridge. Secondary retouch flake scars are usually long, evenly spaced, and struck off on alternate faces, resulting in an irregular pattern along the blade edges. This retouch appears to have been accomplished with indirect percussion or pressure flaking.

COMMENTS: The type was named for the Beaver Lake area in Limestone County, Alabama, where many examples, including the illustrated specimen from Cambron (Pine Tree Site 76), were recovered. Most examples from this area are made from Ft. Payne chert, which is usually patinated to a chocolate brown color. The type has been called unfluted Cumberland in several papers, especially Soday and Cambron (n. d.). Beaver Lake points are found only on sites that produce early-man materials. An example was recovered from the bottom of Stratum III (pre-





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Archaic) at Flint Creek Rock Shelter (Cambron and Waters, 1961). Examples were recovered from the lowest culture-bearing stratum at Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). All evidence indicates the type dates from 10,000 B.P. to an unknown earlier time. It is considered to be a transitional Paleo-Indian type.

#### **BENJAMIN** Cambron (This paper): A-118

GENERAL DESCRIPTION: The Benjamin is a large to medium sized lanceolate point with straight or excurvate base and excurvate blade.

MEASUREMENTS: Nine cotypes, including the illustrated example, ranged in measurements as follows: length—maximum, 100 mm.; minimum, 54 mm.; average, 66 mm.: width—maximum, 32 mm.; minimum, 22 mm.; average, 26 mm.: thickness—maximum, 12 mm.; minimum, 9 mm.; average, 11 mm.

FORM: The cross-section is biconvex. The blade is excurvate. The widest point may be either at the base or somewhat below the midsection, making the hafting area difficult to define. The distal end is acute. The basal edge is usually excurvate, but may be straight, and is usually thinned.

FLAKING: Broad, deep, random flaking appears on the faces, with some fine secondary flaking along the blade edges and sides of the hafting area. Short random flaking was used to thin the basal edge. Local materials were used.

COMMENTS: The type was named after the Benjamin site (Cambron Site 333) in Lawrence County, Alabama, where it was first recognized and appears in association with Woodland artifacts. The illustrated example is from Cambron Site 19 in Morgan County, Alabama. At Cactus Rock Site Dk-101 in DeKalb County, Alabama, one example was recovered from Level 1 in

association with Woodland point types and one example from Level 4 in association with Woodland and Archaic point types. At University of Alabama Site Dk-57 in DeKalb County, Alabama, the type was associated with Copena and Madison points. At University of Alabama Sites Lo-23 in Lowndes County, Alabama, and Lr-20 in Lamar County, Alabama, Benjamin points appear in Woodland strata. The association of Benjamin points at these sites seems to place the type within the Woodland period.

#### BENTON BROAD STEMMED, <u>Cambron</u> (This Paper): A-9-a

GENERAL DESCRIPTION: This is a medium to large, broad-stemmed point with steeply beveled stem edges.

MEASUREMENTS: The measurements of the illustrated example are: length, 66 mm.; shoulder width, 32 mm.; stem width, 28 mm.; stem length, 11 mm.; thickness, 9 mm.

FORM: The cross-section may be flattened or biconvex. The shoulders are narrow and may be horizontal or tapered. The blade is usually excurvate, the distal end acute. The stem is usually slightly expanded, but may be straight. It is very broad and short. The stem side edges are usually incurvate or straight and beveled. The beveled basal edge is usually straight but may be slightly incurvate or excurvate.

FLAKING: The blade and stem display broad, shallow, random flaking. Some broad retouching was used to finish the blade and stem edges. The stem appears to have been formed by the removal of the corners of the original basal edge.

COMMENTS: The type name was derived from the Benton Stemmed point, to which it seems to be closely associated both typologically and culturally. The outstanding differences between the two are the exceptionally broad stem and broader, shorter blade of the Benton

Broad Stem point. The type does not appear as frequently or in as great numbers as Benton Stemmed. The illustrated example is from Cambron Site 48, Lincoln County, Tennessee. Due to its association with Benton Stemmed and Buzzard Roost Creek points, it is considered to be an Archaic point and is probably coeval with these types, dating from about 4000 B.C. to 2000 B.C.

#### BENTON STEMMED, <u>Kneberg</u> (Kneberg, 1956): A-9

GENERAL DESCRIPTION: This is a medium to large, stemmed point with steeply beveled stem edges.

MEASUREMENTS: The measurements of five cotypes from which measurements and traits were taken are: length—maximum, 97 mm.; minimum, 45 mm.; average, 65 mm.: shoulder width—maximum, 30 mm.; minimum, 25 mm.; average, 29 mm.: stem width—maximum, 20 mm.; minimum, 16 mm.; average, 17 mm.: stem length—maximum, 11 mm.; minimum, 8 mm.; average, 9 mm.: thickness—maximum, 9 mm.; minimum, 5 mm.; average, 7 mm. Measurements of the illustrated example are: length, 53 mm.; shoulder width, 28 mm.; stem width, 19 mm.; stem length, 9 mm.; thickness, 8 mm.





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FORM: The cross-section is biconvex to flattened. The shoulders are narrow and, rarely, barbed. They may be horizontal or slightly tapered. The blade is usually recurvate, but may be excurvate with an acute distal end. The stem is relatively broad and short with straight, beveled side edges. It may be tapered or expanded. The steeply beveled basal edge may be straight or incurvate.

FLAKING: The random, primary flaking used to shape the face of the blade and stem is broad and shallow. Some areas seem to be only slightly modified and exhibit some blade scars. The retouching along the blade edges is broad and shallow. Short, broad flakes are used to shape the stem and bevel the stem edges. These appear to be the result of indirect percussion.

COMMENTS: The type was named for Benton County, Tennessee. The illustrated example is from Hulse Site 17, Limestone County, Alabama. The type is found in the Tennessee River Valley and in western Tennessee along the Mississippi River (Bell, 1960). At the Eva Site, in Benton County,

Tennessee, the cultural association is with the early Big Sandy component (Lewis and Lewis, 1961). Practically all the types recovered from Stanfield-Worley Bluff Shelter were from Zone A, where the first ten levels contained examples. The more frequent occurrence of the type in Levels 4 through 9, Zone A, is an indication of Archaic association (DeJarnette, Kurjack, Cambron, 1962). At Rock House Shelter, University of Alabama Site Ms 201, in Marshall County, Levels 5, 7, 8 and 11 produced one point each. This indicates an early Archaic association at this site. At Flint Creek Rock Shelter (Cambron and Waters, 1961), all examples were in middle- and upperstratum II (Archaic). At Little Bear Creek, Ct 8 (Webb and DeJarnette, 1948b), examples were recovered from the two-foot level through the eight-foot level, most examples being from the lower three levels. The type appeared in Zones A, B, C and D at Flint River, Mound Ma 48 (Webb and DeJarnette, 1948a); it was most frequent in Zone C. A strict Archaic association dating from about 4000 B.C. to 2000 B.C. is suggested.

#### BIG SANDY, <u>Lewis and Kneberg</u> A-10 (Cambron and Hulse, 1960a): A-11

GENERAL DESCRIPTION: This is a small to medium, side-notched point. The basal edges and/or notches are usually ground. The blade edges may be serrated and/or beveled.

MEASUREMENTS: The range of measurements of 14 examples from an excavation on the Quad Site (Cambron and Hulse, 1960a) are: length, 35-56 mm.; width, 18-20 mm.; thickness, 6-8 mm. Measurements of the illustrated example are: length, 41 mm.; shoulder width, 20 mm.; width at base, 21 mm.; notch depth, 4 mm.; notch width, 6mm.; thickness, 6mm. Later unground examples from the Big Sandy Site in Henry County, Tennessee, range in length from 44 mm. to 89 mm. and average near 64 mm. (Bell, 1960).

FLAKING: The flaking is variable, but usually is good. Random flaking is usually employed to shape the faces of the blade and hafting area; retouch is evident along the edges. The side notches appear to have been made by broad percussion flaking. Rare examples show oblique flaking (Kneberg, 1956).

FORM: The cross-section is usually biconvex but may be

rhomboid, plano-convex, or median ridged. The blade may be excurvate or straight. Of the 22 whole and broken examples recovered, 62% are beveled on one side of each blade face and 8% are serrated. The distal end is acute. The hafting area is side-notched. The notches average about 5 mm. deep and 7 mm. wide, and are nearly always ground. Of the 22 measured examples, 43% have incurvate bases, 32% have slightly excurvate bases, and 25% have straight bases. The bases are usually thinned, and 50% of the 22 examples have ground bases. The part of the hafting area between the notches and the base may be straight or auriculated. Rarely, the basal edge is parallel pointed.

COMMENTS: The point is named for the Big Sandy I phase of the Archaic period (Lewis and Kneberg, 1959). The illustrated example is from Hulse Site 38 (Pine Tree), Limestone County, Alabama. Examples were found in association with a fluted midsection, Wheeler, Dalton, and Quad points on the Quad Site (Cambron and Hulse, 1960a). Ritchie, in New York (1961), described the type as the Otter Creek point. The type was dated at Stanfield-Worley Bluff Shelter by radiocarbon method at near 10,000 B.P. (DeJarnette, Kurjack and Cambron, 1962). Similar examples from Danger Cave, Utah, were listed by Jennings (1957) as types W4, W25, and W26. Type W4 was recovered only from Level II, where the radiocarbon dates were 9789  $\pm$ 630 B.P. and 8960  $\pm$ 340 B.P. This type was described in earlier editions of this book as Big Sandy I. An unground variant, also described in earlier editions of this book as Big Sandy II, Code, No. A-11, were numerous in the Three Mile Phase at the Eva Site (Lewis and Lewis, 1961). Kneberg suggests a date of from 3500 B.C. to 1000 B.C. for this variant (1959).





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GENERAL DESCRIPTION: This is a small to medium sized, side-notched point with auriculate, incurvate base and excurvate blade edges. The basal edges and/or notches are nearly always ground.

MEASUREMENTS: Eight examples from Cave Spring (Moebes, 1974) provided the following measurements: length, 30-45 mm.; average, 39 mm.; shoulder width, 16-26 mm.; average, 22 mm.: stem width, 18-23 mm.; average, 21 mm.: stem length, 10-13 mm.; average, 11 mm.: thickness, 6-9 mm.; average, 8 mm.: basal concavity, 1-3 mm.; average, 2 mm.: width in notches, 10-17 mm.; average, 14 mm.: notch width, 6-10 mm.; average, 8 mm.: notch depth, 3-7 mm.; average, 4 mm.: stem length below notches, 4-6 mm.; average, 5 mm.

FLAKING: Fifty percent show collateral flaking and 50% show random flaking.

FORM: Seventy-four percent of the cross-sections are biconvex, 13% are plano-convex and 13% are median ridged. All blade edges are excurvate. All bases are incurvate. All bases and notches are ground and 75% of the stem edges are ground. Fifty percent have shoulder barbs and all examples are patinated. Thirteen percent have acuminate distal ends and 87% have acute distal ends.

COMMENTS: The provenience of 9 examples, used to define this type

of Big Sandy point is as follows: Stratum I; Level 3, 1 (probably out of context); Stratum II: Level 7, 2; Level 8, 2; Stratum III: Level 7, 1; Level 10, 1; Level 12, 2. Five examples of similar type (W4) from Level II at Danger Cave (Jennings, 1957) were dated by radiocarbon samples at 9789  $\pm 630$  B.P. and 8960  $\pm 340$  B.P. One example was recovered from Stratum II at Flint Creek Rock Shelter, Fig. 55 (Cambron and Waters, 1958).

#### BIG SANDY BROAD BASE, <u>Cambron</u> (This Paper): A-134

GENERAL DESCRIPTION: This is a medium sized, side-notched, trianguloid point with blade edges that are usually excurvate but may be straight or recurvate. Most examples are serrated. The basal edges and/or notches are usually ground.

MEASUREMENTS: Eleven examples from DeKalb County, Tennessee, 1 example from Warren County, Tennessee, and 3 examples from Cave Spring (Moebes, 1974) provided the following features and measurements: length, 37-53 mm.; average, 44 mm.: shoulder width, 21-38 mm.; average, 25 mm.: stem width, 23-32 mm.; average, 29 mm.: stem length, 11-17 mm.; average, 15 mm.: thickness, 5-10 mm.; average, 7 mm.: basal concavity, 1-4 mm.; average, 2 mm.: width in notches, 17-23 mm.; average, 19 mm.: notch width, 6-9 mm.; average, 7 mm.: notch depth, 3-5 mm.; average, 4 mm.: stem length below notches, 6-10 mm.; average, 8 mm.

FLAKING: Random flaking was employed in shaping the blade and hafting area. The notches were formed by well controlled pressure flaking.

FORM: Thirty percent of the cross-sections are biconvex, 50% are flattened, 5% are plano-convex and 15% are rhomboid. Eighty percent of the blade edges are excurvate, 10% are

straight, 10% are asymmetrical, 54% are serrated, 18% are beveled on one edge of each face, 41% have incurvate bases, 59% have straight bases. The basal edges and notches are usually ground and thinned. All examples are patinated. Eighty-four percent of the distal ends are acute and 16 are acuminate.

COMMENTS: The three examples from Cave Spring were randomly flaked, and rhomboid in cross-section. All three had blade edges that were serrated and beveled on one edge of each face. They were ground in the notches as well as on the base and stem edges. The distal ends were acute. Three other examples from Cave Spring were either broken or reworked and could be not meaningfully measured but the provenience of all six examples is: Stratum II; Level 5, 1; Stratum III; Level 7, 1; Level 8, 1; Level 9, 1; Level 10, 2. An early Archaic or Transitional Paleo placement is suggested.

#### BIG SANDY CONTRACTED BASE, <u>Cambron</u> (This Paper): A-132

GENERAL DESCRIPTION: This is a small to medium sized, side-notched point with a contracting stem and an incurvate base. Most examples show collateral flaking and shallow serrations along the blade edges.

MEASUREMENTS: Seven cotypes supplied the following features: length, 35-60 mm.; average, 45 mm.; shoulder width, 20-26 mm.; average, 23 mm.: stem width, 20-25 mm.; average, 23 mm.: stem length, 12-16 mm.; average, 14 mm.: thickness, 5-8 mm.; average,

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7 mm.: basal concavity, 3-6 mm.; average, 5 mm.: width in notches, 13-16 mm.; average, 15 mm.: notch width, 3-5 mm.; average, 4 mm.: notch depth, 3-5 mm.; average, 4 mm.: stem length below notches, 8-13 mm.: average, 11 mm.

FLAKING: Shallow pressure flaking was used to thin the basal edge. Well controlled pressure flaking was employed to shape the side notches. All blade surfaces exhibit collateral flaking.

FORM: Seventy percent of the cross-sections are median ridged; 15% are biconvex; and 15% are plano-convex. Fifty-seven percent of the blade edges are straight and 43% are excurvate. Eighty-four percent have shallow serrations along the blade edges. Bases are usually thinned and all of them are ground. Eighty-four percent of the stem edges and all notches are ground. All examples are patinated. Forty percent have acute distal ends and 60% of the distal ends are acuminate.

COMMENTS: The provenience of seven examples, from the Cave

Spring Site, (Moebes, 1974) used to define this type of Big Sandy point is as follows: Level 5, 2; Level 7, 1; Level 8, 1; Stratum II. Level 7, 1; Level 8, 1; Level 9, 1; Level 10, 2; Level 11, 1; Stratum III. A similar type was described by Jennings (1957) from Danger Cave, Utah is listed as Type W 17 where dates of 9787 plus or minus 630 B.P. and 8960 plus or minus 340 B.P. were secured from levels containing this type. Two examples were classified from the collection of Steve Maloney Site DK 2 in DeKalb County, Tennessee.

#### BIG SLOUGH, <u>Hulse</u> (Cambron and Hulse, 1960b): A-12

GENERAL DESCRIPTION: This is a medium to large point with a broad expanded stem.

MEASUREMENTS: The range of measurements of 11 cotypes from Morgan and Limestone Counties near Decatur, Alabama are: length—maximum, 85 mm.; minimum, 49 mm.; average, 62 mm.: shoulder width—maximum, 42 mm.; minimum, 29 mm.; average, 34 mm.: stem width—maximum, 28 mm.; minimum, 20 mm.; average, 25 mm.: stem length—maximum, 17 mm.; minimum, 14 mm.; average, 15 mm.: thickness—maximum, 9 mm.; minimum, 7 mm.; average, 8 mm. Measurements of the illustrated example are: length, 85 mm.; shoulder width, 38 mm.; stem width, 28 mm.; stem length, 14 mm.; thickness, 9 mm.

FORM: The cross-section is biconvex. The shoulders are inversely tapered with narrow barbs that may be expanded, especially on examples with recurvate blade edges. The blade may be excurvate or recurvate; rarely, excurvate-recurvate. One example of the cotypes has one straight and one recurvate blade edge. About half the blade edges are asymmetrical. The distal end is usually acute but may be apiculate. The stem is broad and long and expanded by shallow diagonal notches. The stem side edges may be slightly incurvate, slightly excurvate, or straight. The basal edge is excurvate, thin, and usually ground.

FLAKING: Most examples are made by broad, shallow, random flaking, but a considerable number show collateral flaking. Several have random flaking on one face and collateral on the other. The blade edges usually show rather broad retouching with some fine flaking along the retouched edges that gives a somewhat crushed effect, as does the baton method of percussion flaking. The notches appear to have been formed by indirect percussion flaking with some retouch. The basal edge is thinned by removal of broad, shallow flakes. The stem is usually finely retouched on all edges.

COMMENTS: The point is named for the Big Slough area in Limestone County, Alabama, where many examples are found on the surface with early Archaic types. The illustrated example is from Hulse Site 18, Limestone County, Alabama. At Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), one example each was recovered from Levels 1, 5, 6, 8 and 9 of Zone A. At University of Alabama Site Ms 201, Rock House Shelter, in Marshall County, Alabama, Levels 4 and 5 produced one example each. One example was recovered from Zone C (Archaic) at Ma 48, Flint River Mound (Webb and DeJarnette, 1948a). This evidence suggests a cultural association of from early Archaic to middle Archaic times, with a probable age range of about 5000 B.C. to 2000 B.C.

#### BRADLEY SPIKE, Kneberg (Kneberg, 1956): A-14

GENERAL DESCRIPTION: The Bradley Spike is a small to medium-sized, spike-shaped, stemmed point.

MEASUREMENTS: The measurements of the 13 plesiotypes upon which description of form was based (included is the illustrated specimen from Ma 48, Flint River Site, Webb and DeJarnette, 1948a) are: length—maximum, 65 mm.; minimum, 40 mm.; average, 51 mm.: shoulder width—maximum, 17 mm.; minimum, 10 mm.; average, 15 mm.: stem width—maximum, 12 mm.; minimum, 8 mm.; average, 11 mm.: stem length—maximum, 15 mm.; minimum, 7 mm.; average, 11 mm.: thickness—maximum, 14 mm.; minimum, 6 mm.; average, 10 mm.



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FORM: The cross-section is usually median ridged but may, rarely, be planoconvex or biconvex. The shoulders are usually tapered and may be asymmetrical. The blade may be straight or slightly convex; the distal end is sharply acute. The hafting area is stemmed and the stem is usually straight but may be tapered. Stem side edges are straight; the basal edge of the stem is usually excurvate but may be straight and may exhibit some of the patinated rind of the parent material from which the point was made.

FLAKING: Some examples are almost as thick as they are broad. The steep, percussion, random flaking used to shape the point may be struck from alternate faces to produce an irregular blade edge outline. Occasional retouch, that appears to have been done by percussion flaking, is evident; but no regular pressure retouch is present.

COMMENTS: The type was named for Bradley County, Tennessee, where it was first recognized. The illustrated specimen is from Ma 48 (Webb and DeJarnette, 1948a). Ten examples were recovered from Zone A at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), eight specimens from the

upper four levels and one each from Levels 7 and 9. One example was recovered from Level 5 at University of Alabama Site Ms 201 (Rock House). Of the 34 examples from Flint River Mound Ma 48 (Webb and DeJarnette, 1948a), 18 were from Zone A and 16 from Zone B. The evidence supports Kneberg's (1956) analysis of early Woodland cultural association since examples are found in early Woodland association at these sites. However, most of the points were found in the upper Woodland stratum, indicating a later Woodland association in the North Alabama area, possibly dating from about 2000 B.C. to sometime A.D.

#### BREWERTON, EARED-NOTCHED, <u>Ritchie</u> (Ritchie, 1961): A-127

GENERAL DESCRIPTION: This is a small trianguloid point with shallow side notches.

MEASUREMENTS: The measurements of four plesiotypes (including the illustrated example) from which descriptions were taken are: maximum, 40 mm.; minimum, 27 mm.; average, 33 mm.: shoulder width—maximum, 18 mm.; minimum, 14 mm.; average, 16 mm.: stem length—maximum, 9 mm.; minimum, 6 mm.; average, 7 mm.: stem width—maximum, 20 mm.; minimum, 16 mm.; average, 18 mm.: thickness—maximum, 6 mm.; minimum, 5 mm.; average 6 mm.

FORM: The blade edges may be straight or excurvate. The crosssection is biconvex. The base may be straight or excurvate. The hafting area is shallowly side notched forming weak auricles.

FLAKING: The blade and hafting area display broad, shallow random flaking. Some broad retouching was used to finish the blade and hafting area edges. The notches were formed by shallow pressure flaking after the blade was finished, thus forming the auricles.

COMMENTS: Brewerton Eared-Notched is one of four Brewerton

types described by Ritchie (Ritchie, 1961). The other three types were listed as Brewerton Eared-Triangular, Brewerton Corner-Notched and Brewerton Side-Notched. Ritchie (Ritchie, 1961) considers the Brewerton complex to be a part of the upper middle and late Archaic horizons in New York and New England. The examples that provided the type description, including the illustrated example, are from the Etowah River Site, Bartow County, Georgia. They were excavated by James Chapman and others and were associated with ceramics at this site. One example was recovered from Level 6, Stratum I at Cave Spring in Morgan County, Alabama (Moebes, 1974).

#### BUZZARD ROOST CREEK, <u>Cambron</u> (Cambron, 1958a): A-89

GENERAL DESCRIPTION: This is a medium to large, bifurcated-stemmed point.

MEASUREMENTS: The measurements of nine cotypes (including the illustrated example) from which features were taken are: length—maximum, 104 mm.; minimum, 61 mm.; average, 82 mm.: shoulder width—maximum, 36 mm.; minimum, 27 mm.; average, 30 mm.: stem width—maximum, 23 mm.; minimum, 17 mm.; average, 19 mm.: stem length—maximum, 12 mm.; minimum, 10 mm.; average, 11 mm.: thickness—eight examples measured 8 mm. and one example measured 7 mm.

FORM: The cross-section is biconvex. The shoulders are usually inversely tapered and the barbs usually expanded. The blade is recurvate with an acute distal end. The stem is usually straight but may be expanded, with straight or incurvate side edges. The basal edge of the stem is usually bifurcated but may be auriculate. Usually all of the stem edges are beveled. Points made of adaptable material are usually patinated.

FLAKING: The flaking used to shape the blade and stem is usually random, broad, and thin; rarely, it is collateral. The secondary flaking along the edges of the blade is long and shallow. The short deep scars left by flaking used to bevel the stem edges may be the





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result of indirect percussion, possibly with some pressure flaking. The flaking used to bifurcate the stem appears to be of the same type as that used to bevel the stem edges.

COMMENTS: The type was named for Buzzard Roost Creek Site (Cambron Site 158), in Colbert County, Alabama, where the illustrated example was recovered. The original description has been revised to exclude those examples with straight or slightly incurvate stem bases, since these examples are classified as Benton Stemmed—to which Buzzard Roost Creek is culturally and typologically related. Examples at Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) appeared in Zone A, Levels 2 through 8, with concentrations in Levels 6 and 7. Three examples were recovered from the middle and upper parts of Stratum II at Flint Creek Rock Shelter (Cambron and Waters, 1961). At Little Bear Creek (Webb and DeJarnette, 1948b) examples were recovered from four-foot through eight-foot levels, with most examples from the six-foot level. This appears to be an early to middle Archaic type found in northern Alabama and southern Tennessee.

#### CAMP CREEK, Kneberg (Kneberg, 1956): A-16

GENERAL DESCRIPTION: This is a small to medium, triangular point with incurvate base.

MEASUREMENTS: The measurements of the illustrated example are: length, 35 mm.; width at base, 16 mm.; thickness, 7 mm.; depth of basal concavity, 2 mm.

FORM: The cross-section is usually biconvex. The blade is usually straight; rarely, incurvate or excurvate. The distal end is acute. The base is incurvate and usually thinned with some fine retouch.

FLAKING: The flaking used to shape the blade and hafting area is random and fairly well executed. Some fine retouch is in evidence along the blade edges. Much of the flint and quartzite used at the Camp Creek Site has poor flaking qualities, resulting in a poorly manufactured point.

COMMENTS: The type was named from the Camp Creek Site (Cambron Site 284) on the Nolichucky River in Greene County, Tennessee. The illustrated specimen is from Zone A of the Camp Creek Site (Lewis and Kneberg, 1957). This example was selected by Cambron from his collection from Camp Creek (Site 284) as typical of the type. Although a minority type in all levels at this site, it is found with burials more frequently than are other types. It comprises about 15% of the stemless points in Level D, but

in other levels does not exceed 6% (Lewis and Kneberg, 1957). The type appears to be a part of the Greeneville complex, found along the western edge of the Appalachians southwest from the Greeneville, Tennessee, area into south-central Alabama. It is usually associated with the early to middle Woodland period. Some other points that appear in this complex are Greeneville, Nolichucky, Triangular Copena, Coosa, and possibly Ebenezer. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) Zone A, four examples were found in Level 1, five in Level 2, one in Level 3 and three in Level 4. This indicates a Woodland association at this site. Most of the examples recovered from Flint Creek Rock Shelter (Cambron and Waters, 1961) were in the lower three-quarters of Stratum I (Woodland). One example was recovered from Level 1 and one from Level 2 at Rock House Shelter in Marshall County, Alabama (University of Alabama Site Ms 201). Ten examples were recovered from Zones A and B (Woodland) and two from Zone D (Archaic) at Flint River Mound (Webb and DeJarnette, 1948a). Kneberg suggests a date of from about 1000 B.C. to 500 A.D.

#### CANDY CREEK, Kneberg (Kneberg, 1956): A-17

GENERAL DESCRIPTION: This is a medium-sized, auriculate point with recurvate edges and incurvate base.

MEASUREMENTS: The illustrated example measures 50 mm. long, 22 mm. wide at widest point of blade, 25 mm. wide at base, 21 mm. wide across hafting constriction, 9 mm. thick, 3 mm. deep at basal concavity.

FORM: The cross-section is biconvex. The blade is recurvate; the distal end, acute. The auriculated hafting area is usually expanded-rounded with an incurvate basal edge. The base is occasionally fluted or thinned. The hafting area edges may be lightly ground, as are most Copena and Copena Triangular points, with which they are frequently associated.

FLAKING: The flaking used to shape the blade and hafting area is usually shallow and random. Fine retouching employed to finish the blade and hafting area edges is usually evident. Although there appears to be no connection between this type and Paleo fluted types, the hafting method must have been very similar. The flutes, when present, appear to be nothing more than results of attempts to thin the base, as they are usually broad and shallow. Copena and Copena Triangular types were probably hafted in about the same manner as Candy Creek points.

COMMENTS: The name is derived from Candy Creek Site in Bradley





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County, Tennessee. The illustrated specimen is a plesiotype from Cambron 53, Morgan County, Alabama. Of 1552 points at Camp Creek, 9 were classified as Candy Creek (Lewis and Kneberg, 1957). One example was recovered from Zone A, Level 1 at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). Two examples, one from Level 2 and one from Level 3, were recovered from Rock House Shelter in Marshall County, Alabama (University of Alabama Site Ms 201). Twenty-three examples from Cambron Site 53 at Bakers Creek in Morgan County, Alabama, were associated with other Woodland types. Kneberg (1956) suggests an age of from 1000 B.C. to 500 A.D.

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#### CAVE SPRING, Cambron (This Paper): A-126

GENERAL DESCRIPTION: The Cave Spring is a small to medium sized, bifurcated point with an expanded stem.

MEASUREMENTS: Seven cotypes from Strata II and III of the Cave Spring type site (Moebes, 1974) provided the following traits and measurements: length, 50-32 mm.; average, 40 mm.: shoulder width, 25-17 mm.; average, 20 mm.: stem width, 17-11 mm.; average, 15 mm.: stem length, 17-10 mm.; average, 13 mm.: thickness, 6-5 mm.; average 6 mm. The illustrated example, from Stratum III, measures 50 mm. in length, 20 mm. in shoulder width, 14 mm. in stem width, 16 mm. in stem length and 6 mm. in thickness. Stratum III points averaged longer and slightly narrower than points from Stratum II.

FORM: The cross-section is usually biconvex but may be plano-convex or rarely median ridged. Shoulders are usually tapered but may be barbed or rarely horizontal. Blade edges are nearly always straight, rarely excurvate. The distal end is usually acute; rarely broad. The hafting area consists of an expanded stem that is shallowly bifurcated. Stem width usually exceeds the stem length.

FLAKING: Broad, shallow, random flaking is in evidence on the stem and blade. Collateral flaking was used to finish the blades of most examples. Fine retouch is present along most blade edges. Long shallow flakes were removed

to thin the base in the basal concavity. One example from Level 5, Stratum II, had diagonal flakes struck from the base in the same tradition as Decatur points. One large flake was struck from each side of each face of the stem forming a shallow notch where the stem joins the blade. These notches and all other stem edges are usually ground. All examples were made of local material and all were patinated.

COMMENTS: The type was named after the Cave Spring Site in Morgan County, Alabama, where examples were recognized during excavation. The illustrated example is from Level 8, Stratum III. Except for the bifurcated stem some examples are similar to some of the Jude points recovered in this excavation. Some of the blades of Cave Spring points are similar to blades of some Big Sandy points recovered at this site. The provenience and associations at this site strongly suggest a late Transitional Paleo-Indian affiliation as well as early Archaic. One example from the Big Sandy Site in Tennessee is shown in Fig. E, Plate 4 (Bell, 1960). One example is illustrated from the Packard Site, Mays County, Oklahoma, Plate VIII, Fig. 3 (Wyckoff, 1964).

#### CLOVIS, (Suhm, Krieger and Jelks, 1954): A-19

GENERAL DESCRIPTION: This is a medium to large, auriculate, fluted point with incurvate base.

MEASUREMENTS: The maximum measurements, in mm., of 59 examples from 44 sites in the Tennessee River valley (Soday and Cambron, n. d.) average: length, 66; width, 27; thickness, 7. The length of the longest example is 154; of the shortest, 35. The weight of the largest is 60 grams; of the shortest, 5 grams. Maximum measurements of fourteen examples of "Fine Clovis" from 13 sites average 59 mm. long, 25 mm. wide, 6 mm. thick. The length of the longest is 109 mm.; of the shortest, 29 mm. The weight of the longest is 27 grams, of the shortest, 3 grams. Texas examples (Suhm, Krieger and Jelks, 1954) range from 69 mm. to 140 mm. in length and 20 mm. to 40 mm. in width. The range of 66 examples from New York State (Ritchie, 1961) is: length, about 25 mm. to about 127 mm.; thickness, 3 mm. to 10 mm. The illustrated example measures 110 mm. long, 31 mm. wide at widest point, 28 mm. wide at base, 27 mm. wide across basal constriction, 9 mm. thick. The longest flute measures 29 mm.; the shortest flute, 28. Flute width is 19 mm.

FORM: The cross-section in the fluted area of the blade is fluted; in the unfluted area, biconvex. The blade is usually excurvate but may be slightly recurvate; the distal end is usually acute but may be broad. The hafting area is auriculate and





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may be pointed or rounded. It is usually parallel, but on a few examples may be expanded or contracted. The basal edge is incurvate. The hafting area is usually fluted on both faces; rarely, on one. Either single or multiple flutes may be present. Most examples are fluted about one-third of the total length, but some may be fluted to near the distal end. Most examples have ground basal edges, which may determine the hafting area.

FLAKING: The flaking is usually random but may be somewhat collateral, leaving a low median ridge. All examples are retouched along the edges; many are very finely pressure flaked. Flutes appear to have been struck by indirect percussion after preparation of a "striking platform" at the base. On the multiple fluted examples, two or more primary flutes appear to have been removed leaving a striking area near the center of the base from which the main flute was struck. After one face was fluted the base was beveled to facilitate striking flutes from the opposite face. This resulted in a basal concavity (Cambron and Hulse, 1961a).

COMMENTS: The point is named for the Clovis, New Mexico, area, where examples were found [Pg 26] in association with mammoth remains. The illustrated example from Hulse Site 54, in Limestone County, Alabama, was selected for its similarity to the type specimens from New Mexico. A date of over 37,000 B. P. was taken from a hearth containing a Clovis point at Lewisville, Texas (Crook and Harris, 1958), but the association has been questioned. The date from the Naco mammoth find in Arizona is 9250 ±300 B. P. Many early-man authorities suggest a date of about 15,000 years ago. This range of dates may indicate long use of the type. The type is distributed over most of North America. Alabama examples are found on early sites with blade tools.

#### CLOVIS, UNFLUTED, Soday and Cambron (This Paper): A-19-a

GENERAL DESCRIPTION: The Unfluted Clovis point is a medium to large, auriculate point with incurvate base.

MEASUREMENTS: The average measurements of samples from seven sites (Soday and Cambron, n. d.) in the Tennessee River Valley are: length, 61 mm.; width, 25 mm.; thickness, 6 mm. Length and weight range as follows: longest, 179 mm.; weight 18 grams: shortest, 46 mm.; weight 4 grams. The detailed measurements of the illustrated example (one of the cotypes) are: length, 59 mm.; width at widest point, 24 mm.; width at base, 21 mm.; maximum thickness, 6 mm.; depth of basal concavity, 4 mm.; length of ground hafting area, 29 mm.

FORM: The cross-section is biconvex. The blade is excurvate and terminates in an acute, or, sometimes, broad distal end. The auriculate hafting area is usually either parallel-pointed or parallel-rounded; rarely, it is expanded with an incurvate basal edge which is usually well thinned. All basal edges are usually ground—sometimes for almost half the length of the point. The shape is similar to, but usually thinner than, that of the Clovis point.

FLAKING: The flaking used to shape the blade and hafting area may be transverse-oblique, random, or collateral with fine retouch along the blade edges. Usually several broad, shallow flakes were removed to thin the basal edge of the hafting area.

COMMENTS: The type was named Unfluted Clovis because of its similarity to the fluted Clovis type. The illustrated example was found weathered out of an early stratum along with a fluted Quad point on Cambron Site 20 in Morgan County, Alabama. Suhm, Krieger and Jelks (1954) suggest the possibility that some Clovis points have no flutes, and that it would be difficult to distinguish these examples from Plainview points. Concerning the fluting on some of the Clovis points at the Naco, Arizona Site, Wormington (1957) says, "In some instances the grooves had been formed by the removal of several smaller flakes." At least one illustrated example appears to be only basally thinned. The Naco find dates between 10,000 and 11,000 years ago. At the Silver Springs Site in Florida, fluted and unfluted Clovis-like points (Neill, 1958) were recovered together from the lowest levels of the site. Alabama examples usually are recovered from fluted point sites. It is suggested that this type may be contemporaneous with Clovis or may have appeared later.

#### CONERLY, Lively (This Paper): A-135

GENERAL DESCRIPTION: The Conerly is a medium to large point with an incurvate base that is thinned. The stem is contracted.

MEASUREMENTS: Nine cotypes from Lively Sites 1, 2, and 4 in the Sardis area of Burke County, Georgia, provided the following measurements and traits: length-maximum, 105 mm.; minimum, 57 mm.; average, 77 mm.: shoulder width-maximum, 31 mm.; minimum. 21 mm.; average, 27 mm.: stem width-maximum, 21 mm.; minimum, 16 mm.; average, 18 mm.: stem lengthmaximum 20 mm.; minimum, 17 mm.; average, 18 mm.: thickness-maximum, 12 mm.; minimum, 9 mm.; average, 11 mm.: basal concavity-maximum, 4 mm.; minimum, 2 mm.; average, 3 mm.

FORM: The cross-section is biconvex, rarely flattened. The shoulders are narrow or lacking. Blade edges may be excurvate or straight and most examples exhibit shallow serrations. The distal end is acute. The stems are contracted with an incurvate and thinned basal edge.

FLAKING: Mostly broad, shallow, random flaking was employed to shape the



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blade and stem. Two examples exhibited oblique transverse flaking on the blades. Short, deep random flaking used to finish the blade edges often resulted in fine serrations. A minimum of flaking was used to finish the sides of the stem. The basal edge of the stem was flaked to form a concavity and then thinned. Local materials were used and all points were patinated.

COMMENTS: The type was named from the Conerly Site near Sardis in Burke County, Georgia. The examples used are from the collection of Matthew Lively of Birmingham, Alabama. Associated artifacts seem to place the type somewhere in the Archaic period. Physical appearance of the Conerly points indicate a similarity to Savannah River points (Bullen, 1968) as well as Guilford points (Coe, 1959) and Arredondo points (Bullen, 1968). A suggested date is somewhere between 7000 and 4000 years B. P.



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#### COOSA, <u>DeJarnette</u> (DeJarnette, Kurjack and Keel, 1973): A-22

GENERAL DESCRIPTION: This is a small to medium-sized, usually thick, point with a short stem.

MEASUREMENTS: The measurements of ten plesiotypes, including the illustrated example, follow (these plesiotypes also served as a basis for description of features): length—maximum, 43 mm.; minimum, 31 mm.; average, 37 mm.: width at shoulder—maximum, 23 mm.; minimum, 18 mm.; average, 20 mm.: stem width—maximum, 13 mm.; minimum, 10 mm.; average, 12 mm.: stem length—maximum, 7 mm.; minimum, 4 mm.; average, 6 mm.: thickness—maximum, 8 mm.; minimum, 5 mm.; average, 7 mm.

FLAKING: Flaking used to shape the blade and stem is usually of a random nature; rarely, it is transverse oblique. On most examples some or all blade edges may be crudely beveled for about one-fourth the width of the blade. The retouch that produces the beveling also produces fine serrations on some examples. Points are usually made of a poor grade local flint in the Coosa River area.

FORM: The cross-section is usually biconvex but may be plano-convex or flattened. The shoulders are usually horizontal or inversely tapered. The blade is excurvate and very finely serrated by secondary flaking; the

distal end is acute. The two examples with plano-convex cross-sections were unmodified on the plano face except for retouch along the edges. The stem is straight or displays straight side edges and excurvate stem base edge. The stem base edge is usually crudely thinned.

COMMENTS: The type was named for the Coosa River area, where sites produced the first examples to be recognized as a type. The illustrated and measured examples came from University of Alabama Site Ce 200 (Coker Ford Site), Cherokee County, Alabama. The main association at this excavated site was with fabric-marked, limestone-tempered sherds and simple-stamped, sand-tempered sherds (DeJarnette, Kurjack and Keel, 1973). Two occurrences of association in a stone mound with plain or brushed limestone-tempered sherds were also noted. One example was recovered from B Zone (Woodland) at Ma 48, Flint River Mound (Webb and DeJarnette, 1948a). Nine examples recovered from the Camp Creek Site in Greene County, Tennessee, were listed as "straight short stemmed" (Lewis and Kneberg, 1957). A date at this homogeneous site of 2050  $\pm 250$  years B. P. was obtained. This evidence suggests a middle Woodland association in Alabama; the type may be a part of the Greeneville complex. This type was associated with Coosa Notched points at the Coosa River sites.

#### COOSA NOTCHED, <u>DeJarnette</u> (DeJarnette, Kurjack and Keel, 1973): A-23

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GENERAL DESCRIPTION: This is a small to medium-sized point, usually thick, with a shallow side notch.

MEASUREMENTS: The four plesiotypes from which this description was drawn range in measurements as follows: length—maximum, 41 mm.; minimum, 36 mm.; average, 39 mm.: shoulder width—maximum, 23 mm.; minimum, 20 mm.; average, 22 mm.: stem width—maximum, 15 mm.; minimum, 11 mm.; average, 13 mm.: stem length—maximum, 9 mm.; minimum, 6 mm.; average, 7 mm.: thickness—maximum, 8 mm.; minimum, 7 mm.; average, 7 mm. The illustrated examples average 35 mm. in length, 17 mm. in shoulder width, 14 mm. in stem width, 7 mm. in stem length and 7 mm. in thickness.

FORM: The cross-section is usually plano-convex but may be biconvex. In most plano-convex examples, the plane face is unmodified except for retouch. The shoulders are inversely tapered. The blade may be excurvate or straight; the blade edges are usually finely serrated. The distal end is acute. Expanded stems are present as a result of shallow side notching on the hafting area. The basal edge is usually excurvate but may be incurvate; it is usually thinned.

FLAKING: Flaking used to shape the blade and hafting area is usually random. Blade edges may be beveled on one or both sides of each face for about one-fourth the width



of the blade. This retouch often results in fine serrations along the blade edges. Notches appear to have been formed by removal of short flakes. The points are made of a poor grade flint in the Coosa River area.

COMMENTS: The type was named as a variant of the Coosa point, which was named for the Coosa River in Alabama, where many examples are found. The measured and illustrated examples are from University of Alabama Coker Ford Site, Ce 200, Cherokee County, Alabama. The type is associated mostly with fabric-marked, limestone-tempered sherds at this site but also with simple-stamped, sand-tempered ware (DeJarnette, Kurjack and Keel, 1973). The type appears to be coeval with Coosa, nine examples of which were recovered from the homogeneous Camp Creek Site and listed by Lewis and Kneberg (1957) as straight short stemmed. A radiocarbon date of 2050  $\pm 250$  B. P. was obtained from this site. Scattered finds are made on Woodland sites in the Tennessee Valley. This evidence suggests a middle Woodland association in Alabama.



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#### COPENA, <u>Webb and DeJarnette</u> (Kneberg, 1956): A-20

GENERAL DESCRIPTION: This is a medium to large, trianguloid point with recurvate edges.

MEASUREMENTS: The illustrated example is, perhaps, slightly shorter than average. It measures 80 mm. long, 22 mm. wide at the widest point of the blade, 22 mm. wide at the base, 21 mm. wide across hafting constriction and 7 mm. thick.

FORM: The cross-section is biconvex. The blade is recurvate as a result of the hafting constriction. The distal end is usually acute but may be acuminate. The hafting area is expanded at the base. The basal edge is usually straight but may be excurvate or occasionally incurvate. It is usually thinned. Light grinding is usually present on the hafting area edges.

FLAKING: The blade and hafting area are shaped by broad, shallow, random or collateral flaking. The removal of these flakes occasionally resulted in a low median ridge. The edges are finely retouched as from pressure flaking. Copena points are usually made of local flint.

COMMENTS: The type was named after the Copena burial mound culture of North Alabama. The term "Copena" is derived from the first three letters of copper and the last three of galena, since copper and galena artifacts are often associated with the burials. The illustrated example is from Hulse Site 17 in

Limestone County, Alabama. This type was illustrated by Webb and DeJarnette (1942). Copena is often called Southern Hopewell. It is a Woodland point, usually found in burial mounds, but occasionally on late Archaic sites in the Tennessee area (Kneberg, 1956). Copena points appeared in the lower levels of the Woodland stratum at Flint Creek Rock Shelter (Cambron and Waters, 1961) and two examples were recovered from Level 3 (pottery) at University of Alabama Site Ms 201, Rock House Shelter, in Marshall County, Alabama, as well as in the Woodland zone at Ma 48, Flint River Mound, in Madison County, Alabama (Webb and DeJarnette, 1948a). One example was recovered from Level 1 at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). The type is found eroding out of several predominately Woodland shell middens in the Wheeler Basin of the Tennessee River. A suggested age is from about 500 B. C. to A. D.

#### COPENA TRIANGULAR, Webb and DeJarnette (Cambron, 1958b): A-20-a

GENERAL DESCRIPTION: This is a medium to large, trianguloid point. The sides of the hafting area are usually parallel.

MEASUREMENTS: The 16 autotypes (including the illustrated example from the type site) which provided the features described below range in measurements as follows: length—maximum, 74 mm.; minimum, 43 mm.; average, 56 mm.: width at distal end of hafting area—maximum, 31 mm.; minimum, 20 mm.; average, 24 mm.: width at base—maximum, 31 mm.; minimum, 19 mm.; average, 25 mm.: thickness—maximum, 10 mm.; minimum, 7 mm.; average, 8 mm.

FORM: The cross-section is nearly always biconvex; rarely, it is planoconvex. Beyond the hafting area, the blade is usually excurvate but may be straight. Some examples may have one excurvate and one straight blade edge. The distal end is usually acute; rarely, acuminate. The sides of the hafting area are usually parallel but may taper from the base; rarely, they are slightly incurvate. The basal edge may be either straight or incurvate to a depth of about 2 mm. All bases are thinned. The hafting area edges of most examples with incurvate bases are lightly ground. Straight-based examples may be ground along the hafting area edges.



FLAKING: Faces display random flaking. Secondary flaking of short, broad nature appears, followed by fine retouch, as from pressure flaking, along the edges. The basal



thinning is usually short, broad and shallow, but in rare examples it may extend approximately the length of the hafting area. Examples are usually made of local materials.

COMMENTS: The type site is Cambron 53 in Morgan County, Alabama, where examples were found eroding out of a shell midden along with Copena points. The illustrated example is from this site. Examples were first illustrated (Webb and DeJarnette, 1942) as Copena types. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) three examples were recovered from Level 1, one example from Level 2 and two examples from Level 6 in Zone A. This is an indication of Woodland and possibly Archaic association. Examples appeared in Woodland strata at Flint Creek Rock Shelter (Cambron and Waters, 1961). One example was recovered from Level 3 (Woodland) at University of Alabama Site Ms 201, Rock House Shelter, in Marshall County, Alabama. At Flint River Mound (Webb and DeJarnette, 1948a) examples were recovered from both Woodland and Archaic strata. These associations indicate that the type originated in Archaic times and continued into the Woodland period.

#### COTACO CREEK, <u>Cambron</u> (DeJarnette, Kurjack and Cambron, 1962): A-24

GENERAL DESCRIPTION: This is a medium to large, straight-stemmed point with rounded shoulders and straight blade edges.

MEASUREMENTS: Measurements of nine cotypes (including the illustrated example) from which features were taken ranged as follows: length—maximum, 83 mm.; minimum, 47 mm.; average, 64 mm.: width at shoulders—maximum, 45 mm.; minimum, 33 mm.; average, 40 mm.: stem width—maximum, 19 mm.; minimum, 14 mm.; average, 16 mm.: stem length—maximum, 14 mm.; minimum, 6 mm.; average, 10 mm.: thickness—maximum, 10 mm.; minimum, 6 mm.; average, 7 mm.

FORM: The cross-section is usually flattened but may be rhomboid. Shoulders may be straight or inversely tapered with weak barbs and are usually rounded. The blade is usually straight, but may be excurvate, finely serrated and, sometimes, beveled on the right side (looking toward the distal end) of one or both faces. One example is smoothed, as from use, on the edges adjacent to the distal end. The distal end is usually apiculate or obtuse; rarely acute. The stem is usually straight; rarely, expanded with straight side edges. The basal edge may be straight or excurvate. Most basal edges are thinned. About half the examples are ground on the basal edge. Occasionally, the side edges of the stem are ground.



FLAKING: This type displays well-controlled, broad, shallow, random flaking. Edge retouch consisting of the removal of fine, short, regular flakes from alternate face edges appears as fine serrations. Sometimes longer, more even flakes were removed in beveling one edge of each face. Some examples were beveled and then serrated. Points were made from Ft. Payne chert, Bangor nodular flint, jasper or other local materials. Some examples made of Ft. Payne chert show considerable patination.

COMMENTS: The type was named for Cotaco Creek in Morgan County, Alabama, where many examples have been recovered. The illustrated example is from Cambron Site 156 (Stone Pipe) in Limestone County, Alabama. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) 10 examples were recovered from Level 2, 4 from Level 3, 2 from Level 4, 2 from Level 5, 4 from Level 6, 2 from Level 7, 1 from Level 9 and 1 from Level 10. These levels—all in Zone A—are Woodland and Archaic. At the University of Alabama Site Ms 201 in Marshall County, Alabama, one example was recovered from Level 3 (Woodland). Flint Creek Rock Shelter (Cambron and Waters, 1961) produced one example from Stratum I (Woodland) and five examples from middle and upper Stratum II (Archaic). Flint River Mound, University of Alabama Site Ma 48 (Webb and DeJarnette, 1948a) produced three examples from Zones A and B (Woodland) and 18 examples from the upper part of zones C and D (Archaic). This evidence suggests a strong late Archaic occurrence on the Tennessee River and continued use in Woodland times, especially at Stanfield-Worley Bluff Shelter. A variation of the type called Cotaco Creek Variant differs from Cotaco Creek in that it is usually smaller, cruder, often narrower and has an acute distal end. The blade of the variant is more apt to be excurvate.

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#### CRAWFORD CREEK, <u>Cambron and Hulse</u> (DeJarnette, Kurjack and Cambron, 1962): A-25

GENERAL DESCRIPTION: This is a medium-sized, stemmed point with a blade that is usually straight. Blade edges are usually finely serrated.

MEASUREMENTS: The 13 cotypes (including the illustrated example) from which features were obtained ranged in measurements as follows: length—maximum, 46 mm.; minimum, 27 mm.; average, 36 mm.: shoulder width—maximum, 30 mm.; minimum, 20 mm.; average, 25 mm.: stem width—maximum, 20 mm.; minimum, 20 mm.; average, 8 mm.: thickness—maximum, 9 mm.; minimum, 5 mm.; average, 7 mm.

FORM: The cross-section is biconvex. Shoulders may be horizontal, slightly tapered or slightly inversely tapered. The blade is usually straight, but several examples have one excurvate edge. The blade edges of nearly all examples are finely serrated. Distal ends are usually acute. The stem is usually straight but several examples have expanded stems. Stem sides may be straight or incurvate. The basal edge of the stem, strongly thinned on most examples, is usually straight but may be excurvate; rarely, it is incurvate. At Flint Creek Rock Shelter (Cambron and Waters, 1961) expanded-stemmed examples appear to pre-date straight-stemmed examples.

FLAKING: Irregular, random flaking shapes the blade and hafting area. Some large flake or blade scars may be evident on one or both faces. Flakes removed to form the stem were usually fairly deep and broad while the flakes removed to thin the base were broad and shallow. Fine, often steep, retouch along the blade edges appears to have been accomplished by pressure flaking. Fine serrations were formed by the removal of small flakes, opposite each other, from each face. The point is usually made of local materials.

COMMENTS: The type was named for Crawford Creek in Morgan County, Alabama. This creek is near the Flint Creek Rock Shelter (Cambron and Waters, 1961) where the type was first found and called Provisional Type Three, small, stemmed, serrated. The illustrated example is from Flint Creek Rock Shelter, Cambron Site 287. The name Crawford Creek was used by Cambron and Hulse (1960b). One example (plate 13e) from the Eva Site is illustrated by Lewis and Lewis (1961) as a unique point. One example was found among other artifacts in association with a Morrow Mountain burial at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). Zone A (Woodland and Archaic) at the Stanfield-Worley Bluff Shelter also yielded two examples from Level 6, two from Level 8 and one from Level 9. At University of Alabama Site Ms 201, in Marshall County, Alabama, one example was recovered from Level 5, one from Level 7 and one from Level 10. Of the 20 examples from Flint Creek Rock Shelter, two were recovered from Stratum I (Woodland) and the other 18 from Stratum II (Archaic), particularly from the lower half. Surface finds are usually made on early Archaic sites. All of the above evidence indicates an early Archaic association which lasted into later Archaic. A suggested date is sometime before 5000 B. C.

#### CUMBERLAND, Kneberg (Kneberg, 1956): A-26

GENERAL DESCRIPTION: This is a medium to large, auriculate, fluted point displaying hafting constriction.

MEASUREMENTS: Thirty-one plesiotypes from 28 sites in the Tennessee River Valley (Soday and Cambron, n. d.) ranged in measurements as follows: longest example, 101 mm.; shortest; 37 mm.; average length, 69 mm.; average width, 23 mm.; average thickness, 8 mm. The illustrated example measures 77 mm. long, 24 mm. across the blade, 19 mm. wide at base, 16 mm. wide at hafting constriction, 7 mm. thick, 2 mm. deep at basal concavity. Length of flutes measured from basal concavity: 1st flute, after flaking of striking platform for 2nd flute, 47 mm.; 2nd flute, 53 mm.

FORM: Cross-section is usually fluted or median ridged on unfluted faces. The blade is recurvate; the distal ends, acute. The auriculate hafting area is usually expanded-rounded with an incurvate basal edge. There is no sharp break between the blade edges and the ground edges of the hafting area. The base may be multiple fluted or single fluted on one or both faces. The main flute or flutes may extend to near the distal end.

FLAKING: Collateral flaking was usually employed to shape the median ridges on the faces. The hafting constriction was sometimes partially worked out before fluting. For multiple fluting, two short primary flutes were removed down

each side of the median ridge after the basal edge had been flaked to the proper degree of pitch to form a striking platform. This resulted in the formation of a striking nipple in the center of the basal edge from which the main flute was struck by indirect percussion. The basal edge was then reflaked to the desired pitch or level to facilitate repeating the fluting procedure on the other face. Flaking of the basal edge was sometimes accomplished after the second main flute had been struck. Fine retouch was occasionally carried out on all side edges. Finally, the hafting constriction was completed (Cambron and Hulse, 1961).

COMMENTS: The type was named for the Cumberland River Valley in Tennessee where many examples were collected on the surface. The illustrated example is from Holland Site 270 in Colbert County, Alabama. Three examples of Cumberland points were recovered from University of Alabama Site Ms 201, in Marshall County, Alabama, in the irregular, rocky, lower part of the lower levels with Big Sandy I, Dalton and other early types. They are found with Clovis points in many surface collections. A Paleo-Indian association, sometime before 10,000 years ago, is suggested.





#### DALTON, COLBERT, Kneberg (DeJarnette, Kurjack and Cambron, 1962):

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GENERAL DESCRIPTION: This is a medium-sized, auriculate point with a rectangular hafting area.

MEASUREMENTS: Eleven cotypes from 11 sites in the Tennessee River Valley (Soday and Cambron, n. d.) range in measurements as follows: longest, 54 mm.; shortest, 33 mm.; average length, 45 mm.; average width, 18 mm.; average thickness, 6 mm. The illustrated example measures 51 mm. long, 15 mm. wide across blade at junction of hafting area, 18 mm. wide at terminal end of hafting area, 19 mm. wide at base, 16 mm. wide across basal constriction, 6 mm. thick. The hafting area is 19 mm. long.

FORM: The cross-section is usually biconvex but may be somewhat rhomboid. Blade edges are usually straight but may be excurvate and may be beveled on one edge and/or serrated. The distal end is acute. The hafting area is more or less rectangular with slightly incurvate, heavily ground side and basal edges. The base is thinned.

FLAKING: The blade and hafting area are shaped by shallow, random flaking. Short, sharp, regular serrations on the blade edges are the result of the wellcontrolled removal, one at a time on alternate faces, of deep, short, flakes. Retouch was accomplished by the removal of broad, shallow flakes followed by very fine flaking which helped form smooth edges. Most examples are made of Ft. Payne chert but other local materials were also used.



#### DALTON, GREENBRIER, Kneberg (DeJarnette, Kurjack and Cambron, 1962): A-29

GENERAL DESCRIPTION: The Greenbrier Dalton is a medium-sized, auriculate point with expanded auricles and well-defined hafting area.

MEASUREMENTS: One hundred fifty-three plesiotypes which may include some Nuckolls Dalton points, since the types had not been separated when the survey was made (Soday and Cambron, n. d.), from 62 sites in the Tennessee River Valley ranged from maximum length of 69 mm. to a minimum length of 28 mm. The average length was 47 mm.; the average width, 21 mm.; average thickness, 6 mm. The illustrated example measured in length, 48 mm.; in width of blade at junction of hafting area, 18 mm.; in width at terminal end of hafting area, 19 mm.; in width at base, 21 mm.; in length of hafting area, 16 mm.; in width of basal constriction, 18 mm.; in thickness 6 mm.

FORM: The cross-section is usually biconvex but may be rhomboid. The blade is usually excurvate but may be straight. Blade edges may be beveled on one edge and/or serrated. The distal end is acute. The hafting area, usually well defined by a sharp change in the contour of the edge of the point at the junction of the blade, is auriculated with expanded-rounded, rarely expanded-pointed auricles. Side and basal edges of the hafting area are usually incurvate and ground. The basal edge is thinned, sometimes fluted.



COMMENTS: The type was named for the Greenbrier area of Kentucky Lake. The illustrated example is from the Quad Site, Cambron 84, Limestone County, Alabama. Forty-one examples were recovered from the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) excluding those found in the 100-foot trench. Most of the examples came from the trenches, and were present in Levels 7 through 15. Zone C produced two examples. One example was found in each of the following levels of Zone D: 1, 2, 5, 6, 12. At University of Alabama Site Ms 201, in Marshall County, Alabama, one example was recovered from Level 10 and two from Level 11. A radiocarbon date of 9640 ±450 years B. P. from Zone D material at the Stanfield-Worley Bluff [Pg 39] Shelter suggests a Transitional Paleo-Indian association, as do associations of surface finds in





Alabama with other early materials. An example was found in association with Quad, Wheeler, Big Sandy I and Stanfield Triangular points, a fluted midsection and uniface tools at the Quad Site (Cambron and Hulse, 1960a). A variant of the type called Nuckolls Dalton (by Kneberg, for the Nuckolls Site in Kentucky Lake, Tennessee) differs from Greenbrier Dalton in that it has either parallel-rounded or, rarely, parallel-pointed auricles. Forty-six examples of this variant were recovered from the Stanfield-Worley Bluff Shelter. No significant difference in distribution by levels was noted between any of the Dalton types at this site. Examples with straight hafting area sides are similar to Meserve points (Suhm, Krieger and Jelks, 1954).

#### DAMRON, Cambron (This Paper): A-83

GENERAL DESCRIPTION: The Damron point is a medium-sized point with shallow side notches.

MEASUREMENTS: Eleven cotypes, including the illustrated example, provided traits and the following measurements: length—maximum, 72 mm.; minimum, 37 mm.; average, 49 mm.: shoulder width—maximum, 32 mm.; minimum, 24 mm.; average, 27 mm.: stem width—maximum, 29 mm.; minimum, 19 mm.; average, 24 mm.: stem length—maximum, 11 mm.; minimum, 7 mm.; average, 9 mm.: thickness—maximum, 10 mm.; minimum, 7 mm.; average, 8 mm.: notch width—maximum, 8 mm.; minimum, 7 mm.; average, 7 mm.: notch depth—maximum, 5 mm.; minimum, 2 mm.; average, 3 mm.

FORM: The cross-section is usually biconvex but may be flattened or, rarely, plano-convex. Shoulders are tapered. The blade may be excurvate or straight. Some examples have one excurvate and one straight blade edge. Blade edges may be finely serrated. The steepness of some blade edges gives a near-beveled appearance. The distal end is acute. The hafting area is notched with shallow, narrow, side notches situated near the basal edge. Sides of the expanded stem are incurvate. The basal edge is usually excurvate but may be straight. Rarely, it is ground; usually it is beveled on one or both faces.

FLAKING: Fairly deep random flaking shapes the faces of the blade and hafting area. Fine, regular retouch finishes the blade edges, often resulting in fine serrations. Notches, formed by the removal of one or more flakes, are found near the basal edge. Short, deep flakes were removed in order to bevel the basal edge. Unbeveled faces are thinned. Local materials were used and all examples are patinated.

COMMENTS: The type was named from the Damron Site (Cambron Site 47), Lincoln County, Tennessee, where many examples were recovered. The illustrated example is from the Quad Site (Cambron Site 84) in Limestone County, Alabama. The type has been previously classified locally as Upper Valley Side Notched. One example was recovered from Level 8 of Zone A (an Archaic level) at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). At Flint Creek Rock Shelter (Cambron and Waters, 1961) three examples were recovered from the middle Archaic Stratum and one from the upper Woodland Stratum. One example was recovered from Zone B (a Woodland level) at the Flint River Mound (Webb and DeJarnette, 1948a). The appearance of the type in surface collections from pre-shellmound sites in the Wheeler Basin of the Tennessee River indicates an early Archaic association. An association with some part of the Archaic period is suggested.

#### DECATUR, Cambron (Cambron, 1957): A-31

GENERAL DESCRIPTION: This is a small to medium-sized point that is corner-notched and beveled with diagonal flakes struck from the base and basal sides of the stem forming an incurvate base.

MEASUREMENTS: Sixteen autotypes from sites near Decatur, Alabama, provided both measurements and features. Measurements ranged as follows: length—maximum, 54 mm.; minimum, 29 mm.; average 42 mm.: shoulder width—maximum, 38 mm.; minimum, 22 mm.; average, 28 mm.: stem width—maximum, 25 mm.; minimum, 13 mm.; average, 28 mm.: stem length—maximum, 12 mm.; minimum, 4 mm.; average, 7 mm.: thickness—maximum, 7 mm.; minimum, 5 mm.; average, 6 mm. The illustrated example measures in length, 40 mm.; in shoulder width, 23 mm.; in stem width, 17 mm.; in stem length, 5 mm.; in thickness, 5 mm.

FORM: The cross-section is usually rhomboid; rarely, biconvex. The shoulders are usually tapered with expanded barbs but, rarely, may be straight, with or without expanded barbs. The blade may be straight or incurvate; rarely, recurvate. Blade edges are usually beveled on one edge and serrated. The distal end is acute. The corner notches range in width from about 3 mm. to 7 mm. and in depth from about 4 mm. to 7 mm. The expanded stem usually has straight side edges; the basal edge is usually incurvate but may be straight. Rarely, it is excurvate. It is usually thinned and nearly always ground.





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FLAKING: Most examples exhibit broad, shallow flaking on the faces. Blade edges are serrated, either as a result of retouch accomplished by alternate removal of deeper flakes from opposite faces or as a result of beveling. The bevel angle varies from steep to a bevel that extends to near the center of the blade and may overlap from near halfway the blade length to the distal end. Most examples have one or more flakes struck from the basal corners of the stem to near the center of the basal edge. On many examples, the same type of flake may be struck from the basal corners of the stem up the sides of the stem towards the shoulders. This flaking tends to flatten the base and sides of the stem. Stem edges are finished by grinding.

COMMENTS: The type was named for the Decatur, Alabama, area where it was first recognized. The illustrated example is from Hulse Site 32 (Stone Pipe) Limestone County, Alabama. The type was described by Bell (1960). Two examples were recovered, one from upper half of Stratum II and one from the center third of Stratum II (Archaic) at Flint Creek Rock Shelter (Cambron and Waters, 1961). The type was not found in excavations in other early strata away from the Tennessee River. Local examples are found near the river on pre-shellmound sites. This evidence suggests an early Archaic association.

#### EBENEZER, <u>Kneberg</u> (This Paper): A-107

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GENERAL DESCRIPTION: The Ebenezer is a small, short-stemmed, point with rounded stem and excurvate blade edges.

MEASUREMENTS: The illustrated example, which provided the features, is 38 mm. long, 19 mm. in shoulder width, 15 mm. in stem width, 6 mm. in stem length and 7 mm. thick.

FORM: The cross-section is biconvex. Shoulders are narrow and are usually tapered but may be straight. The blade is usually excurvate with an acute distal end. The stem is short and rounded.

FLAKING: The blade and stem are shaped by broad, shallow or deep, random flaking. Short, regular retouch finishes the blade edges. Use of a rather poor grade of local flint at the Camp Creek Site (Lewis and Kneberg, 1957) may account for the relatively crude flaking on examples from this site.

COMMENTS: The Ebenezer type was illustrated as Rudimentary Stemmed at Camp Creek in Greene County, Tennessee (Lewis and Kneberg, 1957) where the illustrated example was recovered (Cambron Site 284). Fifty-eight examples were recovered scattered through the midden. The type was described as being "associated with early Woodland artifacts on other upper eastern Tennessee sites". A

radiocarbon date of  $2050 \pm 250$  B. P. was obtained from the homogeneous midden at Camp Creek. One example was recovered from the middle of Stratum I (Woodland) at Flint Creek Rock Shelter (Cambron and Waters, 1961). At Flint River Mound Ma 48 (Webb and DeJarnette, 1948a) in the Woodland zone, one example was recovered from Zone A and one from Zone B. The Ebenezer point was dominant at the Rankin Site on French Broad River (headwaters of Tennessee River) where most of the ceramics were sand-tempered. This evidence would place the type in early to late Woodland association with a suggested date of from about 2000 years ago to possibly 1500 years ago or some part thereof. The type is similar to some illustrated examples of Cliffton points from Texas (Suhm, Krieger and Jelks, 1954), which are estimated to be near the same age.

#### ECUSTA, Harwood and Osborne (Harwood, 1958): A-32

GENERAL DESCRIPTION: The Ecusta is a small, triangular, side-notched point with serrated and beveled blade edges.

MEASUREMENTS: The illustrated example measures 37 mm. long, 24 mm. wide at the base, and 7 mm. thick.

FORM: The cross-section is rhomboid. The shoulder barbs are weak, and are usually the result of beveling of the blade. The blade is straight, and beveled on one side of each face and, usually, serrated. The distal end is acute. The sides of the hafting area display shallow side notches. The base of the hafting area is usually broad and rounded but may be straight or incurvate. Striking of diagonal flakes from the basal edge on some examples results in flattening of the base.

FLAKING: This is a well-made point, shaped by random, percussion flaking and retouched with serrations along the blade edges.

COMMENT: The point was named "Ecusta" since this is the Cherokee Indian name for Davidson River, where the type was first recognized at the Osborne Site in Transylvania County, North Carolina (Harwood, 1958). The illustrated homotype is from Kyle Hardin's Baker 1 Site in Blount County, Alabama, where it was recovered along with four other examples. One example (No. 1, p. 42) was illustrated by Lewis (1961) from Guntersville Basin in North Alabama. Other examples were found on the surface in North Alabama, Kentucky Lake in Tennessee, and Madison County, North Carolina. The Ecusta is similar to Decatur and Plevna points inasmuch as all of these types are notched, beveled and may have diagonal flakes struck from the base. Plevna and Decatur points from Kyle Hardin's Baker 1 Site were very similar in



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workmanship to Ecusta points from this site. All examples are found with early Archaic materials. An Alabama pre-shellmound association is suggested, with a probable date prior to 5000 years ago.

#### ELK RIVER, Cambron (DeJarnette, Kurjack and Cambron, 1962): A-33

GENERAL DESCRIPTION: This is a medium to large, stemmed point with oblique-horizontal flaking on the blade faces.

MEASUREMENTS: Measurements of the 15 paratypes (specimens of the original series including the holotype) range as follows: length—maximum, 92 mm.; minimum, 48 mm.; average, 72 mm.: shoulder width—maximum, 38 mm.; minimum, 30 mm.; average, 31 mm.: stem width—maximum, 19 mm.; minimum, 15 mm.; average, 17 mm.: stem length—maximum, 17 mm.; minimum, 11 mm.; average, 14 mm.: thickness—maximum, 11 mm.; minimum, 8 mm.; average, 9 mm. The illustrated example measures 128 mm. in length; 27 mm. in shoulder width; 20 mm. in stem width; 14 mm. in stem length; 9 mm. in thickness.

FORM: The cross-section is usually biconvex; rarely, plano-convex. The shoulders are usually tapered and may be expanded. The blade is excurvate; the distal end, acute. The hafting area is usually straight-stemmed but the stem may be expanded or contracted with a straight or, rarely, excurvate basal edge. One example could be described as having shallow side notches. About one-fourth of the original series have lightly ground bases.

FLAKING: One or (usually) both faces are shaped by oblique-transverse flaking. Retouch is minimized since the oblique flaking, in most cases, carries from the blade edges to near the center of the face and occasionally almost forms a median ridge. The transverse-oblique flaking is similar to that seen on the faces of some Angostura, Scotts-bluff and Brown Valley points and Cape Denbigh artifacts illustrated by Wormington (1957). This flaking technique was also used on some late neolithic Danish daggers (Bordaz, 1959).

COMMENTS: The point was named for the Elk River Site on Elk River in Limestone County, Alabama. The illustrated example is from Hulse 38E (Quad Site), Limestone County, Alabama. The type was listed in the depth distribution charts at Flint Creek Rock Shelter (Cambron and Waters, 1961) in the middle-Archaic stratum (10 examples) and Woodland stratum (two examples). An illustration was listed as Provisional Type 2, expanded stem. Two examples of Elk River points from Perry Site, Lu 25, on Seven Mile Island in Lauderdale County, Alabama, were used to illustrate the high art of flint flaking (Webb and DeJarnette, 1942). Examples from Levels 8 and 9, Zone A, at Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) indicate a late Archaic association. Examples were recovered from Zones A, B, C, and D at Flint River Mound, Ma 48 (Webb and DeJarnette,

1948a). At Little Bear Creek, Ct 8 (Webb and DeJarnette, 1948b) six examples were recovered from the five-foot level and one from the six-foot level. This again indicates a middle- to late-Archaic type. Since most of the associations in the North Alabama—South Tennessee area are within the shellmound period, this type very likely appeared before 5000 years ago. It is probably not associated with the western point types with similar flaking.

#### ELORA, <u>Cambron</u> (Cambron and Hulse, 1960b): A-34

GENERAL DESCRIPTION: The Elora is a medium to large, thick, broad, stemmed point with unfinished base.

MEASUREMENTS: The 12 cotypes (including the illustrated example) which provided the features range in measurements as follows: length—maximum, 71 mm.; minimum, 53 mm.; average, 61 mm.: shoulder width—maximum, 57 mm.; minimum, 35 mm.; average, 43 mm.: stem width—maximum, 22 mm.; minimum, 20 mm.; average, 20 mm.: stem length—maximum, 15 mm.; minimum, 8 mm.; average, 12 mm.: thickness—maximum, 12 mm.; minimum, 7 mm.; average, 10 mm.

FORM: The cross-section is biconvex. Shoulders are usually rounded and tapered but may be horizontal or, rarely, expanded. The blade is usually straight; rarely, excurvate or incurvate. Some examples are finely serrated as a result of retouching along the blade edges. The distal end is usually acute; rarely, broad. The hafting area consists of a thick, contracted stem with side edges that are straight or incurvate and a basal edge that is usually straight but may be







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excurvate. The crudely finished stem base found on most examples often has an intentionally broken appearance. Removal of one or more flakes usually results in a relatively broad, flattened basal edge.

FLAKING: The flaking used to form the blade and hafting area is broad, shallow or deep, and random. Fine, sometimes steep, regular retouching along the blade edges accomplished by removal of alternate flakes from each face sometimes results in fine serrations. The shoulder and side edges of the stem may show some secondary flaking. The basal edge is usually unfinished but may show a little retouch as broad flakes were struck off or perhaps intentionally broken off to form a more or less flat stem base edge.

COMMENTS: The type was named from the Elora area of Lincoln County, Tennessee, where several sites have produced many examples of the type. The illustrated example as well as the cotypes are from Cambron Site 48 in this area. A variant classified locally as Elora Serrated is slightly larger than Elora and is strongly serrated by the alternate removal of flakes from opposite faces of the point. The Elora point was categorized Provisional Type 7, large, thick, stemmed, by Cambron and Waters (1961). In Zone A at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) 2 examples were recovered from Level 1, 1 from Level 2, 2 from Level 3, 1 from Level 6, 1 from Level 9. One example of Elora Serrated was recovered from Level 1 in Zone A and one from Level 1 in Zone D at the Stanfield-Worley Bluff Shelter. A serrated example was also recovered from Level 8 at University of Alabama Site Ms 201 in Marshall County, Alabama. At Flint Creek Rock Shelter (Cambron and Waters, 1961) two examples of Elora were recovered from Stratum I (Woodland) and 3 examples from upper Stratum II (Archaic). At Little Bear Creek,



Site Ct 8 (Webb and DeJarnette, 1948b) two examples were recovered from the 4-foot level, one from the 5-foot level and one from Zone B, about the 4-foot level (Archaic). At Flint River, Mound Ma 48 (Webb and DeJarnette, 1948a) two examples were recovered from Zone D (Archaic). This evidence suggests a middle-to-late, shellmound Archaic and possibly a very early Woodland association. Elora Serrated may be slightly older than Elora. A date of 5000 to 3000 years ago, or some part thereof, is suggested. Hulse suggests that Elora Serrated may be a type distinct from Elora.

#### EVA, Kneberg (Kneberg, 1956): A-35

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GENERAL DESCRIPTION: The Eva is a medium to large, basally notched point with an excurvate or recurvate blade.

MEASUREMENTS: The 10 plesiotypes which supplied the features (the illustrated example is included) range in measurements as follows: length—maximum, 96 mm.; minimum, 48 mm.; average, 61 mm.: shoulder width—maximum, 39 mm.; minimum, 25 mm.; average, 33 mm.: stem width—maximum, 26 mm.; minimum, 11 mm.; average, 18 mm.: stem length—maximum, 7 mm.; minimum, 5 mm.; average, 6 mm.: thickness—maximum, 10 mm.; minimum, 8 mm.; average, 9 mm.

FORM: The cross-section is biconvex. Shoulders are simple-barbed and inversely tapered. The blade is usually excurvate but may be recurvate. The distal end is acute. Basal notches range from 1 to 7 mm. deep and average 4 mm. deep. The notch width range is from 3 to 9 mm.; notch width average is 6 mm. Retouching often leaves the stem longer than the barbs. The stem is either straight or contracted. Stem side edges may be straight or excurvate. The stem base is usually straight but may be excurvate; it is usually thinned by retouching and may be lightly ground.

FLAKING: The blade and hafting area are shaped by strong, broad, shallow, random flaking. The blade face is thinned from edge to center by broad secondary flaking. Some fine retouch appears along the blade and hafting area edges. The basal notches are formed perpendicular to the base by removal of one broad flake from opposite faces on each side of the stem. Retouching often shortened the barbs; in some cases a barb was almost completely worked away. No retouch was noted in the notches.

COMMENTS: The point is named after the Eva Site in Benton County, Tennessee. The illustrated example is among the 10 measured plesiotypes from the Plevna Site, Cambron 79, in Madison County, Alabama. Lewis and Lewis (1961) describe most examples from the Eva Site as having recurvate blade edges and sometimes displaying barbs longer than the stems. Examples of the type were in association at the Eva Site with materials dated by radiocarbon method at 7200 B. P. Lewis and Lewis (1961) also describe a smaller, narrower variant found at later levels as Eva II. Four examples of the Eva type were recovered from Zone A—one each from Levels 3, 7, 9 and 11—at



Stanfield-Worley Bluff Shelter in Colbert County, Alabama (DeJarnette, Kurjack and Cambron, 1962). Four examples were recovered from the bottom of Stratum II (Archaic) at Flint Creek

Rock Shelter (Cambron and Waters, 1961). At Little Bear Creek Site in Colbert County, Alabama (Webb and DeJarnette, 1948b), one example was recovered from the 8-foot level (below the shellmidden). Numerous surface finds in North Alabama also indicate an early Archaic association. The 7200 B. P. date at Eva Site appears acceptable.

#### EVANS, Ford and Webb (Ford and Webb, 1956): A-36

GENERAL DESCRIPTION: This is a medium-sized point which usually displays an expanded stem and a notch flaked into each blade edge above the shoulders.

MEASUREMENTS: The illustrated example measures 60 mm. in length, 33 mm. in width, 20 mm. in stem width, 11 mm. in stem length, 11 mm. in thickness.

FORM: (The following description is taken from the illustrated example, an example from Cambron Site 14, Limestone County, Alabama, and from illustrations and description by Bell, 1958): The cross-section is biconvex. Shoulders may be horizontal, inversely tapered, or tapered. The blade is usually excurvate but may be straight; blade edges are deeply notched from the shoulders to about one-third to nearly one-half the length of the blade. The distal end may be acute or broad. The hafting area may include the notched portion of the blade as well as the stem. The stem is usually expanded but may be straight or, rarely, contracted. The side edges of the stem may be straight or incurvate and the basal edge, straight or excurvate. The excurvate stem base edge is ground on the Alabama example.

FLAKING: Broad, irregular, random flaking appears on the blade and stem. Some retouch accomplished by the removal of small, fairly deep flakes is found along the blade edges. Deep side notches are the result of removal of a broad, deep flake from the edges of opposite faces of the blade. Occasionally, limited retouch was employed to broaden the notches after the main notching flake had been struck.

COMMENTS: The point was named after examples found at Poverty Point Site in Louisiana. The illustrated example is from Holland Site 123 in Franklin Parish, Louisiana. Bell (1958) gives the distribution as the northern half of Louisiana, the adjacent portions of eastern Texas, southern Arkansas and western Mississippi. On the basis of radiocarbon dates from Poverty Point and the Jaketown Site, Ford and Webb (1956) suggest an age of around 2600 to 2800 years ago. Points of similar workmanship but with three or more notches along each blade edge are found in North Alabama and classified as Provisional Type 10, eccentric notched (Cambron and Waters, 1961; Cambron and Hulse, 1960b). These points may or may not be related to the Evans type.

#### FAIRLAND, <u>Kelley</u> (Suhm, Krieger and Jelks, 1954): A-137

GENERAL DESCRIPTION: This is a small to medium-sized point with an expanded stem, incurvate base and random flaking.

MEASUREMENTS: Eight cotypes from sites in South Calhoun County and North Talladega County, Alabama provided traits and the following measurements: length—maximum, 52 mm.; minimum, 41 mm.; average, 45 mm.: shoulder width—maximum, 31 mm.; minimum, 26 mm.; average, 28 mm.: stem width—maximum, 28 mm.; minimum, 21 mm.; average, 26 mm.: stem length—maximum, 13 mm.; minimum, 10 mm.; average, 12 mm.: thickness—maximum, 13 mm.; minimum, 8 mm.; average, 9 mm. The illustrated example measures 46 mm. long, 31 mm. wide at the shoulders, 27 mm. wide across the stem, 12 mm. in stem length, and 9 mm. thick.

FORM: The cross-section is usually flattened but may be biconvex. Shoulders are inversely tapered. The blade may be excurvate or straight. The distal end is usually acute but may be broad. The stem is expanded and the side edges may be ground. The basal edge is incurvate and thinned.

FLAKING: Because of the poor grade of material used, the shallow, random flaking which shapes the blade and stem is, in most cases, poor. Some blade edges may be finely serrated.

COMMENTS: The type was named from the Lehmann Rock Shelter in Texas by J. Charles Kelley (1947b) and was described by Suhm and Krieger who also give an estimated age of about 1000 B. C. to 500 A. D. or part thereof (Suhm, Krieger and Jelks, 1954). Suhm and Krieger list the Fairland type as characteristic of Central Texas. Occasional examples appear in collections throughout Oklahoma and elsewhere (Bell, 1960). Four of the eight measured examples are made of quartzite and four are made of a poor grade of flint The illustrated example is made of quartzite. All examples, including 39 that were

broken and not measured, are from the collection of Eugene L. Grace of Anniston, Alabama. They were recovered from late Archaic and early Woodland sites.





FLINT CREEK, <u>Cambron</u> (Cambron, 1958b): A-37

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GENERAL DESCRIPTION: The Flint Creek is a medium to large, finely serrated, stemmed point.

MEASUREMENTS: Examples which provided the features (including the illustrated example) ranged in measurements as follows: length—maximum, 76 mm.; minimum, 39 mm.; average, 55 mm.: shoulder width—maximum, 29 mm.; minimum, 18 mm.; average, 23 mm.: stem width—maximum, 19 mm.; minimum, 13 mm.; average, 16 mm.: stem length—maximum, 15 mm.; minimum, 7 mm.; average, 11 mm.: thickness—maximum, 12 mm.; minimum, 7 mm.; average, 10 mm.

FORM: The cross-section is biconvex. Shoulders are usually inversely tapered but may be tapered or, occasionally, horizontal. The blade is excurvate and is usually finely serrated; the distal end is acute. The stem, usually formed by corner or side notching, is expanded. The side edges of the stem are usually excurvate; rarely, straight. The stem base edge is usually excurvate but may, on rare examples, be straight. It may be thinned or unfinished with rind still in evidence. Several examples were lightly ground on the stem base edge.

FLAKING: The thick blade is shaped by broad, random flaking. Deep, narrow, and often long flakes were removed from the blade edges to shape and finish the blade and to form fine regular serrations. These flakes were removed alternately from opposite faces, making the serration projections rather sharp. Broad, deep flakes, struck from the basal corners or sometimes the sides of the hafting area, shape the stem. Some of the straighter stemmed examples are reworked along the stem side edges, but usually no retouch is noted in the notches. Basal edges are often slightly thinned by broad shallow flaking.

COMMENTS: The type was named from Cambron Site 78 on Flint Creek in Morgan County, Alabama, where numerous examples were first collected. The illustrated example is one of several from the predominantly Copena site, Cambron Site 53, in Morgan County, Alabama. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), 69 examples were recovered from Zone A, Levels 1 through 8. Of these 69 examples, 40 per cent were from Levels 3 and 4, indicating a climax in the late Archaic—early Woodland times. One example each was recovered from Levels 4, 5 and 7 at University of Alabama Site Ms 201 in Marshall County, Alabama. At Flint

Creek Rock Shelter (Cambron and Waters, 1961), ten examples were recovered from Stratum I (Woodland) and one from Stratum II (Archaic). The Flint Creek type was important at Flint River Mound (Webb and DeJarnette, 1948a), where most examples were found in upper Zone C (Archaic) and lower Zone B (Woodland). This is a late Archaic to early Woodland type. The type appears to be related to Dustin points illustrated by Ritchie (1961). Similar examples may be recognized among points illustrated as Palmillos by Suhm, Krieger and Jelks (1954), who give the distribution as from East Texas across the state to the Trans-Pecos area, and from the upper Brazos and Trinity valleys to the central and eastern coastal plain. The distribution extends southward in Mexico to southern Tamaulipas. The type is associated with late Archaic and early Woodland cultures. The Dustin points are from Michigan and from the Lamoka Lake Site, Schuyler County, New York.

#### FLINT RIVER SPIKE, <u>Cambron</u> (DeJarnette, Kurjack and Cambron, 1962): A-38

GENERAL DESCRIPTION: This is a small to medium, narrow, lanceolate point.

MEASUREMENTS: Fifteen cotypes (including the illustrated example) from University of Alabama Site Ma 48 (Webb and DeJarnette, 1948a) range in measurements as follows: length—maximum, 58 mm.; minimum, 39 mm.; average, 50 mm.: width—maximum, 21 mm.; minimum, 12 mm.; average, 16 mm.: thickness—maximum, 11 mm.; minimum, 7 mm.; average, 9 mm.

FORM: The cross-section may be median ridged or biconvex. The blade is usually excurvate, but may be straight with an acute distal end. The base is usually rounded, but an occasional example may display a straight, unfinished basal edge. The hafting area includes the basal area from the base to the widest point of the blade, which is usually less than half way from base to distal end. The base is usually thinned.

FLAKING: The blade and hafting area were shaped by random percussion flaking. Many of the flakes are rather deep. Some retouch appears along the edges, especially along the blade edges, of about half the examples.

COMMENTS: The type was named after Flint River Mound at the mouth of Flint River in Madison County, Alabama (Webb and DeJarnette, 1948a), where the illustrated example was recovered. Of the 41 examples from this site, 24 were from upper Zone A (Woodland), 14 from lower Zone A and Zone B (Woodland) and three from upper Zone C (Archaic). Two examples were recovered from Level 3 (Woodland) at University of Alabama Site Ms 201 in Marshall County, Alabama. Six examples (excluding material from the 100foot trench) were recovered at the Stanfield-Worley Bluff Shelter (DeJarnette,



Kurjack and Cambron, 1962): two examples were recovered from Level 1, Zone A, one each from Levels 2, 3 and 6, Zone A, and one from Level 1 of Zone B. Flint River Spike and Bradley Spike appear to be of late Woodland cultural association and may be typologically related. Unlike



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Bradley Spike, however, Flint River Spike has no stem and may be retouched along the blade edges. A late Woodland association is suggested for Flint River Spike in North Alabama.

#### FORT ANCIENT, <u>Bell</u> (Bell, 1960): A-39

GENERAL DESCRIPTION: This is a small to medium, thick, triangular point that may be serrated.

MEASUREMENTS: Bell (1960) lists the length as from about 30 mm. to 50 mm. and the width as about 15 mm. or less. The illustrated example measures 32 mm. long, 14 mm. wide, and 6 mm. thick.

FORM: The cross-section is usually biconvex. The blade is usually straight but may be slightly incurvate near the distal end or, rarely, excurvate. Blade edges may be serrated. (Serrated examples are more readily identified.) The distal end may be keenly acute or acuminate. The base may be straight or excurvate. It is usually thinned and may be slightly expanded.

FLAKING: The point displays random flaking which is usually broad and fairly deep, with some fine retouch near the distal end. The serrations on the serrated examples are the result of the removal of broad regular flakes from the edge of alternate faces, leaving an irregular pattern along the blade edges. Occasionally the basal edge was retouched as well as thinned by removal of broad flakes.

COMMENTS: "The Fort Ancient points are associated with the Feurt Focus of the Fort Ancient aspect of the Ohio Valley. The Fort Ancient point has been recognized among archaeologists, both amateur and professional, in the Ohio region for a number of years." (Bell, 1960). The illustrated example is from Cambron Site 27, Limestone County, Alabama. This Woodland-Mississippian site has produced Fort Ancient, Madison, Jacks

Reef Corner Notched, Knight Island, Swan Lake and Copena points. One Fort Ancient point was recovered from Level 1 at University of Alabama Site Ms 201 in Marshall County, Alabama. Bell (1960) dates the type at some time from about 1200 A. D. to 1600 A. D. Morgan (1952), in summarizing the prehistoric Indian cultures of the Ohio region, says of the Fort Ancient aspect of the Mississippian period: "Their trait assemblage is indicative of a people with a mixed cultural background, both Woodland and Mississippi elements being involved. White trade goods at one site show that some of these people were probably still in existence as late as the last quarter of the seventeenth century."

#### FRAZIER, Kneberg (Kneberg, 1956): A-40

GENERAL DESCRIPTION: This is a medium-sized, narrow, triangular point with a well thinned basal edge.

MEASUREMENTS: "In size these points range from 2 to 2<sup>3</sup>/<sub>4</sub> inches." (Bell, 1960.) Alabama examples are slightly shorter. Measurements of 4 plesiotypes, including the illustrated example, are: length—maximum, 51 mm.; minimum, 45 mm.; average, 49 mm.: width at base—maximum, 25 mm.; minimum, 21 mm.; average, 23 mm.: thickness—maximum, 8 mm.; minimum, 6 mm.; average, 7 mm. Basal depth on one incurvate base example was 1 mm.

FORM: The cross-section is flattened. The blade is excurvate. A slightly serrated appearance is found on some examples as the result of retouching along the blade edge. The distal end is acute. The hafting area includes an undetermined basal portion of the blade which is more or less parallel along the basal edges. The basal edge is usually straight but may be slightly incurvate; it is thinned and, rarely, ground.

FLAKING: Large shallow flakes, removed to shape the faces, were followed by shorter deeper flaking along all edges. The secondary flaking along the basal edge is usually broader and longer than that used along the blade and hafting area edges. Some retouching along the blade edges results in a finely serrated appearance.

COMMENTS: This point is named after the Frazier Site in Benton County, Tennessee. The illustrated example is from Cambron Site 389 in Limestone County, Alabama. No examples were recovered from control sites in the Tennessee Valley. The type is comparatively rare in Alabama and the cultural association is not known, but it usually appears in surface collections from early Archaic sites. Kneberg (1956) suggests a

late Archaic association in Tennessee and a "probable time period from about 1500 B. C. to early centuries A. D." The point is similar to Paint Rock Valley points but is narrower. The base is not as incurvate and the flaking is usually better controlled.

#### GARTH SLOUGH, <u>Cambron</u> (This Paper): (Formerly classified as Catahoula)

GENERAL DESCRIPTION: This is a small to medium, expanded-barb point. Barbs are prominent and usually obtuse.

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MEASUREMENTS: The measurements of eight plesiotypes (including the illustrated example) from which descriptions were drawn are: length—maximum, 47 mm.; minimum, 33 mm.; average, 40 mm.: shoulder width—maximum, 33 mm.; minimum, 26 mm.; average, 29 mm.: stem width—maximum, 13 mm.; minimum, 8 mm.; average, 11 mm.: stem length—maximum, 7 mm.; minimum, 5 mm.; average, 5 mm.: thickness—maximum, 7 mm.; minimum, 4 mm.; average, 6 mm.

FORM: The cross-section is biconvex. The shoulder barbs are usually expanded and broad; the barb ends may be obtuse or straight. The blade is usually incurvate; rarely, recurvate or straight. Most examples are finely serrated with an acute distal end. The stemmed hafting area is formed by diagonal notches. The stems of the measured examples are straight. The base may be straight or excurvate, thinned, and may be ground on some examples.

FLAKING: Remnants of blade scars may be evident on the faces. Random, secondary flaking may leave a median ridge on some examples. This flaking, along with some fine retouch produced fine serrations along the blade edges. Broad flakes were removed to form the basal notches.

COMMENTS: The type was named from examples from surface sites in the Garth Slough area in Morgan County, Alabama. The illustrated example is from Cambron Site 76 (Pine Tree) in Limestone County, Alabama. The type is found on Transitional

Paleo and Early Archaic sites in North Alabama. One example was recovered from the bottom of Stratum II (Early Archaic) at Flint Creek Rock Shelter (Cambron and Waters, 1961). What appears to be a smaller variant of the type was recovered from level V at Danger Cave, Utah (Jennings, 1957) and listed as type W37. Radiocarbon dates from this level range from  $6863 \pm 500$  B. P. at the base of the level to  $3893 \pm 240$  B. P. in the topmost part of the level. One example was recovered from Cave Spring, Level 9, Stratum III, in association with Big Sandy, Cave Spring, Colbert Dalton, Decatur, Frazier, Greenbrier Dalton, Jude, Lerma Rounded Base, Paint Rock Valley, and Stanfield points. The Garth Slough point was formerly but incorrectly, classified as Catahoula.

#### GARY, <u>Newell and Krieger</u> (Suhm, Krieger and Jelks, 1954): A-41

GENERAL DESCRIPTION: This is a medium sized point with contracted stem.

MEASUREMENTS: Bell (1958) gives the size range as about 40 mm. to 80 mm. Suhm, Krieger and Jelks (1954) note that the stem length is more consistent than the length of the blade. The illustrated example measures 57 mm. in length, 26 mm. in shoulder width, 18 mm. in stem width, 14 mm in stem length and 9 mm. in thickness.

FORM: The cross-section is biconvex. Shoulders may be horizontal or tapered and are occasionally rounded or expanded barbed. The blade is usually straight to excurvate, but may be incurvate or recurvate (Suhm, Krieger and Jelks, 1954). The distal end is acute. The stem is usually contracted, with straight or excurvate side edges and a rounded to pointed basal edge.

FLAKING: The blade and hafting area are shaped by broad random flaking. The blade edges are retouched by the removal of deep short flakes. The stem may be retouched.

COMMENTS: The type was named after points found in Texas and was formerly called Gary Contracting Stem. The illustrated specimen is from Cambron Site 76 in Limestone County, Alabama. There is considerable variation within the Gary type, and further study may lead to classification into separate types (Bell, 1958, quoting Baerreis, Freeman and Wright, 1958). Several Gary points were recovered from the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). Most of the examples were in the upper half of Zone A, which would indicate a late Archaic to

Woodland association. Flint Creek Rock Shelter (Cambron and Waters, 1961) and Flint River Mound (Webb and DeJarnette, 1948a) also produced Gary points from both Woodland and Archaic strata. Jenkins (1975) has demonstrated Gary as the dominant projectile point type for Middle Woodland in the Central Tombigbee area (Miller I and II).

#### GREENBRIER, <u>Kneberg</u> (Lewis and Kneberg, 1960): A-42

GENERAL DESCRIPTION: The Greenbrier is a medium to large point with expanded auricles and shallow ground side notches.

MEASUREMENTS: The illustrated example measures in length, 63 mm.; in shoulder width, 25 mm.; in stem width, 25 mm.; in stem length, 12 mm.; in thickness, 6 mm.

FORM: The cross-section is usually flattened but may be biconvex. Shoulders are tapered and may be weakly barbed. The blade is usually parallel, with fine serrations, and may be beveled on

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each side of both faces. The distal end is acute. The hafting area displays broad side notches, created as the shoulder tapers in to the expanded stem. Notches on the illustrated example are 4 mm. deep and 14 mm. wide. Side edges of the hafting area are usually heavily ground. The base is incurvate, thinned and lightly ground.

FLAKING: Flaking used to shape the blade and hafting area is broad and thin. The short flaking which was used to bevel the blade edges and create fine serrations may occasionally appear on the shoulder edges of the hafting area. The notches were formed by the removal of one or more fairly large flakes, followed by secondary flaking. Most Alabama examples were made of Ft. Payne chert or other good material.

COMMENTS: The type was briefly described by Lewis and Kneberg (1960), who point out that several examples were illustrated from the Nuckolls Site (Lewis and Kneberg, 1958). Good examples illustrated in that paper are Figs. 24-30, 37, and 48-49. The illustrated example is from Hulse Site 53, Limestone County, Alabama. Its general appearance is somewhat similar to that of the Pine Tree point and it often appears on the same sites. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) one example was recovered from Level 11 of R-4 trench, one from Zone C, one from Level 1, Zone D, and two from Level 2, Zone D. At Flint Creek Rock Shelter (Cambron and Waters, 1961) one example was recovered from the center of Stratum II (Archaic). One example was recovered from upper Zone C (Archaic) at Flint River Mound (Webb and DeJarnette, 1948a). This



evidence indicates a shellmound Archaic association at Flint River, early Archaic at Flint Creek and early Archaic to transitional Paleo-Indian at Stanfield-Worley. A suggested age is from 5000 years ago to about 9000 years ago.

#### GREENEVILLE, <u>Kneberg</u> (Kneberg, 1957): A-43

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GENERAL DESCRIPTION: This is a medium sized trianguloid point with parallel to excurvate basal edges.

MEASUREMENTS: Kneberg (1957) lists the range as 1.5 inches to 2.5 inches. The nine plesiotypes, including the illustrated example (Lewis and Kneberg, 1957), from Cambron Site 284 (Camp Creek Site) are: length—maximum, 40 mm.; minimum, 29 mm.; average, 33 mm.: width—maximum, 25 mm.; minimum, 18 mm.; average, 20 mm.: thickness—maximum, 9 mm.; minimum, 6 mm.; average, 8 mm.: width at base—maximum, 25 mm.; minimum, 16 mm.; average, 19 mm.

FORM: The cross-section is biconvex. The blade is excurvate or straight above the hafting area. The distal end is acute. The hafting area usually has parallel sides but may taper slightly towards the blade. Of the nine measured examples, seven have a basal concavity 1.0 mm. deep and two examples have a straight basal edge. The basal edge is usually thinned.

FLAKING: The blade and hafting area were shaped by random flaking. Most examples show some secondary flaking along the blade edges. This flaking ranges from narrow to broad, but usually fairly deep flake scars are exhibited. Points that have secondary flaking may not be flaked on all blade edges. Basal thinning appears, accomplished by broad flaking along the basal edge which is often followed by some secondary flaking. Of the nine measured examples, seven are made of black to gray local flint, one is quartzite and one chalcedony.

COMMENTS: The type was named (Lewis and Kneberg, 1957) after the Camp Creek Site (Cambron Site 284), which is near Greeneville, Tennessee. While the illustrated example is from the plough level of this site, examples were recovered from all levels. A radiocarbon date of 2050

 $\pm 250$  B. P. was secured at this site. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) Level 1 produced five examples; Levels 2 and 3, two each; Levels 4, 5 and 8, one each. All were from Zone A. Four examples, one from Level 1, two from Level 2, and one from Level 5 were recovered at University of Alabama Site Ms 201, in Marshall County, Alabama. Three examples were recovered from upper Stratum I (Woodland) at Flint Creek Rock Shelter (Cambron and Waters, 1961). At Flint River Mound (Webb and DeJarnette, 1948a) 19 examples were recovered from Zones A and B (Woodland) and three from Zone C (upper Archaic). This Woodland point is scattered along the western edge of the Appalachians from Greeneville, Tennessee, to South Alabama as well as in the Tennessee River Valley and other areas.

#### GUILFORD, <u>Coe</u> (Coe, 1952): A-44

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GENERAL DESCRIPTION: This is a medium to large, lanceolate point with incurvate base.

MEASUREMENTS: Bell (1960) gives the range of the length from about 60 mm. to 135 mm. Measurements listed by Coe (1959) range as follows: length—maximum, 120 mm.; minimum, 50 mm.; average, 90 mm.: width—maximum, 35 mm.; minimum, 20 mm.; average, 30 mm. The illustrated plesiotype measures 84 mm. long, 24 mm. in width, 11 mm. wide at the base, 12 mm. thick, 1 mm. deep in basal concavity.

FORM: The cross-section is usually biconvex and thick but may approach



median ridged. The blade is usually excurvate but may be nearly straight. The distal end may be acute or apiculate. The hafting area is contracted with short, rounded auricles, incurvate base and some basal thinning. Side edges of the hafting area are usually lightly ground. The hafting area may be defined by a break in the contour of the side edges or may be described as extending to somewhere near the widest part of the blade.

FLAKING: The blade and hafting area are usually shaped by well controlled, random flaking. Coe (1952) describes some flaking as being transverseoblique. Careful secondary flaking in the form of short, often deep, flaking appears along the side edges. The basal concavity is formed by the removal of broad flakes. A variety of local materials including quartz, quartzite, porphyritic rhyolite, andesite and varieties of argillite or novaculite were used (Coe, 1959).

COMMENTS: The type was named after the Guilford focus of the Carolina Piedmont. The illustrated example is from Cambron 326, Buncombe County, North Carolina. The type was described by Bell (1960). At the Doerschuk

Site Coe (1959) recovered Guilford points above Morrow Mountain and below Halifax types. He suggests a date of around 6000 years ago in the Carolina Piedmont area. He gives the distribution as widespread throughout the Piedmont of North Carolina but points out that they "do not have a distribution much north of Virginia or south of Piedmont, Georgia." Examples appear on several sites in western North Carolina. Examples were illustrated by Miller (1962) from Sites 44Mc66 and 44Mc75, Mecklenburg County, Virginia (Plate 39 W and X, Plate 40 N, Plate 44 P, T and V, Plate 45B). An early Archaic association prior to 5000 years ago is suggested. Recent evidence from Randolph County indicates that the Archaic Guilford complex may extend into the Alabama Piedmont (O'Hear and Knight, 1975).

#### GUILFORD ROUNDED BASE, Cambron (This Paper): A-44-a

GENERAL DESCRIPTION: This is a medium sized lanceolate point with a rounded base.

MEASUREMENTS: Ten plesiotypes from Cambron 326 (Harwood 98), Buncombe County, North Carolina ranged in measurement as follows: length—maximum, 72 mm.; minimum, 53 mm.; average, 61 mm.: width—maximum, 28 mm.; minimum, 17 mm.; average, 23 mm.: thickness— maximum, 13 mm.; minimum, 8 mm.; average, 10 mm. The length from base to widest point of blade ranges from 21 mm. to 35 mm. and averages 28 mm. The illustrated example measures about 63 mm. long, 23 mm. wide, 14 mm. thick and 25 mm. from base to widest point of blade. Coe (1959) illustrated an example 30 mm. long.

FORM: The cross-section is biconvex. The blade is excurvate with widest point less than halfway from the base to the distal end. This point of maximum width may mark the termination of the hafting area. Some examples are beveled on one side of each face. Side edges of the hafting area are tapered. The basal edge is rounded. Basal edges may be lightly ground.

FLAKING: The measured examples (all made of quartzite) are shaped by well controlled random flaking. Secondary flaking of a deeper shorter nature appears on all edges. This flaking may have been accomplished by a percussion.

COMMENTS: The type was named after examples illustrated by Coe (1959) along with Guilford points (Bell, 1960). The illustrated example is from Cambron Site 326, Buncombe County, North Carolina. At the Doerschuk Site, Coe (1959) recovered examples with Guilford points above Morrow Mt. and below Halifax types. He suggests a date of around 6000 years ago in the Carolina Piedmont area. He gives the distribution as Carolina Piedmont and not much north of Virginia or south of Piedmont, Georgia. Examples appear on several sites in western North Carolina. Miller (1962) illustrated examples from

Roanoke River drainage area in Mecklenburg County, Virginia, as follows: Site 44Mc75 (Plate 29, Fig. F, Plate 45, Fig. L); Site 44Mc66 (Plate 40, Figs. G, H, M; Plate 41, Figs. I, J); Site 44Mc73 (Plate 42, Fig. D); Bluestone Creek drainage area (Plate 48, Figs. 1, 2a). The similarity of the type to Lerma Rounded Base points may be an indication that they are coeval. An early Archaic association prior to 5000 years ago is suggested.

#### GUNTERSVILLE, <u>Cambron</u> (This Paper): A-59

GENERAL DESCRIPTION: This is a small to medium-sized, lanceolate point with straight base and excurvate blade.

MEASUREMENTS: Seven cotypes, including the illustrated example, ranged in measurements as follows: length—maximum, 50 mm.; minimum, 33 mm.; average, 35 mm.: width at base—maximum, 18 mm.; minimum, 10 mm.; average, 14 mm.: thickness—maximum, 6 mm.; minimum, 4 mm.; average, 5 mm. The blade width of four examples ranged from a maximum of 21 mm. to a minimum of 13 mm. and averaged 16 mm.

FORM: The cross-section is usually flattened but may be biconvex. The blade is excurvate. The widest point may be at the base or somewhat below the midsection. The distal end is acute. Side edges of the hafting area may be parallel or slightly contracted. (It is difficult to define the extent

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of the hafting area on examples with contracted side edges.) The basal edge is straight and thinned.

FLAKING: Broad, shallow, random, flaking appears on the faces with fine secondary flaking along the blade edges and sides of the hafting area. Fairly long, often broad, flakes were removed in order to thin the basal edge. Local materials were used.

COMMENTS: The type was named after sites in Guntersville Basin of the Tennessee River where many examples are found. The illustrated example is from Cambron Site 12, Limestone County, Alabama. Six examples in association with Madison points, a stone disc and other artifacts were taken from Burial 6, Site Lu 92, Lauderdale County, Alabama (Webb and DeJarnette, 1942). Examples illustrated along with Madison and Ft. Ancient points, were described as Dallas component triangular points by Lewis and Kneberg (1946). Both Guntersville Lanceolate and Madison points were illustrated and described by Kneberg (1956) as Late Mississippi Triangular. She states, "In eastern Tennessee it is equally numerous in the Mouse Creek and Dallas Cultures, and occurs in smaller numbers in historic Cherokee sites" (1956). The type was classified as Type W in the Guntersville Basin where it appeared in association with trade goods in several historic burials. A burial at Lewis Bluff in Wheeler Basin of Tennessee River (Cambron and Waters, 1959a) yielded examples in association with Madison points, complicated-stamped sherds and plain, shell-tempered ware, an elbow-clay pipe and other artifacts. Two examples were recovered from the middle section of Stratum I and upper half of Stratum I (Woodland and Mississippian) at Flint Creek Rock Shelter



(Cambron and Waters, 1961). Guntersville Lanceolate appears to be associated with late Mississippian and historic cultures in the Tennessee Valley. Kneberg (1956) suggests a probable date of 1300 A. D. to 1800 A. D.

# HALIFAX, <u>Coe</u> (Coe, 1959): A-112

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GENERAL DESCRIPTION: The Halifax is a small to medium-sized, side-notched point usually made of vein quartz or, occasionally, quartzite.

MEASUREMENTS: Coe (1959) lists a range of length from 56 mm. to 29 mm. with an average length of 44 mm. and a range of width from 25 mm. to 17 mm. with an average width of 20 mm. Measurements of the illustrated example are: length, 30 mm.; shoulder width, 21 mm.; stem width, 18 mm.; stem length, 9 mm.; thickness, 8 mm.; depth of notch, 3 mm.; width of notch, 10 mm.

FORM: The cross-section is usually biconvex. Shoulders are tapered. The blade is usually straight but may be excurvate. The distal end is acute. The stem is expanded with straight or incurvate side edges and straight or excurvate basal edge. The stem base edge and side notches of the hafting area are usually ground.

FLAKING: The blade and stem are shaped by broad, often deep, random flaking. Some examples show good secondary flaking along the blade edges. The notches were worked out by the removal of several flakes. Some points are asymmetrical due to variation in depth and location of notches. According to Coe (1959) "The typical specimen was relatively thick and worked from a core. These cores, however, frequently originated as thick spalls struck from quartz or quartzite boulders common to this area of the Roanoke River."

COMMENTS: The type was named after Halifax County, North Carolina, where examples were recovered from the Gaston Site on the Roanoke River. The illustrated example is from Cambron Site 94, Buncombe County, North Carolina. A radiocarbon date of 5440



 $\pm 300$  B. P. was secured for the type at the Gaston Site, where it appeared above Guilford and below Savannah River points. Coe (1959) suggests "a relationship to Lamoka points of the New York area." This, in turn, indicates that the type is ancestral to Lamoka points, similar to Swan Lake points, of Alabama and Tennessee Valley area. In Alabama Swan Lake is associated with the Woodland culture. Halifax points are found on several sites in Buncombe County, North Carolina. Miller (1962) illustrated examples (Plate 42, Figs. J, K, M and U) from Site 44Mc73, which is described as a pre-pottery site. Swan Lake points from Site 44Ha7 (Plate 52, Figs. F, N, T, V and DD) are described by Miller (1962) as "typical Woodland types." Thus both Halifax and Swan Lake points appear in the John H. Kerr Basin of the Roanoke River, Virginia and North Carolina. A type resembling Halifax has been isolated in Randolph County in an Archaic context (O'Hear and Knight, 1975).

#### HAMILTON, Lewis (Lewis, 1955): A-45

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GENERAL DESCRIPTION: The Hamilton is a small, triangular point with incurvate blade and incurvate base.

MEASUREMENTS: Bell (1960) lists the length range as 22 mm. to 45 mm.; the length mode, 40 mm. The illustrated plesiotype measures 37 mm. long, 18 mm. wide at base, 4 mm. thick, 3 mm.

deep in basal concavity.

FORM: The cross-section is flattened. The blade ranges in shape from near straight to deeply incurvate but is usually slightly incurvate. Fine serrations along the blade edges are rare. The distal end is acute. The base is usually incurvate but may be straight and is always thinned.

FLAKING: According to Kneberg (1956) "Exceptionally fine pressure chipping characterizes this type." The faces are worked by broad, shallow flaking with fine retouch along the blade edges. The basal edge is thinned by the removal of broad shallow flakes and is rarely retouched except near the junction of the basal edge with the side edges.

COMMENTS: "The Hamilton Incurvate point and Hamilton culture are named from Hamilton County, Tennessee, where they were first identified." (Kneberg, 1956). The illustrated example is from Cambron Site 27, Limestone County, Alabama. According to Kneberg (1956) the Hamilton is "a late Woodland type associated with the Hamilton culture. This is the culture characterized by dome-shaped burial mounds in eastern Tennessee. It is also found in middle Tennessee with the Decatur and Harmon's Creek Woodland cultures." An example was recovered

from Level 1 at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). At University of Alabama Site Ms 201, Marshall County, Alabama, two examples were recovered from Level 1 and one from Level 5. At the Flint River Site (Webb and DeJarnette, 1948a) one example was recovered from each zone: Zones A and A-B (both Woodland), Zone C, and Zone D (Archaic). This evidence indicates a Woodland or possibly late Archaic association at Flint River. Examples are found on Woodland and Mississippian sites in North Alabama. Kneberg (1956) suggests a probable age of about 500 A. D. to 1000 A. D. Bell (1960) suggests a date of about 300 A. D. to 800 A. D.

### HAMILTON STEMMED, Cambron (This Paper): A-108

GENERAL DESCRIPTION: This is a medium-sized, expanded-stem point with an excurvate blade.

MEASUREMENTS: Lewis and Kneberg (1946), Plate 65, illustrate two examples of Hamilton Stemmed points. These two are 72 mm. and 76 mm. long respectively. The illustrated example measures 75 mm. long, 30 mm. in shoulder width, 18 mm. in stem width, 12 mm. in stem length, and 9 mm. thick.

FORM: The cross-section is biconvex. Shoulders are inversely tapered, forming short sharp barbs. The blade is excurvate. The rather sharply-acute distal end gives the blade edge a near-recurvate appearance. The stem is expanded with straight side edges; the stem base, thinned and either straight or slightly excurvate.

FLAKING: The blade and hafting area are shaped by broad, shallow-to-deep random flaking. One or all blade edges may be secondarily flaked by the removal of fine, shallow flakes or rather crude deep flakes. The corner notches are formed by strong, broad flaking (usually by removal of one flake from each side of each notch). Stem edges may be retouched, with fine flaking having been employed to thin the base of the stem.

COMMENTS: The type is named after Hamilton County, Tennessee where the Hamilton culture was first recognized. The illustrated plesiotype is from Cambron Site 27, Limestone County, Alabama, which has produced several examples of Hamilton points. It is a late Woodland type associated with the Hamilton culture. Kneberg states (1956), "This is the culture characterized by dome-shaped burial mounds in eastern Tennessee. It is also found in

middle Tennessee with the Decatur and Harmon's Creek Woodland cultures." Local examples have been classified as Hamilton corner notched. An example was illustrated by Rowe (1947) as a rare Hamilton culture type from eastern Tennessee.

#### HARDAWAY, Coe (Coe, 1959): A-46

GENERAL DESCRIPTION: This is a small to medium-sized, side notched point with concave base.

MEASUREMENTS: Coe (1959) lists the measurements of examples from the North Carolina Piedmont as follows: length-maximum, 50 mm.; minimum, 28 mm.; average, 35 mm.: widthmaximum, 35 mm.; minimum, 23 mm.; average, 25 mm.: thickness-maximum, 6 mm.; minimum, 3 mm.; average, 4 mm. The length of samples in the Tennessee Valley ranges from a maximum of 50 mm. to a minimum of 29 mm. The average measurements of 28 examples from 16 sites follow: length, 40 mm.; width, 21 mm.; thickness, 6 mm. (Soday and Cambron, n. d.). The illustrated example measures 38 mm. long, 23 mm. wide at the distal end of hafting area, 26 mm. wide at base, 6 mm. thick, 21 mm. wide across hafting constriction, 4 mm. deep in basal concavity.

FORM: The cross-section is biconvex. The blade is usually straight but may be excurvate. Blade edges may be serrated. The distal end is usually acute. The hafting area is auriculate with expanded-rounded auricles. Coe (1959) describes the average side notch as about 4 mm. deep and 5 mm. wide. This results in a short hafting constriction. The





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basal edge is incurvate and thinned. Both side and basal edges of the hafting area are usually ground.

FLAKING: The face is shaped by broad well controlled flaking. A weak median ridge created by broad, shallow secondary flaking is often seen near the distal end of the blade face. The basal edge of the hafting area is thinned by the removal of broad flakes. Most edges of both the hafting area and the blade are finely retouched.

COMMENTS: The type was named after the Hardaway Site in Stanley County, North Carolina and has been referred to in the Tennessee Valley as Corner Notched Dalton. The illustrated example is from Cambron Site 76, Limestone County, Alabama. Examples were recovered in Zone IV at the Hardaway Site in association with Dalton, Quad, and Hardaway blade types (Coe, 1959). At Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) most examples were recovered from Zone D in association with Dalton, Big Sandy I and other early types. A



radiocarbon date of 9640  $\pm$ 450 B. P. was secured. A transitional Paleo-Indian association is suggested.

#### HARPETH RIVER, <u>Crabtree</u> (Cambron, 1970): A-130

GENERAL DESCRIPTION: The Harpeth River point is a medium to large side notched point with flattened blade, beveled on both sides of each face and displays shallow serrations.

MEASUREMENTS: Seventeen cotypes from sites in Cheatham and Dickson Counties, Tennessee, along the Harpeth River and one example from near McMinnville, Tennessee, provided the following measurements and traits: length—maximum, 90 mm.; minimum, 53 mm.; average, 67 mm.: shoulder width—maximum, 26 mm.; minimum, 20 mm.; average, 23 mm.: width at base—maximum, 28 mm.; minimum, 20 mm.; average, 25 mm.: thickness—maximum, 9 mm.; minimum, 7 mm.; average, 8 mm.: hafting area length—maximum, 25 mm.; minimum, 11 mm.; average, 16 mm.: width of hafting area in notches—maximum, 24 mm.; minimum, 16 mm.; average, 21 mm.

FORM: The cross-section is flattened. Shoulders are tapered. The blade may be excurvate or straight with fine serrations and is beveled on each side of both faces. The distal end is usually acute but may be acuminate. The hafting area displays broad, shallow side notches and is well defined by a sharp change in the contour of the edge of the point at the junction of the blade and is auriculated with expanded-rounded auricles. Side edges of the hafting area are incurvate and ground. The basal edge is straight, usually ground, and is thinned.

FLAKING: The blade and hafting area were shaped by broad, shallow, random flaking. Blade edges are steeply beveled on each side of both faces by the removal of deep, short, narrow flakes which resulted in fine serrations along the blade edges. The shallow notches that form the hafting area are steeply flaked. This usually leaves expanded shoulder barbs.

COMMENTS: The type was named from sites along the Harpeth River in Cheatham and Dickson Counties, Tennessee, where 60% of the 50 odd examples were recovered from one site which had also produced Big Sandy, Dalton, Greenbrier, P-8 Corner Notched, Pine Tree, Cumberland, LeCroy, and Copena

points. These points are in the collection of Wayne Crabtree, Pegram, Tennessee. In general outline the Harpeth River points may somewhat resemble Dalton, Russell Cave, Greenbrier or Pine Tree points. One example has strong basal thinning on one face and what appears to be a flute struck from a prepared striking platform on the other face. One example has been recovered from Overton County and one from Humphreys County, Tennessee. One site along the Harpeth River from which 5 examples were recovered produced Big Sandy, Pine Tree, Turkey Tail and Cotaco points. The associations of Harpeth River points with other Early Archaic and Transitional Paleo points, as well as their hafting area and flaking characteristics, indicate a placement of the type in very Early Archaic or late Transitional Paleo cultural association. Forty-eight cotypes of Rockport variety of Harpeth River are described along with eighteen illustrations in the Tennessee Archaeologist, Vol. XXVI, No. 2 (Adair and Sims, 1970).

### JACKS REEF CORNER NOTCHED, <u>Ritchie</u> (Ritchie, 1961): A-21

GENERAL DESCRIPTION: This is a medium-sized, corner notched point with a thin, flattened, excurvate (or often parallel-angular) blade.

MEASUREMENTS: Nine examples, including the illustrated example from Limestone County, Alabama, provided traits and the following measurements: length—maximum, 60 mm.; minimum, 30 mm.; average, 42 mm.: shoulder width—maximum, 24 mm.; minimum, 15 mm.; average, 18 mm.: stem width—maximum, 20 mm.; minimum, 13 mm.; average, 16 mm.: stem length—maximum, 9 mm.; minimum, 6 mm.; average, 8 mm.: thickness—maximum, 5 mm.; minimum, 3 mm.; average, 4 mm. Ritchie (1961) gives the following approximate measurements: length—maximum, 57 mm.; minimum, 25 mm.; average, 47 mm.: approximate average width—38 mm.: thickness—maximum, 6 mm. (most examples are under 5 mm.). Alabama examples tend to be

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longer than New York examples. Corner notches average about 7 mm. deep and 5 mm. wide.

FORM: The cross-section is usually flattened, rarely, plano-convex. The shoulders are tapered with sharp thin barbs. The blade may be excurvate or parallel-angular. The distal end ranges from narrow to broad-acute. The hafting area is corner notched. The base of the expanded stem is usually straight; rarely, incurvate. It is thinned and may be lightly ground. These features are similar to those of New York points.

FLAKING: The blade and hafting area are formed by broad, shallow, random flaking. Retouching was done by carefully controlled, broad, shallow secondary flaking followed by fine retouching along the blade edges. Broad flakes were struck off to form the notches, which were then finely retouched. This point is usually made of local materials.

COMMENTS: The type was named after the Jacks Reef Site in Onondaga County, New York. Ritchie previously referred to the type as "broad corner notched" or corner notched with angular edges. The illustrated example is from Cambron Site 116, Limestone County, Alabama. A radiocarbon date of 1056  $\pm$ 250 B. P. was obtained for samples from the White Site, Norwich, New York (Ritchie, 1961). It is considered to be late middle Woodland and

early late Woodland in New York. It is an important type in central New York and occurs in Ohio (Ritchie, 1961). An example from Site Ct 27 was illustrated (Plate 294, No. 1) by Webb and DeJarnette (1942) as Type 47. For several years, the type has been referred to in the Tennessee Valley where it is found on late Woodland sites, as "Corner Notched Woodland". One example was recovered from Level 3, Zone A at Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), six from Zone A (Woodland) at Ma 48 (Webb and DeJarnette, 1948a) and one example each from Levels 1 and 2 at Ms 201, Rockhouse Shelter, in Marshall County, Alabama. Examples from P-12 Pit at Russell Cave in Jackson County, Alabama, were dated by radiocarbon method at 1500  $\pm$ 175 B. P. (John W. Griffin, personal communication).

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### JACKS REEF PENTAGONAL, <u>Ritchie</u> (Ritchie, 1961): A-60a

GENERAL DESCRIPTION: This is a thin, small to medium-sized pentagonal point.

MEASUREMENTS: Fifteen plesiotypes, including the illustrated example from Cambron Site 27, Limestone County, Alabama, provided the following traits and measurements: length—maximum, 61 mm.; minimum, 25 mm.; average, 42 mm.: width—maximum, 31 mm.; minimum, 14 mm.; average, 20 mm.: width at base—maximum, 23 mm.; minimum, 13 mm.; average, 16 mm.: thickness—maximum, 8 mm.; minimum, 3 mm.; average, 4 mm.: length of hafting area—maximum, 28 mm.; minimum, 12 mm.; average, 20 mm.

FORM: The cross-section is flattened. The blade is straight; the distal end, acute. The hafting area consists of one-half to one-third (usually about two-fifths) of the length of the point. It is contracted, with straight side edges. The basal edge may be straight or incurvate 1 or 2 mm. and is thinned. There is usually a sharp break between the blade and the hafting area.

FLAKING: The blade and hafting area are shaped by broad, shallow, random flaking. Fine retouch was used to finish all edges. The basal edge is treated in the same manner as the blade and hafting area edges. Local materials were used.

COMMENTS: The type was named after the late Point Peninsula Jacks Reef Site in Onondaga County, New York. The illustrated example is from Cambron Site 27, Limestone County, Alabama. Alabama examples are narrower and longer than New York examples as described by Ritchie (1961). The type has been classified locally as "Mississippi Pentagonal". The type was dated at the White Site near Norwich, Chenango County, New York, at 1057  $\pm 250$  B. P. (Ritchie, 1961). Ritchie also mentioned a thicker, cruder middle Archaic variant. The type is coeval with Jacks Reef Corner Notched at Point

Peninsula and Owasco sites in New York. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), two examples were recovered from Level 1 and one from Level 3. This indicates a late Woodland association at this site. At the University of Alabama Site Ms 201, in Marshall County, Alabama, one example was recovered from Level 1, two from Level 2 and one each from Levels 4 and 5. This occurrence indicates a Woodland association. Associations in surface collections indicate a late Woodland association. The larger, broader examples may be derived from Copena Triangular points, but all examples were made in a manner similar to the way in which Madison points were made. This indicates a transitional placement between Copena and Mississippian. The type is probably around 1000 years in age or older in Alabama.

### JEFF, Soday and Cambron (This Paper): A-47

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GENERAL DESCRIPTION: The Jeff is a medium-sized, broad, auriculate point with straight basal edge and expanded auricles.

MEASUREMENTS: The range in length of examples from the Tennessee Valley is from 69 mm. to 28 mm.; the average measurements of 10 examples from 10 sites are as follows: length, 47 mm.; width at base, 25 mm.; thickness, 7 mm. (Soday and Cambron, n. d.). The illustrated example





measures 49 mm. long, 25 mm. wide at upper end of hafting area, 30 mm. wide at base, 7 mm. thick, 2 mm. deep in basal concavity.

FORM: The cross-section is flattened. The blade is excurvate and may be slightly beveled on one side of each face and/or serrated. The distal end is acute. The hafting area is auriculate (expanded-rounded). The basal edge is usually straight but may be slightly incurvate and may be beveled or thinned. Side and basal edges of the hafting area are usually ground.

FLAKING: The flattened blade is produced by removal of broad, thin flakes. Secondary flaking along the blade edges is shorter and deeper and may result in weak serrations. Short flakes were removed along the side and basal edges of the hafting area. In some cases the angle of the flaking along the basal edge produced a short bevel.

COMMENTS: The type was named after the Jeff area of Madison County, Alabama, where several examples were first recognized. The illustrated example is from Cambron Site 76, Limestone County, Alabama. Examples are always found in association with uniface tools and other early point types and are not found on shellmound Archaic middens. This evidence and field observations suggest a transitional Paleo association.



### JUDE, <u>Madison-Huntsville Chapter of Alabama Archaeological Society</u> (Madison-Huntsville Chapter of Alabama Archaeological Society, 1961): A-48

GENERAL DESCRIPTION: The Jude is a small, straight-stemmed point with a short blade.

MEASUREMENTS: Eight cotypes from the type site area and one example from Colbert County, Alabama provided the traits and the following measurements: length—maximum, 29 mm.; minimum, 19 mm.; average, 24 mm.: shoulder width—maximum, 23 mm.; minimum, 17 mm.; average, 20 mm.: stem width—maximum, 16 mm.; minimum, 13 mm.; average, 15 mm.: stem length—maximum, 12 mm.; minimum, 10 mm.; average, 11 mm.: thickness—maximum, 6 mm.; minimum, 5 mm.; average, 5 mm. The illustrated example measures 25 mm. in length, 19 mm. in shoulder width, 15 mm. in stem width, 11 mm. in stem length and 5 mm. in thickness.

FORM: The cross-section is usually biconvex; rarely, plano-convex. Shoulders are usually horizontal; rarely, tapered or inversely tapered. Blade edges are nearly always straight; rarely, excurvate. The distal end is usually acute. The stem is straight or, rarely, slightly expanded. Stem width exceeds the stem length. Side edges of the stem are straight. The thinned basal edge is usually slightly incurvate but may be straight. All stem edges are usually lightly ground.

FLAKING: Broad, shallow, random flakes shape the blade and stem and are followed along all edges by similar but somewhat shorter secondary flaking. All measured examples were made of local material and except for one made of smoky quartz, all were patinated.

COMMENTS: The type was named after Jude Hollow in Madison County, Alabama, where examples were first recognized. The illustrated example is from Brosemer Site 6 in Jude Hollow. Examples from surface collections have produced a range of



cultural material including Paleo-Indian and Transitional Paleo-Indian, as well as Archaic and Woodland. The most frequent associations indicate early Archaic or Transitional Paleo-Indian, as do patination and basal grinding. On at least one site in Colbert County, Alabama, later Archaic and Woodland artifacts are absent (Holland, personal communication). Several examples were recovered from the Cave Springs Site (Moebes, 1974) in association with and below Big Sandy and Dalton points. This association indicates a Transitional Paleo-Indian association at this site. The type seems to be somewhat similar to Elam points of Texas (Suhm and Jelks, 1962).

#### KAYS, Kneberg (Kneberg, 1956): A-49

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GENERAL DESCRIPTION: The Kays point is a medium to large, straight-stemmed point with excurvate blade.

MEASUREMENTS: Seven plesiotypes from Cambron Site 4, Limestone County, Alabama, provided traits and the following measurements: length—maximum, 88 mm.; minimum, 56 mm.; average, 63 mm.: shoulder width—maximum, 32 mm.; minimum, 26 mm.; average, 30 mm.: stem width—maximum, 17 mm.; minimum, 16 mm.; average, 17 mm.: stem length—maximum, 14 mm.; minimum, 13 mm.; average, 14 mm.: thickness—maximum, 11 mm.; minimum, 9 mm.; average, 9 mm. The illustrated example measures 59 mm. in length, 30 mm. in shoulder width, 17 mm. in stem width, 14 mm. in stem length, and 9 mm. in thickness.

FORM: The cross-section is biconvex. Shoulders are usually tapered, but

may be horizontal and may be rounded on some examples. The blade is excurvate, but may be nearly straight. The distal end is acute to sharply acute. The stem is straight and is slightly wider than it is long, with a straight basal edge that may be very slightly incurvate or excurvate. The edges of the stem are thinned and may be ground.

FLAKING: The blade and stem are shaped by broad, shallow to deep flaking. While a few examples appear to have been shaped by collateral flaking, random flaking is usually employed. Short, regular, secondary flaking was used to finish the blade and hafting area edges. All examples of the measured group are patinated and are made of local materials.

COMMENTS: The type was named after the Kays Landing Site in Henry County, Tennessee. The illustrated example is from Cambron Site 4, Limestone County, Alabama. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) one example each was recovered from Levels 1, 8, 9 and 10 in Zone A. This indicates an Archaic association. Three examples were recovered from Stratum II (Archaic) at

the Flint Creek Rock Shelter (Cambron and Waters, 1961). At Flint River Mound (Webb and DeJarnette, 1948a) 12 of the 18 examples recovered were from Zone C (upper Archaic), two from Zone C-D, two from Zone D (lower shellmound Archaic) and one each from Zones A and B (Woodland). This is a strong indication of late Archaic association at this site. Kneberg (1956) suggests a middle Archaic to late Archaic association and a date of about 3000 B. C. to A. D. Ritchie (1961) notes the marked similarity of Kays points to Genesee points of New York. The latter have radiocarbon dates of 4941  $\pm 260$  B. P. to 3684  $\pm 250$  B. P. Genesee points average 3 to  $3\frac{1}{2}$  inches in length and range to 6 inches or longer, considerably larger than Kays points. A middle to late Archaic association is indicated by available evidence, including surface associations.

# KIRK CORNER NOTCHED, Coe (Coe, 1959): A-50

GENERAL DESCRIPTION: This is a medium- to large-sized, corner notched point with blade edges that are usually serrated.

MEASUREMENTS: Coe (1959) lists the following measurements for the type: range of length—40 mm. to 100 mm., average length, 60 mm.; range of width—20 mm. to 45 mm., average width, 30 mm.; range of thickness—6 mm. to 12 mm., average thickness, 8 mm. The measurements of 15 plesiotypes from Cambron Sites 19 and 20 in Morgan County, Alabama, range as follows: length —69 mm. to 39 mm., average, 51 mm.: shoulder width—39 mm. to 29 mm., average, 34 mm.: stem width—29 mm. to 23 mm., average, 25 mm.: stem length—12 mm. to 9 mm., average, 11 mm.: thickness—10 mm. to 5 mm., average, 7 mm. Measurements of the illustrated example are: length, 59 mm.; shoulder width, 36 mm.; stem width, 25 mm.; stem length, 11 mm.; thickness, 7 mm.

FORM: The cross-section is usually flattened but may be biconvex. Shoulders are strongly barbed. The blade is usually excurvate but may be straight or recurvate. Blade edges are usually serrated and beveled on both sides of each face. The distal end is acute. The hafting area is corner notched. The notches average about 11 mm. deep and 5 mm. wide. Side edges of the expanded stem are straight and the stem base edge either straight, slightly incurvate or, rarely, excurvate. On Alabama examples, the stem base is thinned and usually ground, but basal grinding is rarely found on examples from the North Carolina Piedmont (Coe, personal communication).

FLAKING: The blade and hafting area are shaped by broad, shallow, random flaking. The edges are shaped by fine, regular, secondary flaking, which often resulted in serrations and beveled blade edges. The notches were formed by the removal of long, broad flakes, one from each side on each face. The edges of the notches were often retouched. Broad, shallow flakes were removed to thin the basal edge, which was then finely retouched. Local materials were used in the manufacture of these points.

COMMENTS: The type is named after examples excavated in the North Carolina Piedmont. The illustrated example is from Cambron Site 19, Morgan County, Alabama. Coe (1959) estimates the age as about 8000 years ago at the type sites. Seven examples were recovered from Archaic Stratum II at Flint Creek Rock Shelter (Cambron and Waters, 1961). At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) one example each was recovered from Levels 1, 2, 6 and 9 in Zone A. One example was recovered from Level 6 at the University of Alabama Site Ms 201, Marshall County, Alabama. Practically all examples from surface collections are from early Archaic sites. Evidence suggests an early Archaic association, with ground base examples being earliest.

#### KIRK SERRATED, <u>Coe</u> (Coe, 1959): A-51

GENERAL DESCRIPTION: This is a medium to large, straight-stemmed point with deep serrations.



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MEASUREMENTS: Measurements of North Carolina Piedmont examples range as follows: length —maximum, 120 mm.; minimum, 45 mm.; average, 70 mm.: width—maximum, 35 mm.; minimum, 25 mm.; average, 30 mm.: thickness—maximum, 12 mm.; minimum, 8 mm.; average, 9 mm. Eleven plesiotypes from three sites in Morgan and Limestone counties, Alabama, near the Tennessee River provided the following measurements: length—maximum, 78 mm.; minimum, 45 mm.; average, 56 mm.: shoulder width—maximum, 36 mm.; minimum, 24 mm.; average, 29 mm.: stem width—maximum, 20 mm.; minimum, 15 mm.; average, 17 mm.: stem length—maximum, 11 mm.; minimum, 8 mm.; average, 10 mm.: thickness—maximum, 9 mm.; minimum, 7 mm.; average, 8 mm. Measurements of the illustrated example are: length, 61 mm.; shoulder width, 26 mm.; stem width, 15 mm.; stem length, 11 mm.; thickness, 9 mm.

FORM: The cross-section is usually biconvex but may be plano-convex. Shoulders are usually horizontal but may be inversely tapered. Shoulders or barbs may be expanded. Most blades display one excurvate and one recurvate or, rarely, straight edge. Some examples have two excurvate blade edges. Least common are blades with two recurvate edges. Blade edges are always serrated. Serration is usually deeper and broader near the hafting area and becomes finer and more regular nearer the distal end, which is usually acute. The stem has straight side edges and an incurvate or straight basal edge. The base is thinned and, rarely, beveled.

FLAKING: The blade and hafting area are shaped by broad, shallow, random flaking followed by deep, short flaking which forms the serrations along the blade edges. The stem is retouched by short, shallow flaking.

COMMENTS: The type was named after examples from sites in the North Carolina Piedmont. The illustrated example is from Hulse Site 32 (Stone Pipe), Limestone County, Alabama. Coe (1959) suggests a date of between 5000 B. C. and 6000 B. C., slightly later than Kirk Corner Notched. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) one example was recovered from Level 5, one from Level 6, four from Level 9 in Zone A; one from Level 1 of Zone B. This indicates an early Archaic association. One example each was recovered from Levels 1, 7 and 9 at University of Alabama Site Ms 201 in Marshall County, Alabama. This is also an indication of an early Archaic association. Nine examples were scattered through Stratum II (Archaic) at Flint Creek Rock Shelter (Cambron and Waters, 1961). One example was recovered from the eight-foot level, which was the lowest level at the Little Bear Creek Site (Webb and DeJarnette, 1948b). Flint River Mound (Webb and DeJarnette, 1948a) produced one example from Zone C (upper Archaic) and one from Zone D (lower Archaic). This evidence indicates an early to middle Archaic association on some sites.



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### KNIGHT ISLAND, <u>Hulse</u> (This Paper): A-21-a

#### GENERAL DESCRIPTION: This is a medium-sized, thin, side notched point.

MEASUREMENTS: Ten cotypes, nine from North Alabama and one from Washington County, Alabama, provided traits and the following measurements: length—maximum, 60 mm.; minimum, 40 mm.; average, 49 mm.: shoulder width—maximum, 20 mm.; minimum, 15 mm.; average, 18 mm.: stem width—maximum, 20 mm.; minimum, 14 mm.; average, 17 mm.: stem length—maximum, 11 mm.; minimum, 5 mm.; average, 9 mm.: thickness—maximum, 6 mm.; minimum, 3 mm.; average, 5 mm. The illustrated example measures 55 mm. long, 18 mm. wide at shoulders, 15 mm. wide across stem, 16 mm. in stem length, and 11 mm. thick.

FORM: The cross-section is usually flattened; rarely, plano-convex. The shoulders are usually straight on narrow-notched examples and inversely tapered on the broader-notched examples. The blade is usually excurvate, but may be parallel angular. Blade edges of the Washington County example are finely serrated. The distal end is acute. The hafting area is side notched about 3 or 4 mm. from the base. The notches average about 3 mm. deep and vary from 8 mm. to 3 mm. wide (average width, 5 mm.). The basal edge is straight except on the Washington County example, where it is slightly incurvate. The basal edge is usually thinned, and may be lightly ground.

FLAKING: The blade and hafting area are shaped by broad, shallow, random flaking and retouched by fine, secondary flaking. The notches, formed by the removal of broad flakes, are usually finely retouched.

COMMENTS: The type was named for Knight Island in the Wheeler Reservoir of the Tennessee River where examples were first recognized. The illustrated example is from Hulse Site 17, Limestone County, Alabama. The type may be related to "Upper Valley Side Notched," briefly described by Kneberg (1956). Ritchie's illustrations of Jacks Reef Corner Notched (1961, page 79, Figure 8 and possibly Figure 7) appear to be of the Knight Island type. Both types are usually found on late Woodland sites in North Alabama. One example was recovered from Hn 1, Hardin County, Tennessee (Webb and DeJarnette, 1942), below the three-foot level, which produced Mississippian point types. It is possible that the radiocarbon date of 1056  $\pm 250$  B. P. obtained for Jacks Reef Corner Notched at the White Site, Norwich, New York, (Ritchie, 1961) applies to Knight Island. A larger variant is also recognized from Alabama. Reed



# LECROY, <u>Kneberg</u> (Kneberg, 1956): A-52

 $\label{eq:GENERAL DESCRIPTION: This is a medium-sized, bifurcated-stemmed point which is usually serrated.$ 

MEASUREMENTS: Fourteen plesiotypes (including the illustrated example) from sites in Morgan and Limestone counties, Alabama, provided the following measurements: length—maximum, 58 mm.; minimum, 33 mm.; average, 44 mm.: shoulder width—maximum, 40 mm.; minimum, 23 mm.; average, 28 mm.: stem width—maximum, 27 mm.; minimum, 21 mm.; average, 23 mm.: stem length—maximum, 16 mm.; minimum, 10 mm.; average, 13 mm.: thickness—maximum, 7 mm.; minimum, 5 mm.; average, 6 mm.

FORM: The cross-section is usually biconvex; rarely, plano-convex or hexagonal. Shoulders are expanded on serrated examples and may be horizontal or tapered. The blade is nearly always straight; rarely, incurvate. Blade edges are usually deeply serrated and occasionally beveled on both edges of each face. The distal end is acute. The hafting area consists of a stem that is usually expanded (rarely, straight) and always deeply bifurcated. The auricles are expandedrounded and are usually ground along the edges.

FLAKING: Flaking used to shape the blade and stem is usually broad, shallow and random, but removal of broad flakes to form serrations along the blade edges sometimes resulted in flaking of a collateral nature on the blade faces. Single, broader serrations may be formed by removal of more than one flake. Broad, deep flakes were removed to notch the stem below the shoulders and on the basal edge. Some retouch was carried out in these notches.

COMMENTS: The type was named after the LeCroy Site on the Tennessee River in Hamilton County, Tennessee, and was described by

Bell (1960). The illustrated example is from Cambron Site 83, Limestone County, Alabama. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) one example was recovered from Zone C, Block 2, along with transitional Paleo and early Archaic points. One example was recovered from the University of Alabama Site Ms 201 in Marshall County, Alabama, in Level 10. This indicates early Archaic or transitional Paleo. Four examples were recovered from Stratum II (Archaic) at Flint Creek Rock Shelter (Cambron and Waters, 1961), mostly from lower levels. Examples from surface collections are usually from pre-shellmound sites in the Wheeler Basin of the Tennessee River. An early Archaic association is suggested, and a date of sometime before 5000 years ago is indicated.

### LEDBETTER, Kneberg (Kneberg, 1956): A-53

GENERAL DESCRIPTION: This is a large, stemmed point with asymmetrical blade edges.

MEASUREMENTS: The illustrated plesiotype provided the following measurements: length, 71 mm.; shoulder width, 36 mm.; stem width, 16 mm.; stem length, 13 mm.; thickness, 10 mm. The type "... varies in length from 3 to 7 inches and is usually thick ( $\frac{1}{2}$ " to  $\frac{3}{4}$ ")." (Kneberg, 1956.)

FORM: The cross-section is biconvex. Shoulders are usually asymmetrical, with one being wider than the other. Shoulders may be tapered or straight. "The distinctive feature of the blade is its asymmetry. The side edges are usually recurvate, but the recurvature is reversed on the two side edges." (Kneberg, 1956.) The distal end is acute. The stem may be straight or slightly expanded. The basal edge is usually straight; rarely, excurvate and thinned.

FLAKING: The blade and hafting area are shaped by broad, shallow, random flaking. Secondary flaking ranges in extent from regular flaking along the sides to the faces with fine retouch along the blade edges, to practically non-existent secondary flaking on some examples. Local materials were generally used.

COMMENTS: The type was named for the Ledbetter Site in Benton County, Tennessee. The illustrated example is from Cambron Site 48 in Lincoln County, Tennessee. One example was recovered from Level 4 at the University of Alabama Site Ms 201 in Marshall County, Alabama. This indicates a late Archaic or early Woodland association. At the Eva Site

(Lewis and Lewis, 1961) most examples appear to have originated late in the Archaic period. Examples were recovered from the Big Sandy component and Stratum II (top) of the Three Mile component. Examples are found on Archaic sites in North Alabama. Kneberg (1956) suggests a date of from about 2000 B. C. to early centuries A. D.

LERMA POINTED BASE, Termed "Lerma" by <u>MacNeish</u> (Suhm, Krieger and Jelks, 1954): A-54

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GENERAL DESCRIPTION: This is a medium to large, lanceolate point with a pointed base.

MEASUREMENTS: Twenty points from 15 sites in the Tennessee Valley (Soday and Cambron, n. d.) provided the following measurements; length—maximum, 104 mm.; minimum, 48 mm.; average, 74 mm.: width—average, 23 mm.: thickness—average, 10 mm. The illustrated example is 110 mm. long, 28 mm. wide, and 9 mm. thick.

FORM: The cross-section may be plano-convex or biconvex. The widest part of the point is usually about one-third of the length of the point from the base. From its widest part to the distal end, the blade is excurvate or sometimes nearly straight. The distal end is acute. The base is pointed and may be broad or acute.

FLAKING: The presence of many hinge fractures on blade faces indicates much of the flaking used to shape the blade and hafting area may be the result of the baton method of percussion flaking. Some secondary flaking appears along the edges. The plane striking area on the basal edge indicates manufacture from a blade. Many examples in the Tennessee Valley are made of Ft. Payne chert.

COMMENTS: The type site is the Canyon Diablo Site of Tamaulipas, Mexico (Mahan, 1955). An example was found with a mammoth near Mexico City. The illustrated example is from Hulse Site 32E, Limestone County, Alabama. Examples are usually found on the same sites as Lerma Rounded Base, but may be somewhat earlier as is the case with the Mexican examples although not with Rounded Base Texas examples. At the Quad Site (Cambron and Hulse, 1960a) an example reworked to a drill was recovered from Stratum III in association with Big Sandy I, Dalton, Crawford Creek, and other points. An early Archaic to transitional Paleo association is suggested.



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#### LERMA ROUNDED BASE, Termed "Lerma" by <u>MacNeish</u> (DeJarnette, Kurjack and Cambron, 1962): A-55

GENERAL DESCRIPTION: This is a medium to large sized, lanceolate point with rounded base.

MEASUREMENTS: Some measurements of 52 examples from 27 sites in the Tennessee Valley (Soday and Cambron, n. d.) follow: length—maximum, 99 mm.; minimum, 51 mm.; average, 80 mm.: width—average, 28 mm.: thickness—average, 9 mm. The illustrated example is 90 mm. long, 30 mm. wide, and 9 mm. thick.

FORM: The cross-section is usually biconvex but may be somewhat flattened or plano-convex. The blade is usually excurvate but may be nearly straight beyond the hafting area. Some examples may be beveled on one side of each face beyond the hafting area. The distal end is acute. The hafting area may be rounded or broad-pointed. The basal edge is thinned, except for the striking platform of the basic blade, on many examples. This leaves a plane area on part of the basal edge.

FLAKING: A combination of broad shallow flakes and short hinged flakes were used on many examples to shape the blade and hafting area. Secondary flaking is usually present along the edges. The plane striking area on the basal edge indicates manufacture from a blade. Local materials are usually employed. Many North Alabama examples are made of Ft. Payne chert.

COMMENTS: The point was named Lerma Rounded Base by Cambron to distinguish it from Lerma Pointed Base. The type is a variant of the Lerma point as defined by MacNeish (E. C. Mahan, 1955). The illustrated example is from Hulse Site 37E in Limestone County, Alabama. Examples from Texas are illustrated by Suhm and Jelks (1962) with an estimated age of 2000 B. C. to

1000 A. D. Others from Texas were described as Archaic and illustrated by Bell (1958). At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) one example was recovered from Level 1 of Zone D, which is an indication of pre-Archaic or early Archaic association at this site. The presence of one example each from Levels 8 and 9 at the University of Alabama Site Ms 201 in Marshall County, Alabama, indicates an early Archaic association. Three examples were found in Stratum II at Flint Creek Rock Shelter (Cambron and Waters, 1961), indicating an early to middle Archaic association. Evaluation of this evidence and observations indicate a possible existence of from transitional Paleo to middle Archaic times.

#### LIMESTONE, <u>Cambron</u> (This Paper): A-105

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GENERAL DESCRIPTION: This is a small to medium sized, incurvate-based point with tapered shoulders.

MEASUREMENTS: Ten cotypes from Cambron Site 12, Limestone County, Alabama, provided the following measurements: length—maximum, 52 mm.; minimum, 38 mm.; average, 48 mm.: shoulder width—maximum, 35 mm.; minimum, 24 mm.; average, 28 mm.: stem width—maximum, 21 mm.; minimum, 14 mm.; average, 17 mm.: stem length—maximum, 9 mm.; minimum, 6 mm.; average, 8 mm. Measurements of the illustrated example are: length, 51 mm.; shoulder width, 29 mm.; stem width, 20 mm.; stem length, 14 mm.; thickness, 9 mm.

FORM: The cross-section is biconvex. Shoulders are usually tapered or, rarely, horizontal and are occasionally rounded. The blade is straight and the distal end acute.



The stem may be straight or slightly expanded with straight or incurvate side edges. The basal edge is always incurvate and thinned.

FLAKING: The blade and stem are shaped by broad, shallow, random flaking. Secondary flaking along the blade edge ranges from crude to fine. Several examples show fine retouch on only one side of each blade edge, but this does not appear to be an attempt to bevel the blade edges. Large deep flakes were often removed from the basal corners of the original blade in order to shape the stem. These "notches" were then usually retouched as a final measure. After having been thinned, the basal edge was often finely retouched. Bangor flint appears to have been the most frequently used material in manufacture of these points.

COMMENTS: The type was named after examples taken from a shell mound on the Tennessee River in Limestone County, Alabama. The illustrated example is from the type site, primarily an Archaic

shellmound site, Cambron Site 12 in Limestone County, Alabama. Surface collections from sites in this area indicate a late Archaic and/or Woodland association. At the University of Alabama Site Ms 201 in Marshall County, Alabama, two examples were recovered from Level 4 and one from Level 7. This is an indication of late Archaic or early Woodland association at this site.

# LITTLE BEAR CREEK, <u>DeJarnette</u> (DeJarnette, Kurjack and Cambron, 1962): A-56

GENERAL DESCRIPTION: This is a medium to large sized, long-stemmed point with slightly excurvate blade edges.

MEASUREMENTS: Eleven cotypes from Little Bear Creek, Ct 8 (Webb and DeJarnette, 1948b), provided the following measurements: length—maximum, 90 mm.; minimum, 64 mm.; average, 75 mm.: shoulder width—maximum, 28 mm.; minimum, 22 mm.; average, 24 mm.: stem width—maximum, 17 mm.; minimum, 15 mm.; average, 16 mm.: stem length—maximum, 20 mm.; minimum, 16 mm.; average, 18 mm.: thickness—maximum, 11 mm.; minimum, 7 mm.; average, 9 mm. Measurements of the illustrated example are: length, 80 mm.; shoulder width, 30 mm.; stem width, 15 mm.; stem length, 16 mm.; thickness, 11 mm.

FORM: The cross-section is biconvex. Shoulders are horizontal or tapered. Blade edges are excurvate or, rarely, straight. The distal end is acute. The hafting area is stemmed. The stem may be straight or contracted with straight side edges. Stem edges are usually ground. The stem base edge is straight and may be unfinished.

FLAKING: Deep flake scars and hinge fractures indicate that random percussion flaking was used to shape the blade and stem. Some secondary flaking may also be the result of percussion flaking. Local materials were used.

COMMENTS: The type was named after Little Bear Creek Site Ct 8 (Webb and DeJarnette, 1948b) where it was the most important type. The illustrated example is from Hulse Site 17 (Apple Orchard) in Limestone County, Alabama. Of the 65 recovered examples from the Little Bear Creek Site, 58 were from the upper three feet of the eight-foot midden with about one-half of these in the upper foot. This indicates an introduction of the type in late Archaic times and a climax in late Woodland. At Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) three examples were recovered from Level 1, seven from Level 2, three from Level 3 and one each from Levels 4, 5 and 7. This indicates

a strong late Woodland association at this site with a possible introduction somewhat earlier. Stratum I (Woodland) at Flint Creek Rock Shelter (Cambron and Waters, 1961) produced two examples, one in the center third and one from the upper fifth of the stratum. At Flint River Shell Mound (Webb and DeJarnette, 1948a) three examples were recovered from Zones A and B (Woodland) and six examples from Zones C and D (Archaic). This evidence seems to indicate an introduction in the shellmound Archaic period of North Alabama and a climax in late Woodland times, with a suggested date of 4000 years ago to about 1500 years ago.

# LOST LAKE, <u>Cambron and Hulse</u> (DeJarnette, Kurjack and Cambron, 1962): A-27

GENERAL DESCRIPTION: This is a medium to large, corner-notched point beveled on one edge of each blade face and is rhomboid in cross-section.

MEASUREMENTS: The measurements of 11 cotypes (including the illustrated example, from which feature data were taken) range as follows: length—maximum, 81 mm.; minimum, 49 mm.; average, 63 mm.: shoulder width—maximum, 48 mm.; minimum, 35 mm.; average, 40 mm.: stem width—maximum, 32 mm.; minimum, 23 mm.; average, 27 mm.: stem length—maximum, 15 mm.; minimum, 12 mm.; average, 13 mm.: thickness—maximum, 8 mm.; minimum, 7 mm.; average, 7 mm.

FLAKING: The flaking used on the faces is broad, shallow and random





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leaving the faces flat. The regular retouch flaking used to bevel the blade was removed from one side of each face and often left serrations; much of this flaking appears to be percussion. One deep, broad flake was removed on each face to form the terminal end of the notches. Apparently small flakes were removed for about one-third the length of the finished notch before the large flakes were struck off. Some retouching was used to finish the notches. Shallow, relatively broad, flakes were removed in thinning the base.

FORM: The cross-section is rhomboid. As a result of deep, narrow, corner notches, the barbs are usually simple, long and may be rounded or acute; rarely, expanded. The blade is usually straight; rarely, excurvate or recurvate. The blade edges may or may not be serrated but are always beveled on one edge of each face. The distal end is usually acute but may approach broad. The hafting area is usually diagonally corner notched; rarely, diagonally basal notched. The notches, as measured along the stern side edge, are usually deep and narrow. The sides of the expanded stem are straight or incurvate. The stem base is



thinned and may be incurvate, straight or excurvate. It is usually ground except on some straightbased examples.

COMMENTS: The type was named after the Lost Lake area in Limestone County, Alabama, where many examples are found. The illustrated example is from Hulse Site 14a, Limestone County, Alabama. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) an example from Level 6, Zone A, and one from Level 9, Zone A, were recovered. Examples from North Alabama are from pre-shellmound sites, and are usually patinated. This indicates an early Archaic association prior to 5000 years ago.

#### MADISON, Scully (Scully, 1951): A-60

GENERAL DESCRIPTION: This is a small, thin, triangular point.

MEASUREMENTS: Fifteen plesiotypes, including the illustrated example from Cambron Site 27 in Limestone County, Alabama, provided the following measurements and traits: length—maximum, 33 mm.; minimum, 17 mm.; average, 26 mm.: width at base—maximum, 21 mm.; minimum, 12 mm.; average, 16 mm.: thickness—maximum, 6 mm.; minimum, 3 mm.; average, 4 mm.

FORM: The cross-section is flattened. Blade edges are straight, rarely slightly excurvate. The distal end is acute. There is no way to distinguish the hafting area from the blade. Some part of the basal portion of the blade was used as a hafting area. The basal edge may be straight—or incurvate one or two millimeters—and is thinned.

FLAKING: Broad, shallow, random flaking was used to shape the blade. Fine secondary flaking was used to thin and shape the side and basal edges. Local materials were used.

COMMENTS: According to Ritchie (1961) this type was described by Scully as the Mississippi Triangular point and was later changed by him to the Madison point (Scully, 1951). Scully gives the association as "Middle Mississippi" and the distribution as "Middle and Upper Mississippi sites in Illinois, Wisconsin, and Missouri".

Kneberg (1956) refers to a similar point as "Late Mississippi Triangular." She suggests a date of 1300-1800 A. D. The length range, as given by Scully, and measurements of 100 points from a single prehistoric Iroquois site in western New York (Ritchie, 1961) compare

favorably with Alabama measurements. The type is associated with the middle Mississippi culture in Alabama and has been referred to locally as Mississippi Triangular. At Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), of eleven levels in Zone A, Levels 1 and 2 produced 167 of the 234 examples recovered. At the University of Alabama Site Ms 201 in Marshall County, Alabama, 44 of the 52 examples from 13 levels came from Levels 1 and 2. Of the 86 examples recovered from Stratum I (Woodland and Mississippian) at the Flint Creek Rock Shelter (Cambron and Waters, 1961) most examples were in the uppermost levels. Of 11 examples from Flint River Mound (Webb and DeJarnette, 1948a) 9 were in Zone A (uppermost zone). The middle Mississippi culture, with which the points are associated in Alabama, is considered prehistoric Creek. Jenkins (1975) has confirmed a pre-Mississippian (Miller III) provenience for this type on the Central Tombigbee River. The Madison point type was also found on transitional Late Woodland-Early Mississippian sites (West Jefferson Phase) within the Warrior drainage (Jenkins and Nielsen, 1974).

#### MAPLES, Cambron (DeJarnette, Kurjack and Cambron, 1962): A-57

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GENERAL DESCRIPTION: This is a large, thin, broad stemmed point with an excurvate base.

MEASUREMENTS: Seventeen cotypes from the Tennessee River Valley (with the exception of length, where only 6 examples were used since the distal ends of the other 11 examples are missing) provided the following measurements and features: length—maximum, 119 mm.;



minimum, 61 mm.; average, 93 mm.: shoulder width—maximum, 72 mm.; minimum, 37 mm.; average, 52 mm.: stem width—maximum, 50 mm.; minimum, 24 mm.; average, 36 mm.: stem length—maximum, 16 mm.; minimum, 8 mm.; average, 11 mm.: thickness—maximum, 18 mm.; minimum, 10 mm.; average, 14 mm. The illustrated example provided the following measurements: length, 104 mm.; shoulder width, 60 mm.; stem width, 35 mm.; stem length, 12 mm.; thickness, 14 mm.

FORM: The cross-section is biconvex. Shoulders are tapered. Blade edges are usually excurvate but may be straight. The distal end is usually acute. The stem is short and usually contracted-rounded with excurvate side edges. The basal edge is excurvate or straight, usually thinned, and may be ground.

FLAKING: Broad, shallow to deep, flaking was used to shape the blade and stem. A minimum of secondary flaking was used on some examples, sometimes on only one edge of a face. Other examples show a considerable amount of retouching along the blade edges. A minimum of secondary flaking was used on the basal edge and sides of the stem. Local materials were utilized, especially Ft. Payne chert.

COMMENTS: The type was named from sites along Elk River near Maples Bridge in Limestone County, Alabama. The illustrated example is from Cambron Site 19, Morgan County, Alabama. An example from the Eva Site in Benton County, Tennessee is illustrated in Plate 4-a, Page 32 (Lewis and Lewis, 1961) and is described as late Archaic. At Stanfield-Worley Bluff Shelter (Delarnette Kuriack and Cambron 1962) an



Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) an example was recovered from Level 9 of Zone A. This indicates an Archaic association. Seven examples from the 3-foot level and one from the 5-foot level at Little Bear Creek Site Ct 8 (Webb and DeJarnette, 1948b) place the association as late Archaic at this site. At Flint River Shell Mound (Webb and DeJarnette, 1948a) one example was recovered from Zone A (Woodland) and one from Zone C-D (Archaic). An example was recovered from Archaic Level 7 at the University of Alabama Site 1 Ru 28 in Russell County, Alabama, on the Chattahoochee River. Evidence indicates a middle to late Archaic association with a probable date of about 4000 years ago or slightly earlier.

### McINTIRE, <u>Hulse</u> (This Paper): A-106

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GENERAL DESCRIPTION: The McIntire point is a medium sized, expanded stem point with straight base and excurvate blade edges.

MEASUREMENTS: Eleven cotypes, including the illustrated example, provided the following measurements and features: length—maximum, 68 mm.; minimum, 50 mm.; average, 57 mm.: shoulder width—maximum, 39 mm.; minimum, 31 mm.; average, 34 mm.: stem width—maximum, 21 mm.; minimum, 18 mm.; average, 20 mm.: stem length—maximum, 13 mm.; minimum, 11 mm.; average, 13 mm.: thickness—maximum, 10 mm.; minimum, 8 mm.; average, 9 mm.

FORM: The cross-section is biconvex. Shoulders are usually horizontal, but may be tapered or inversely tapered with short barbs. Blade edges are usually excurvate. Some examples may have one straight blade edge. The distal end is acute. The hafting area consists of an expanded stem with incurvate side edges. The basal edge is straight, rarely slightly incurvate, and thinned.

FLAKING: Broad, shallow, random flaking was employed to shape the blade and stem with short, sometimes deep, retouch along the blade edges. Broad deep flakes were removed by indirect percussion to form the stem. All stem edges were then retouched. Local materials were used and remnants of patinated rind remain on the base of most examples. This indicates manufacture from nodular materials, mostly Bangor flint in the area of the type site.

COMMENTS: The point is named for sites near McIntire ditch on the north bank of the Tennessee River near Decatur in Limestone County, Alabama. The illustrated example is from Cambron Site 28, one of the shellmound type sites in Limestone County, Alabama. In North



Alabama this type is associated with Archaic shellmounds along the Tennessee River. Most expanded stem examples illustrated as Type 7 by Webb and DeJarnette (1942) from Pickwick Basin are probable McIntire points, especially Numbers 1, 3 and 5 in the bottom row of top half of Plate 93. At least one example is included in Type L (Webb and Wilder, 1951) from Guntersville Basin shellmounds, and a few probable examples are illustrated from Wheeler Basin (Webb, 1939). The type may be coeval with Limestone Stemmed points. Associations in surface collections indicate a middle to late Archaic placement. Before recognition of the type some examples may have been classified as Provisional Type 2, expanded stem.

#### McKEAN, <u>Wheeler</u> (Wheeler, 1952): A-103

GENERAL DESCRIPTION: This is a small to medium sized lanceolate point with thinned, incurvate base.

MEASUREMENTS: Nine examples from eastern Wyoming, illustrated by Bell (1958) after Wheeler (1952) provided the following measurements: length—maximum, 61 mm.; minimum, 35 mm.; average, 51 mm.: width—maximum, 21 mm.; minimum, 14 mm.; average, 17 mm.: width at base—maximum, 13 mm.; minimum, 11 mm.; average, 12 mm.: depth of basal concavity—maximum, 6 mm.; minimum, 2 mm.; average, 4 mm. Measurements of four points including the illustrated example, are: length—maximum, 60 mm.; minimum, 52 mm.; average, 55 mm.: width —maximum, 29 mm.; minimum, 17 mm.; average, 24 mm.: thickness—maximum, 8 mm.; minimum, 5 mm.; average, 6 mm.: width at base—maximum, 20 mm.; minimum, 13 mm.; average, 16 mm.: basal concavity—maximum, 3 mm.; minimum, 2 mm.; average, 2 mm.

FORM: The cross-section is usually biconvex, but may be flattened. Blade edges are usually excurvate, but may be straight or recurvate. The distal end is acute. The auriculate hafting area is usually contracted rounded, but may be parallel rounded or expanded rounded. The basal edge is incurvate and thinned.

FLAKING: Flaking used to shape the blade and hafting area is usually random but may be collateral. The side edges are usually retouched and the basal edge is well thinned. Some examples from Idaho (Neisler Collection) exhibit transverse oblique flaking. Alabama examples are made of local materials.

COMMENTS: The type was named from examples from sites in Keyhole Reservoir in northeastern Wyoming (Wheeler, 1952). The illustrated example is from Hulse Site 55 in Limestone County, Alabama. About 15 examples in the collection of W. E. Neisler, from the Snake River between Kamima and American Falls, Idaho, were observed and considered in describing this type (Neisler, personal communication). The Idaho points more or less parallel the Wheeler points in outline, but all examples are heavily thinned on the

basal edge. One Wheeler point was observed in the collection but was made of flint and was on a site separate from the sites that produced McKean points. Most of the sites consist of "blow-outs" that cover an area of from one to ten acres. Bell (1958) lists radiocarbon dates from two areas, one from lower levels at Signal Butte, Nebraska (Wheeler, 1952) of 3500 to 4000 years ago. Other dates for sites in Angostura Basin, South Dakota, are  $3630 \pm 350$  and  $4230 \pm 350$  B. P. At Danger Cave near Wendover, Utah, examples listed by Jennings (1957) as Type W6 were found in Levels II, III, IV and V (uppermost) where radiocarbon dates of from 9789  $\pm 630$  to 1930  $\pm 240$  B. P. were secured. More examples were from Level V. As some examples of W8 (Wheeler points?) were recovered from the same levels (some A6s may be Wheeler points), this suggests that McKean points are derived from Wheeler points.

### MONTGOMERY, <u>Cambron</u> (This paper): A-121

GENERAL DESCRIPTION: The Montgomery is a small broad, rounded base point with an excurvate blade.

MEASUREMENTS: Fourteen cotypes from Montgomery and Escambia counties, Alabama, provided the following measurements and traits: length—maximum, 43 mm.; minimum, 23 mm.; average, 37 mm.: width —maximum, 22 mm.; minimum, 10 mm.; average, 16 mm.: thickness—maximum, 10 mm.; minimum, 5 mm.; average, 6 mm.

FORM: The cross-section is biconvex. The blade is excurvate. The distal end is acute. The base is rounded and thinned.

FLAKING: The blade and hafting area were shaped by shallow, random, percussion flaking with some retouch along the edges, especially near the distal end.

COMMENTS: The type was named after Montgomery, County, Alabama, where many points of this type, including the illustrated example, were recovered. The type is associated with sand and claygrit tempered pottery in Montgomery and Escambia counties, indicating a Woodland association in this area.

#### MORROW MOUNTAIN, <u>Coe</u> (Coe, 1959): A-61

GENERAL DESCRIPTION: This is a medium sized, rounded stem point with excurvate blade.

MEASUREMENTS: Eleven plesiotypes from Limestone County, Alabama, including the illustrated example, provided the following measurements and traits: length—maximum, 68 mm.; minimum, 36 mm.; average, 50 mm.: shoulder width—maximum, 28 mm.; minimum, 23 mm.; average, 25 mm.: stem width—maximum, 20 mm.; minimum, 14 mm.; average, 17 mm.: stem length—maximum, 11 mm.; minimum, 7 mm.; average, 9 mm.: thickness—maximum, 11 mm.; minimum, 7 mm.; average, 9 mm.

FORM: The cross-section is biconvex. Shoulders are narrow, usually horizontal but may be inversely tapered and occasionally expanded. Blade edges are usually excurvate but are recurvate on examples with expanded shoulders, and about half the examples have serrated blade edges. The distal end may be acute or mucronate, rarely broad. The

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hafting area is composed of a rounded, rarely pointed, stem that is occasionally ground along the edges.

FLAKING: Rather narrow, shallow, random flaking was used to shape the blade and stem. Some fine retouch was used to complete the shape of all edges. Short, fairly deep flakes were removed to form serrations along the blade edges of serrated examples. These serrations may appear the full length of the blade near the basal end or near the distal end. A variety of local flints and cherts were used.

COMMENTS: The type was named from sites near Morrow Mountain in the Piedmont of North Carolina where many examples, designated by Coe (1959) as Morrow Mountain I, were recovered. The illustrated example is from Cambron Site 76 (Pine Tree) in Limestone County, Alabama. The type had been illustrated as Rounded Stem Gypsum Cave points by Cambron (1958a) and designated Three Mile by Kneberg (personal communication). Morrow Mountain was adopted at the suggestion of James B. Griffin (personal communication). Coe (1959) places the type later than Stanley and earlier

than Guilford points in the Piedmont of North Carolina, where he suggests a date of about 4500 B. C. He also lists dates in Nevada of Gypsum Cave points between 6000 and 8000 B. C. Examples were found associated with two burials at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) along with Morrow Mountain Rounded Base and other early Archaic points and artifacts. Other examples recovered from this site as well as from Flint Creek Rock Shelter (Cambron and Waters, 1961) and Little Bear Creek (Webb and DeJarnette, 1948b) suggest an early Archaic association, as do surface collections in the Tennessee River Valley.

#### MORROW MOUNTAIN ROUNDED BASE, <u>Cambron</u> (DeJarnette, Kurjack and Cambron, 1962): A-61-b

 $\ensuremath{\mathsf{GENERAL}}$  DESCRIPTION: This is a medium to large, rounded base point with an excurvate blade.

MEASUREMENTS: Ten plesiotypes from Limestone County, Alabama, and Lincoln County, Tennessee, provided the following measurements: length—maximum, 58 mm.; minimum, 37 mm.; average, 45 mm.: width—maximum, 41 mm.; minimum, 24 mm.; average, 30 mm.: thickness—maximum, 10 mm.; minimum, 7 mm.; average, 8 mm. Larger examples are known from North Alabama, especially from the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962).

FORM: The cross-section may be flattened or biconvex. Blade edges are excurvate and rarely serrated. The distal end is usually acute but may be mucronate. The hafting area is rounded and thinned, but rarely ground.

FLAKING: Variable, random flaking was used to shape the faces. Some examples were finely retouched along the blade and hafting area edges, while others were not retouched at all. In general the flaking is cruder than that of Morrow Mountain or Morrow Mountain Straight Base. Local flints and cherts were used to make the points.

COMMENTS: The type was named because of similarities and associations with Morrow Mountain points (Coe, 1959) from sites near Morrow Mountain in the North Carolina Piedmont area. The illustrated example is from Cambron Site 76 (Pine Tree) in Limestone County, Alabama. The type was listed as Gypsum Cave by Cambron (1958a). At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), four examples were

associated with Burial No. 11 and two examples were found in association with Burial No. 8 along with Morrow Mountain points and other early Archaic points and tools—including a drill made from a Morrow Mountain Rounded Base point. At the University of Alabama Site Ms 201 in Marshall County, Alabama, one example was recovered from Level 1. In the Tennessee Valley of North Alabama the type is found on early Archaic sites. This type is similar to Gypsum Cave points, dated in Nevada at between 6000 and 8000 B. C. (Coe, 1959). An early Archaic association in Alabama is suggested.

# MORROW MOUNTAIN STRAIGHT BASE, <u>Cambron</u> (Cambron and Hulse, 1960b): A-61-a

GENERAL DESCRIPTION: This is a medium sized point with contracted stem and straight base.

MEASUREMENTS: Eleven plesiotypes, including the illustrated example, provided the following measurements and traits: length—maximum, 51 mm.; minimum, 37 mm.; average, 42 mm.: shoulder width—maximum, 35 mm.; minimum, 25 mm.; average, 28 mm.: stem width—maximum, 19 mm.; minimum, 16 mm.; average, 17 mm.: width at base of stem—maximum, 13 mm.; minimum, 8 mm.; average, 11 mm.: stem length—maximum, 10 mm.; minimum, 7 mm.; average, 9 mm.: thickness—maximum, 9 mm.; minimum, 7 mm.; average, 8 mm.



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FORM: The cross-section is biconvex. The narrow shoulders are usually inversely tapered but may be horizontal. Blade edges are excurvate and most examples are serrated. As on Morrow Mountain points, the serrations may be near the basal edge of the blade, near the distal end of the blade, or along the entire blade edges. Distal ends may be acute or mucronate. The hafting area consists of a straight sided, contracted stem with a straight thinned base. Some base and/or side edges may be ground.

FLAKING: Shallow, narrow-to-broad, random flaking was used to shape the blade and stem. Some fine retouch was carried out along the blade edges. Short deep flaking was used to form the serrations. Occasionally the mucronate distal end appears to be the result of intentional termination of serrating at the distal end. Other mucronate distal ends were simply flaked out.

COMMENTS: The type was named for its similarity to Morrow Mountain points (Coe, 1959) from sites near Morrow Mountain



in the Piedmont of North Carolina. The illustrated example is from Cambron Site 76 (Pine Tree) in Limestone County, Alabama. The type was first listed as Straight Stemmed Gypsum Cave by Cambron (1958a). The greatest differences between this type and Morrow Mountain is the greater frequency of shoulder barbs and the straight base of this type. Also, Morrow Mountain is more common. Three examples were recovered from Level 10, Zone A at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), which suggests a possibility of greater age than Morrow Mountain points. This type was not found with the two burials from this site which were associated with Morrow Mountain and Morrow Mountain Rounded Base points. At the University of Alabama Site Ms 201 in Marshall County, Alabama, this straight based variant was found below the other two types. A slightly earlier chronological provenience is suggested. Based on Coe's (1959) suggested date of about 4500 B. C. as the earliest appearance of Morrow Mountain points, a date of some time prior to 5000 years ago seems in order.

# MOTLEY, <u>Haag</u> (Ford, Phillips and Haag, 1955): A-109

GENERAL DESCRIPTION: The Motley point is a medium sized, expanded stem point with broad side or corner notches and straight blade edges.

MEASUREMENTS: Eight examples, including the illustrated specimen, from North Alabama and the southern part of Tennessee provided the following measurements and features: length—maximum, 71 mm.; minimum, 50 mm.; average, 60 mm.: shoulder width—maximum, 32 mm.; minimum, 27 mm.; average, 29 mm.: stem width at base—maximum, 26 mm.; minimum, 18 mm.; average, 22 mm.: stem width at narrowest point—maximum, 14 mm.; minimum, 11 mm.; average, 12 mm.: stem length—maximum, 17 mm.; minimum, 14 mm.; average, 15 mm.: thickness—maximum, 10 mm.; minimum, 7 mm.; average, 8 mm.

FORM: The cross-section may be biconvex or flattened. Shoulders may be horizontal, tapered, or inversely tapered. Blade edges are more apt to be straight but may be slightly excurvate, or one edge may be straight and the other excurvate. The distal end is acute. The stem is expanded and formed by broad deep side or corner notches. Several examples have one corner notch and one side notch. The side edges of the stem are incurvate and the base is usually straight. It is usually thinned, but rarely ground.

FLAKING: Shallow to deep random flaking was used to shape the faces. The blade edges are usually retouched by removal of short and fairly deep flakes. Large deep flakes were removed to form the notches, usually followed by secondary flaking along the stem and shoulder edges. Local materials were used.

COMMENTS: The Motley point was named from the Motley Place in northeastern Louisiana. The illustrated example is from Cambron Site 301 in Limestone County, Alabama. Bell (1958) states, "The type is best represented from the Poverty Point Culture in the lower Mississippi Valley" where radiocarbon dates range from about 1300 B. C. up to 200 B. C. It is



# **MOUNTAIN FORK, Cambron (This Paper): A-114**

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GENERAL DESCRIPTION: This is a small, narrow, thick, stemmed point.

MEASUREMENTS: Eleven cotypes from sites in Madison and Limestone counties, Alabama,

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provided the following measurements and traits: length—maximum, 51 mm.; minimum, 28 mm.; average, 40 mm.: shoulder width—maximum, 20 mm.; minimum, 13 mm.; average, 15 mm.: stem width—maximum, 15 mm.; minimum, 9 mm.; average, 11 mm.: stem length—maximum, 14 mm.; minimum, 7 mm.; average, 11 mm.: thickness—maximum, 8 mm.; minimum, 6 mm.; average, 7 mm.

FORM: The cross-section is usually biconvex but may be somewhat median ridged. Shoulders are narrow and tapered. Blade edges may be straight or excurvate. The distal end is acute. Nine of the eleven measured examples show impact fractures of the distal end. The stem is usually straight but may be tapered. The basal edge may be straight or excurvate and is usually unfinished, but may be thinned and is rarely ground.

FLAKING: Short, deep, random flakes were removed in shaping the faces of the blade and stem. Retouching of the edges was accomplished by removal of very short deep flakes. Local materials were used, especially Bangor nodular flint.

COMMENTS: The type was named from points from sites along Mountain Fork Creek in Madison County, Alabama, where they were first recognized. The illustrated example is from Cambron Site 103 in this area. The type appears in surface collections along with Swan Lake, Flint River Spike, and Bradley Spike points. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), a few examples were recovered from the upper levels of Zone A. This is an indication of late Woodland association at this site.



### MUD CREEK, <u>Hulse</u> (Cambron and Hulse, 1960b): A-62

GENERAL DESCRIPTION: This is a medium sized, expanded stem point with excurvate blade and acuminate distal end.

MEASUREMENTS: Fourteen cotypes from Limestone County, Alabama, provided the following measurements and traits: length—maximum, 67 mm.; minimum, 46 mm.; average, 56 mm.: shoulder width—maximum, 29 mm.; minimum, 23 mm.; average, 26 mm.: stem width—maximum, 20 mm.; minimum, 14 mm.; average, 18 mm.: stem length—maximum, 17 mm.; minimum, 12 mm.; average, 14 mm.: thickness—maximum, 10 mm.; minimum, 8 mm.; average, 9 mm.

FLAKING: Broad, shallow, random flaking was used to shape the blade and hafting area. Small, fairly deep flakes were removed in retouching the blade and stem edges. Most stem bases have been thinned, but a few are crudely finished.

FORM: The cross-section is biconvex. Shoulders are usually tapered but may be horizontal and are sometimes rounded. Blade edges are excurvate. The distal end is sharply acute or acuminate. The stem is expanded, sometimes only slightly. Side edges are usually straight. The basal edge is usually thinned and straight but may be excurvate. About half of the examples have ground bases, and several bases retain rind from the parent material.

COMMENTS: It is named from points found on sites near Mud Creek in Limestone County, Alabama. The illustrated example is from Hulse Site 50 in Limestone County, Alabama. The type is similar to Lange points (Bell, 1958) in outline, but is narrower in proportion and differs in other features. At Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) one example each was recovered from Levels 1, 2, and 3; two from Level 5; one from Level 7; two from Level 9. This indicates a late Archaic to



#### MULBERRY CREEK, <u>DeJarnette</u> (DeJarnette, Kurjack and Cambron, 1962): A-63

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GENERAL DESCRIPTION: This is a medium to large, stemmed point with pronounced excurvate blade.

MEASUREMENTS: Ten cotypes, from the Little Bear Creek Shell Mound (Webb and DeJarnette,

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1948b) provided the following measurements and traits: length—maximum, 116 mm.; minimum, 81 mm.; average, 96 mm.: blade width—maximum, 36 mm.; minimum, 22 mm.; average. 30 mm.: shoulder width—maximum, 30 mm.; minimum, 20 mm.; average, 25 mm.: stem width—maximum, 20 mm.; minimum, 12 mm.; average, 17 mm.: stem length—maximum, 16 mm.; minimum, 12 mm.; average, 15 mm.: thickness—maximum, 12 mm.; minimum, 9 mm.; average, 10 mm. The illustrated example provided the following measurements: length, 81 mm.; blade width, 30 mm.; shoulder width, 28 mm.; stem width, 17 mm.; stem length, 13 mm.; thickness, 10 mm.

FORM: The cross-section is biconvex. Shoulders are narrow, usually tapered, and may be asymmetrical. Blade edges are excurvate, with the widest point near the midsection, and may be finely serrated. The distal end is usually acute but may be acuminate. The stem may be tapered or straight, rarely expanded. The basal edge is usually excurvate, but may be straight, and is poorly thinned. Stem edges are usually ground.

FLAKING: Broad, shallow, random flaking was used to shape the faces. Fine retouch was carried out along the blade edges. The stem edges were usually more crudely retouched. Local materials, especially Ft. Payne chert, were used.

COMMENTS: The type was named from examples from sites at and near Mulberry Creek in Colbert County, Alabama. The illustrated example is from Cambron Site 8 in Morgan County, Alabama. One example was recovered from Level 1, Zone A at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). At the Little Bear Creek Site in Colbert County, Alabama (Webb and DeJarnette, 1948b), six of the fourteen recovered examples were from the 2-foot level, two from the 1-foot level, two from Zone A (2.75'), two



from the 3-foot level and two from the 6-foot level. This evidence indicates an introduction in middle Archaic times, a strong association to late Archaic, and survival into early Woodland at this site. At the Flint River Shell Mound (Webb and DeJarnette, 1948a) two examples were taken from Zone A (upper Woodland), one from Zone C (upper Archaic) and one from Zone D (lower Archaic). Based on this information and surface collection associations, a climax of the type in late shellmound Archaic is suggested for North Alabama. Distribution seems to be somewhat limited, although similar examples are illustrated from early Woodland Roskamp Focus of Illinois (Wray, 1950) and from Boone Focus (early Woodland) of central Missouri (Chapman, 1948).

#### NEW MARKET, <u>Cambron</u> (This paper): (Formerly classified as Randolph) A-74

GENERAL DESCRIPTION: This is a medium sized, narrow, rounded stem point with expanded shoulders.

MEASUREMENTS: Six plesiotypes, including the illustrated example, provided the following measurements: length—maximum, 61 mm.; minimum, 45 mm.; average, 51 mm.: shoulder width —maximum, 18 mm.; minimum, 15 mm.; average, 17 mm.: stem width—maximum, 13 mm.; minimum, 10 mm.; average, 12 mm.: stem length—maximum, 12 mm.; minimum, 9 mm.; average, 11 mm.: thickness—maximum, 9 mm.; minimum, 6 mm.; average, 7 mm.

FORM: The cross-section is biconvex. Shoulders are narrow and tapered and may be expanded. Excluding the expanded shoulders, the blade is usually straight but may be slightly excurvate. The distal end is sharply acute. The stem is contracted-rounded and thinned on the edges. Sides of the stem are usually straight. The basal edge is always excurvate.

FLAKING: Flaking used to shape the faces of the blade and stem is usually fairly deep, as is most of the fine retouching along the edges. The expanded shoulder is formed by leaving that area of the blade intact during finishing of the blade edges. In some cases the lack of retouch along the basal edge of the blade resulted in an absence of expanded shoulders. Local materials were used.

COMMENTS: The type was named for the New Market Site near New Market, Alabama, where the type was first recognized. The type was described in previous editions of this book as Randolph, a historic type named by Coe (1959) from the Doerschuk Site in Piedmont, North Carolina. The New Market point has been found to differ in flaking as well as culturally from the Randolph type. The illustrated example is from Cambron Site 76 (Pine Tree) in

Limestone County, Alabama. The type is similar in some respects to Bradley Spike, but differs in that the stem is tapered and rounded, shoulders may be expanded, and fine retouch is a feature of the blade. One example was recovered from Level 2 at the University of Alabama Site Ms 201 in Marshall County, Alabama. One example was recovered from Zone A and two from Zone A-B at the Flint River Shell Mound (Webb and DeJarnette, 1948a). These proveniences place the type at these sites in the Woodland period or later. They are found at Flint River and nearly always in surface collections with Swan Lake, Flint River Spike, and Bradley Spike points.



# NODENA, Chapman and Anderson (Bell, 1958): A-110

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GENERAL DESCRIPTION: The Nodena is a small to medium-sized, lanceolate

point with rounded base.

MEASUREMENTS: The illustrated plesiotype measures 46 mm. long, 15 mm. wide and 7 mm. thick. Bell (1958) gives the range as 1 to 3 inches in length.

FORM: The cross-section is biconvex. The blade is excurvate with an acute distal end. The hafting area or basal edge is usually rounded, but may be acute.

FLAKING: Broad, shallow, random flaking was used to shape the blade and hafting area, leaving a low median ridge on some examples. The edges of the blade and hafting area show fine retouching of a narrow shallow nature. Local flint was used for the illustrated specimen.

COMMENTS: The type was named after the Nodena Site in eastern Arkansas, but has been referred to as the "Willow-leaf" type by numerous writers and collectors for the past 25 years (Bell, 1958). The illustrated example is from Baker Site N, Madison County, Alabama. Bell (1958) gives the distribution as heaviest in eastern Arkansas, along the Mississippi and St. Francis river valleys and also along the Arkansas River Valley as far as Dardanelle, Arkansas. He lists the cultural affiliation as late prehistoric and suggests a date of 1400 to

1600 A. D. The type is rare in Alabama, and the cultural association of Alabama points is unknown.

#### NOLICHUCKY, <u>Kneberg</u> (Kneberg, 1957): A-64

GENERAL DESCRIPTION: The Nolichucky is a small to medium sized point with incurvate hafting area.

MEASUREMENTS: The illustrated example from the type site provided the following measurements: length, 37 mm.; blade width, 16 mm.; width of base, 17 mm.; width of hafting constriction, 15 mm.; thickness, 6 mm. "The size is usually small, but occasional examples range up to 2 inches in length. The proportions are usually narrow, rarely broad." (Kneberg, 1957.)

FORM: The cross-section is biconvex. Blade edges may be straight or excurvate. The distal end is acute. The hafting area consists of an area with incurvate side edges that may be ground and may be auriculate with expanded pointed or rounded auricles. The basal edge is usually incurvate but may be straight and is usually thinned.

FLAKING: Deep to shallow random flaking was employed to shape the faces. Retouching on all edges is usually evident.

COMMENTS: The type was named for the Nolichucky River. The type site is Camp Creek Site at the confluence of Camp Creek with the Nolichucky River (Lewis and Kneberg, 1957). The illustrated example is from Level A of this homogenous site.

"An early Woodland type associated with Greeneville and Camp Creek types. These three types represent 50% of all points from Camp Creek Site." (Kneberg, 1957). A radiocarbon date of 2050  $\pm$ 250 B. P. was obtained from Level C at this site (Lewis and Kneberg, 1957). One example was recovered from the upper level of Stratum I (Woodland and Mississippian) at Flint Creek Rock Shelter (Cambron and Waters, 1961).

At Flint River Mound one example was taken from Zone A. Greeneville and Camp Creek points were more numerous at this site. This evidence indicates a sparse late Woodland association in north Alabama. Three examples appear in the University of Alabama surface collections from Guntersville Basin of the Tennessee River.

#### OSCEOLA, <u>Ritzenthaler</u> (Ritzenthaler, 1946 and Bell, 1958): A-65

GENERAL DESCRIPTION: This is a large, parallel sided point with deep, narrow side notches.

MEASUREMENTS: Bell (1958) gives the size as ranging from 3 inches to 9 inches in length with most examples measuring between 4 inches and 5 inches. The illustrated example provided the following measurements: length, 97 mm.; width of blade, 32 mm.; width at base, 27 mm.; thickness, 7 mm.; depth of notches, 7 mm.; width of notches, 5 mm.

FORM: The cross-section is flattened. Blade edges are usually near parallel for most of the length of the blade, then slope rather abruptly to an acute distal end. Local examples may be sparsely serrated along the blade edges. "The hafting area is notched from the side edges near the base and may be either squared or rounded. The stem base is either straight or incurvate with the incurvate base being more typical." (Bell, 1958). The base of the illustrated example is ground.

FLAKING: Bell (1958) describes the flaking as well done, first by rather large percussion flaking and then by finer flaking along the edges and base. Long, shallow, random flaking was usually employed. Local materials were used.

COMMENTS: The type was named for the Osceola Site in Wisconsin. The illustrated example is from Cambron Site 19, Morgan County, Alabama. A somewhat similar type is described by Ritchie (1961) as Otter Creek points associated with the Archaic cultures of Vermont and New York. Bell (1958) states that the type is associated with the Old Copper Culture of Wisconsin where radiocarbon dates suggest an age of 7000 to 5000 years ago. He also





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lists distribution as Wisconsin, Illinois and Missouri. Alabama examples usually appear on early Archaic sites. The type is probably related to the Big Sandy Complex.

# PAINT ROCK VALLEY, <u>Mahan</u> (Cambron, 1958a): A-66

GENERAL DESCRIPTION: The Paint Rock Valley point is a medium sized, broad, triangular point with incurvate base and excurvate blade edges.

MEASUREMENTS: Fourteen plesiotypes, including the illustrated example, from Cambron Site 48, Lincoln County, Tennessee, provided the following measurements and traits: length—maximum, 58 mm.; minimum, 35 mm.; average, 46 mm.: blade width—maximum, 31 mm.; minimum, 25 mm.; average, 28 mm.: width at base—maximum, 30 mm.; minimum, 18 mm.; average, 25 mm.: thickness—maximum, 10 mm.; minimum, 6 mm.; average, 8 mm.: depth of basal concavity—maximum, 3 mm.; minimum, 1 mm.; average, 2 mm.

FORM: The cross-section is biconvex. Blade edges are usually excurvate, rarely straight. The distal end is usually acute but may be broad. The hafting area consists of an indeterminate basal portion of the blade that is usually slightly contracted. The base is usually incurvate, rarely straight, and may be thinned or beveled.

FLAKING: Broad, sometimes deep, random flaking was used to shape the blade and hafting area. Rather long secondary flakes were struck off along the edges, with a minimum of fine retouch having been carried out. Short flakes struck from the basal edge often resulted in a beveling of the basal edge. Local materials were used.

COMMENTS: This type was named from points found on sites in the Paint Rock River Valley in Jackson County, Alabama. The illustrated example is from Cambron Site 48, Lincoln County, Tennessee. It resembles several Texas types (Suhm, Krieger and Jelks, 1954): Kinney, with an estimated age of 4000 years ago, which is shorter and broader; Matamoros with an estimated age of 500 A. D., which is smaller and usually beveled; Tortugas, estimated age 6000 years ago, which is

beveled and has no contraction of the base. At the University of Alabama Site Ms 201 in Marshall County, Alabama, two examples were recovered from Level 11 and one from Level 9. Other types from these lower levels include Cumberland, Quad, Dalton, Wheeler and Big Sandy I points. One example was recovered from Burial 8 at Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) in association with Morrow Mountain, Crawford Creek, White Springs and possibly Eva points, as well as bone points and other artifacts. These associations indicate an early Archaic to transitional Paleo-Indian connection. At the Hardaway Site (Coe, 1959) points similar to Paint Rock Valley points were recovered from Stratum IV along with Dalton and Quad points.

#### PALMER, <u>Coe</u> (Coe, 1959): A-67

GENERAL DESCRIPTION: The Palmer point is a small corner notched point with a straight, ground base and pronounced serrations (Coe, 1959).

MEASUREMENTS: Coe (1959) lists the following measurements: length—maximum, 60 mm.; minimum, 28 mm.; average, 35 mm.: width—maximum, 25 mm.; minimum, 15 mm.; average, 20 mm.: thickness—maximum, 12 mm.; minimum, 5 mm.; average, 8 mm.: average width of notches, 3 mm.: length of notches, measured along stem edge, 5 mm. to 7 mm. The illustrated example provided the following measurements: length, 46 mm.; width at shoulders, 25 mm.; width of stem, 21 mm.; thickness, 7 mm.; width of notches, 3 mm.; depth of notches, 6 mm.

FORM: The cross-section is biconvex. Shoulders are barbed. Blade edges are usually straight, but may be slightly incurvate or excurvate. Most examples are serrated, some quite deeply. The hafting area is corner notched. Side edges of the stem are usually incurvate. The basal edge is usually straight but may be slightly incurvate or excurvate. It is thinned and ground.

FLAKING: "These points were made by pressure flaking upon a prismatic flake of the proper proportions. The serrations apparently were made at the time when the point was finished, since the flake scars produced by the serrations were long and overlapped





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toward the center of the blade." (Coe, 1959). The notches were formed by the removal of deep broad flakes. Local materials were used.

COMMENTS: The type was named from points recovered from the Hardaway Site in Piedmont, North Carolina. The illustrated example is from Cambron Site 92 in Madison County, North Carolina. Concerning the type at the Hardaway Site, Coe (1959) states, "Following the Hardaway occupation, the style of projectile points changed to a small corner-notched serrated variety with extensive grinding along the base. Along with this the use of the small hafted snub-nosed scraper increased considerably." He gives distribution as "Camp Creek Site in Tennessee and northward along the Atlantic Coast into New England." He further states, "On the basis of excavated data, this type must have an antiquity of nearly 8000 years." Two examples are listed by Cambron and Waters (1961) from the bottom of Stratum II (Archaic) at Flint Creek Rock Shelter. Three Palmer points were classified by Cambron from the surface collection of the University of Alabama from Guntersville Basin on the Tennessee River. The type is also found on western North Carolina sites.



# PEDERNALIS, Kelley (Suhm, Krieger and Jelks, 1954): A-68

GENERAL DESCRIPTION: This is a medium to large point with bifurcated stem.

MEASUREMENTS: Suhm and Jelks (1962) list some measurements in mm., as follows: "Length, max. 130, min. 30, av. between 60 and 90; average width 30 to 50; stem width 15 to 30; stem length 15 to 20." The illustrated example provided the following measurements: length, 87 mm.; width of shoulders, 32 mm.; width of stem, 28 mm.; stem length, 25 mm.; thickness, 6 mm.; depth of basal concavity, 8 mm.

FORM: The cross-section may be biconvex or flattened. Shoulders may be horizontal or barbed. "Blade edges are usually straight or excurvate, but occasionally incurvate, recurved, or narrowed to a slim needle-like tip." (Bell, 1958.) The distal end is usually acute. The stem is usually straight, but may be slightly contracted with straight or excurvate side edges. The basal edge is incurvate, usually deeply so, and may be thinned by removal of large flakes, and may be near beveled on some examples. Grinding of basal edges is seldom present.

FLAKING: Broad, shallow flakes were removed to shape the blade and stem. Deeper shorter flaking was used to finish all edges. On many examples large broad flakes were removed to form the shoulders, especially on barbed examples. The thinning of the bases of some examples was accomplished by removal of one or several large thin flakes. Local materials were generally used.

COMMENTS: The type was named from sites in central Texas where it is regarded as a diagnostic type of the "Round Rock Focus" (Kelley, 1947a). The illustrated example is from the Helen Womack collection of Bedford County,

Tennessee. Suhm, Krieger and Jelks (1954) list Pedernalis as "very common over all of central Texas." It is listed as a common point found with the Edwards Plateau aspect of the Archaic period with an estimated age of 4000 B. C. to 500 or 1000 A. D. (Suhm, Krieger and Jelks, 1954). An example of the type appears in unknown provenience at Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). A broken example from the middle of the Archaic Stratum II at Flint Creek Rock Shelter (Cambron and Waters, 1961) appears to have been reworked on one blade edge to a burin. Two examples were recovered from Zone C (upper Archaic) at Flint River Shell Mound (Webb and DeJarnette, 1948a). A suggested association for Alabama is late Archaic or early Woodland.

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# PICKWICK, DeJarnette (DeJarnette, Kurjack and Cambron, 1962): A-69

GENERAL DESCRIPTION: This is a medium to large, expanded shoulder point with recurvate blade edges and tapered stem.

MEASUREMENTS: Twelve cotypes from the Tennessee River Valley of North Alabama provided the following measurements and traits: length—maximum, 117 mm.; minimum, 71 mm.; average, 85 mm.: shoulder width—maximum, 48 mm.; minimum, 37 mm.; average, 44 mm.: stem width—maximum, 24 mm.; minimum, 15 mm.; average, 19 mm.: stem length—maximum, 12 mm.; minimum, 9 mm.; average, 10 mm. The illustrated example provided the following measurements: length, 76 mm.; shoulder width, 41 mm.; stem width, 19 mm.; stem length, 13 mm.; thickness, 9 mm.

FORM: The cross-section is biconvex. Shoulders are usually tapered, but may be horizontal, and are always expanded. About one-half of the measured examples had asymmetrical shoulders. Blade edges are recurvate and may be slightly serrated. The distal end is acute. Stems are thick and tapered, rarely straight. Side edges of the stem are usually incurvate and may be ground. The basal edge may be excurvate or straight and rarely ground.

FLAKING: Broad, shallow flaking was used to shape the blade and stem.



Short, deep, regular flaking was used to finish the blade edges, often resulting in fine serrations. A minimum of retouch was used along the stem edges. Local materials were utilized.

COMMENTS: The type was named from points found on sites in Pickwick Basin of the Tennessee River Valley. The illustrated example is from Cambron Site 48 in Lincoln County, Tennessee. It is similar to Ledbetter Stemmed points (Kneberg, 1956), but both blade edges are recurvate. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) five examples were recovered from Zone A, one from Level 2, two from Level 3 and one each from Levels 4 and 7. At Little Bear Creek Shell Mound (Webb and DeJarnette, 1948b) examples were recovered from levels as follows: Levels 1 and 2, 1 each; Level 3, 13; Level 4, 3; Level 5, 4; Levels 6 and 7, 1 each. Levels 1 and 2 are Woodland, the other levels contained Archaic materials. At Flint River Shell Mound (Webb and DeJarnette, 1948a) one each was recovered from Zones A and B (Woodland), four examples from Zone C, one from Zone C-D and three from Zone D. Zones C, C-D and D are Archaic. The above evidence indicates a beginning in middle Archaic and a climax in late Archaic for the type.



# PINE TREE, Cambron (Cambron, 1956): A-70

GENERAL DESCRIPTION: This is a medium sized, side notched, serrated point with expanded shoulders.

MEASUREMENTS: Seven cotypes from Limestone County, Alabama, provided the following measurements and traits: length—maximum, 66 mm.; minimum, 50 mm.; average, 59 mm.: shoulder width—maximum, 29 mm.; minimum, 25 mm.; average, 27 mm.: stem width—maximum, 29 mm.; minimum, 26 mm.; average, 28 mm.: stem length—maximum, 15 mm.; minimum, 11 mm.; average, 12 mm.: thickness—maximum, 9 mm.; minimum, 5 mm.; average, 7 mm.

FORM: The cross-section is usually biconvex but may be flattened. Shoulders are narrow, tapered, and expanded. Blade edges are recurvate and serrated. The distal end is acute. The hafting area is side notched with expanded stem. The notches average about 9 mm. wide and 3 mm. deep. Side edges of the stem are incurvate. The basal edge is thinned and incurvate.

FLAKING: Broad, shallow flaking was used to shape the blade and stem faces. Collateral or random flaking was used to retouch the sides of the blade faces to a near median ridge resulting in serrations. The side notches were formed by the removal of one large flake or several smaller flakes. Retouch was carried out along the basal edge. All examples are patinated and are made of local materials.

COMMENTS: The type was named from points found on and near Cambron Site 76, the Pine Tree, (Cambron, 1956) in Limestone County, Alabama. The illustrated example is from Cambron Site 4, Limestone County, Alabama. An example was illustrated by Webb and DeJarnette (1942) as type 54 from Colbert County, Alabama, Site Ct 27 (Plate 294). One example, of unknown

provenience, from Site Ms 53A (Webb and Wilder, 1951) in Marshall County, Alabama, was recovered (Plate 29-C, No. 16). The type is pre-shellmound in North Alabama and is considered an early Archaic point type. One example was found on a site on Valley River at Andrews, North Carolina. Other than this occurrence the known distribution is Alabama and Southern Tennessee.

### PINE TREE CORNER NOTCHED, <u>Cambron</u> (This Paper): A-70-a

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GENERAL DESCRIPTION: This is a medium sized, corner notched, serrated point with expanded shoulders.

MEASUREMENTS: Seven cotypes, including the illustrated example, provided the following measurements and traits: length—maximum, 72 mm.; minimum, 40 mm.; average, 54 mm.: shoulder width—maximum, 32 mm.; minimum, 23 mm.; average, 27 mm.: stem width—maximum, 30 mm.; minimum, 25 mm.; average, 28 mm.: stem length—maximum, 12 mm.; minimum, 10 mm.; average, 11 mm.: thickness—maximum, 8 mm.; minimum, 7 mm.; average, 7 mm.

FORM: The cross-section is biconvex, rarely flattened. Shoulders are usually inversely tapered, rarely horizontal, and the barbs are expanded. Blade edges are usually incurvate, rarely straight, and serrated. The distal end is acute. The hafting area is usually corner notched, rarely side-notched, with expanded stem. Notches measured along the stem edge average about 11 mm. deep and about 5 mm. wide. Side edges of the stem are usually straight. The base is thinned and usually straight, but may be excurvate, rarely incurvate. Light basal grinding may be present.

FLAKING: Random flaking was first employed to shape the blade and stem faces. This was followed by collateral, rarely random, flaking, usually resulting in regular serrations along the blade edges. Blade edges were worked in to form expanded barbs. The corner notches were formed by the removal of one or more large flakes, with retouch along the stem edge. Some retouch was used to finish the basal edge. All examples are patinated and are usually made of local materials.



COMMENTS: The type was named from points found on and near the Pine Tree Site Cambron 76 (Cambron, 1956) in Limestone County, Alabama. The illustrated example is from Cambron Site 19 in Morgan County, Alabama. The type was formerly included with the Pine Tree point (Cambron, 1957) but was later referred to locally as Pine Tree Variant. It is a pre-shellmound or early Archaic type. Physical characteristics indicate a greater antiquity for this type than for the Pine Tree type, but surface collection associations suggest a contemporaneous existence.

# PLEVNA, Cambron (DeJarnette, Kurjack and Cambron, 1962): A-72

GENERAL DESCRIPTION: The Plevna is a medium to large, corner notched point with excurvate base and beveled on one edge of each face.

MEASUREMENTS: Nine cotypes from North Alabama and Southern Tennessee, including the illustrated example, provided the following measurements and traits: length—maximum, 95 mm.; minimum, 46 mm.; average, 65 mm.: shoulder width—maximum, 35 mm.; minimum, 26 mm.; average, 30 mm.: stem width—maximum, 31 mm.; minimum, 24 mm.; average, 27 mm.: stem length—maximum, 17 mm.; minimum, 12 mm.; average, 15 mm.: thickness—maximum, 10 mm.; minimum, 7 mm.; average, 8 mm.

FORM: The cross-section is rhomboid. Shoulders are inversely tapered or horizontal. Where shoulder barbs are present they may be expanded. Blade edges are usually straight, but may be incurvate or excurvate and may be serrated. They are always beveled on one edge of each face. Distal ends are acute. The hafting area is corner notched, with deep narrow notches that average about 4 mm. wide at the blade edge, 2 or 3 mm. wide at the bottom of the notch, and about 6 mm. deep along the stem edge. The expanded stem usually has straight side edges, and the basal edge is always excurvate, thinned, and ground.

FLAKING: Broad, shallow, random flaking was employed to produce flattened faces of the blade. Most blades were probably excurvate with a gentle bevel before one edge of each face was reworked by short, shallow to deep, flaking which often created serrations. Repeated reworking of these blade edges resulted in steep beveling and often in incurvate blade edges. The notches were formed at the widest part of the blade by the initial removal of one broad deep flake from each side of each face. The area thus thinned was then notched by removal of short fine flakes. The hafting area was thinned by broad, shallow flaking followed by the removal of small, shallow flakes along the basal edge. Local materials were used, and all examples showed patination.

COMMENTS: The point is named from points found on the Plevna Site (Cambron 79) in Madison County, Alabama, associated with Eva and other early Archaic types. The illustrated example is from Hulse Site 38, Limestone County, Alabama. The type is associated with pre-shellmound materials in North Alabama and is considered an early Archaic type. Physical characteristics suggest that Plevna points may be ancestral to the unbeveled, late Archaic to early Woodland St. Charles points (Bell, 1960) found throughout the Ohio Valley and in surrounding states. A date of sometime before 5000 years ago is suggested for the type in Alabama.

#### QUAD, <u>Soday and Cambron</u> (Cambron and Waters, 1959a): A-73

GENERAL DESCRIPTION: The Quad is a medium sized, broad, unfluted or fluted, point with an expanded-rounded, auriculate hafting area.

MEASUREMENTS: Fifty-one examples from thirty-one sites in the Tennessee River Valley (Soday and Cambron, n. d.) provided the following measurements: unfluted points—maximum length, 86 mm.; minimum length, 47 mm.; average length, 57 mm.; average width, 23 mm.; average thickness, 7 mm.: fluted points—maximum length, 79 mm.; minimum length, 39 mm.; average length, 52 mm.; width, 24 mm.; average thickness, 7 mm. The illustrated example provided the following measurements: length, 60 mm.; width at base, 31 mm.; width of blade above hafting area, 29 mm.; width of hafting constriction, 28 mm.; depth of basal concavity, 7 mm.

FORM: The cross-section may be flattened or biconvex. Blade edges above the hafting area are convex. The distal end is acute. The auriculate hafting area is expanded-rounded with a hafting constriction along the side edges near the auricles. The base is incurvate and may be thinned or fluted. Hafting area edges are usually ground, especially the constriction.

FLAKING: Flaking on the faces is usually random but may be collateral. Retouch with short, fairly deep flaking, is usual on all edges. Because of the thinness of these





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points, fluted examples have short flutes similar to the Clovis points.

COMMENTS: The type was named from points found on and near the Quad Site (Soday, 1954) in Limestone County, Alabama. The illustrated example is from Cambron Site 76 (Pine Tree) near the Quad Site. The unfluted variant was described by Bell (1960), and he suggests a date of some portion of the period from 8000 B. C. to 4000 B. C. He illustrates examples from Tennessee and Ohio. An unfluted example was found in Level 11 at the University of Alabama Site Ms 201 in Marshall County, Alabama, in the same stratum as Wheeler, Paint Rock Valley, Cumberland, Dalton, and other points. An example from Flint Creek Rock Shelter (Cambron and Waters, 1961) was recovered in pre-Archaic Stratum III along with a Beaver Lake point. A Quad-like point was recovered from the Quad Site in the same stratum as a fluted midsection, Dalton, and Big Sandy I points (Cambron and Hulse, 1960a). Coe (1959) found similar points associated with Daltons on the lower levels of the Hardaway Site in Piedmont, North Carolina. The above evidence and surface associations indicate a transitional Paleo association with an age of 10,000 years ago or more.



### **REDSTONE**, <u>Mahan</u> (This Paper): A-75

GENERAL DESCRIPTION: This is a medium to large, triangular, fluted point with an incurvate base.

MEASUREMENTS: Seven points from seven sites in the Tennessee Valley (Soday and Cambron, n. d.) range in length as follows: longest, 117 mm. (from Soday Site 475 in Morgan County, Alabama); shortest, 67 mm. (from Serio 1, Madison County, Alabama); average, 89 mm. The average width of the seven points is 37 mm. and the average thickness, 7 mm. The illustrated specimen measures in length, 110 mm.; width at base, 34 mm.; thickness, 6 mm.; depth of basal concavity, 9 mm.; longest flute, 70 mm.; shortest flute, 26 mm.

FORM: The cross-section is fluted. The blade is straight with an acute distal end. Grinding along the basal edge for about one-third of the length of the point designates the hafting area. The auriculated base is parallel-rounded and incurvate and may show multiple flutes on one or both faces. The basal edge is thinned on each side of the flute and ground.

FLAKING: The flakes removed in order to shape the blade and hafting area are narrow, shallow and random. The edges were finished by the removal of alternate flakes along the blade and hafting area edges, leaving a fine, irregular pattern. The short flute was removed first from a flattened face, the longer flute from a median ridged face that shows multiple flute scars (Cambron and Hulse, 1961).

COMMENTS: The type was named after Redstone Arsenal in Madison County, Alabama, where the illustrated specimen, a classic example, was recovered from Brosemer Site M-17, a site that has produced other early points. Several examples have been illustrated in the Tennessee Archaeologist as follows: Vol. X, No. 1, p. 17, Fig. 45 (Morgan County, Alabama, Soday, 1954); Vol. X, No. 2, p. 40, Fig. 1, p. 48, Fig. 87, p. 50, Fig. 96 (Madison County, Alabama, Mahan,

1954); Vol. 12, No. 1, p. 36, Figs. 3 and 4 (Chickamauga Lake, Tennessee, Lewis, 1956); Vol. XIII, No. 2, p. 82, Fig. 7 (Weakley County, Tennessee, Taylor, 1957); Vol. XV, No. 2, p. 124, Fig. 19 (Limestone County, Alabama), p. 142, Fig. 1, (Humphreys County, Tennessee, Lewis, 1959); Vol. XVI, No. 1, p. 58, Figs. 18, 19 (Henry County, Tennessee, Lewis, 1960a). The Redstone type appears to be a variant of the Clovis and probably was in use at about the same time as Clovis points. Charcoal from hearths with which a Clovis point was presumed to have been associated, gave dates in excess of 37,000 years ago (Crook and Harris, 1958). When dating methods were improved, dates in excess of 42,000 years ago were obtained at this site. This means the Redstone, as well as the Clovis, could have been in use as early as 42,000 years ago, but most archaeologists suggest a date of about 15,000 years ago.

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# **RHEEMS CREEK, Cambron (This Paper): A-113**

GENERAL DESCRIPTION: This is a small to medium sized stemmed point with straight blade edges.

MEASUREMENTS: Fifteen cotypes in the Harwood collection from Cambron Site 326 in Buncombe County, North Carolina, provided the following measurements: length—maximum, 60 mm.; minimum, 37 mm.; average, 41 mm.: shoulder width—maximum, 23 mm.; minimum, 18 mm.; average, 21 mm.: stem width—maximum, 16 mm.; minimum, 11 mm.; average, 15 mm.: stem length—maximum, 12 mm.; minimum, 7 mm.; average, 9 mm.: thickness—maximum, 10 mm.; minimum, 7 mm.; average, 8 mm. The illustrated example provided the following measurements: length, 37 mm.; shoulder width, 19 mm.; stem width, 12 mm.; stem length, 9 mm.; thickness, 7 mm.

FORM: The cross-section is usually biconvex, rarely plano-convex. Shoulders are tapered and fairly broad. Blade edges are usually straight, but may be excurvate,



rarely incurvate. The distal end is acute. The stem is usually straight but may be tapered. The basal edge is excurvate and usually thick, but may be thinned.

FLAKING: The entire point appears to have been made by short, fairly deep, random percussion flaking. The lack of retouch along the blade edges leaves an irregular blade edge outline that somewhat resembles crude serrations on some examples. All examples from the site are made of vein quartz.

COMMENTS: The type was named from the Rheems Creek Site (Cambron Site 326) in Buncombe County, North Carolina. A few examples approach Bradley Spike in size and flaking, but are broader with a more triangular blade. The smaller examples somewhat resemble Coosa points, but are not retouched along the edges and are made of quartzite. The cultural association of this type is as yet unknown, as the type site has produced artifacts belonging to transitional Paleo, Archaic and Woodland components. A category of tool types resembling Rheems Creek has been

identified in Randolph County from Mid-Archaic to Early Woodland (O'Hear and Knight, 1975).

#### **RUSSELL CAVE**, <u>Cambron</u> (This paper): A-117

GENERAL DESCRIPTION: The Russell Cave point is a medium sized, expanded stem point with shallow serrations and straight blade edges.

MEASUREMENTS: Seven examples, including the illustrated specimen, from the lower G layer at Russell Cave in North Alabama provided the following measurements and features: length—maximum, 60 mm.; minimum, 44 mm.; average, 54 mm: shoulder width—maximum, 28 mm.; minimum, 21 mm.; average, 25 mm.: stem width at base—maximum, 24 mm.; minimum, 21 mm.; average, 23 mm.: stem width at narrowest point—maximum, 21 mm.; minimum, 19 mm.; average, 20 mm.: stem length—maximum, 20 mm.; minimum, 16 mm.; average, 17 mm.: thickness—maximum, 9 mm.; minimum, 7 mm.; average, 8 mm.

FORM: The cross-section is biconvex. Shoulders are tapered. The blade is usually straight; rarely excurvate. Blade edges are shallowly serrated. The distal end is acute. The stem is expanded. The side edges of the stem are incurvate and usually ground. The basal edge is straight, usually ground and may be beveled.

FLAKING: Shallow, broad, random flaking was used to shape the blade and stem. Short, fairly deep flakes were removed to shape and finish the blade and to form fine regular serrations. These were flaked alternately from opposite faces, making the short serration projections rather sharp. The sides of the hafting area are usually steeply flaked to form an expanded stem. The basal edge is usually thinned by the removal of broad shallow flakes, but may be rather steeply flaked.

COMMENTS: The type was named from Russell Cave in Jackson County, Alabama, where the seven cotypes were recovered from lower G layer. This was the deepest excavated layer and produced three radiocarbon dates: Level 17, 7565  $\pm$ 250 years B. P.; Level 20, 8095  $\pm$ 275 and 8435  $\pm$ 275 years B. P. These dates place the type in early Archaic at this site. Distribution of the type is not known.

#### SAND MOUNTAIN, <u>Cambron</u> (This paper): A-119

GENERAL DESCRIPTION: This is a small, serrated, triangular point with an incurvate base.

MEASUREMENTS: Six cotypes from the Jones Bluff Reservoir in Lowndes County, Alabama, provided the following measurements and traits: length—maximum, 27 mm.; minimum, 21 mm.; average, 24 mm.: width at base—maximum, 15 mm.; minimum, 13 mm.; average, 14 mm.: thickness—maximum, 7 mm.; minimum, 3 mm.; average, 5 mm.: basal concavity—maximum 4 mm.; minimum, 1 mm.; average, 2 mm.

FORM: The cross-section is usually biconvex—rarely, flattened. The blade is usually straight, but may be slightly incurvate or excurvate. Blade edges are serrated. The distal end is usually acute but may be acuminate. The base is incurvate and may be expanded.

FLAKING: The point displays random flaking which is usually broad and fairly deep. The serrations are the result of the removal of regular flakes from the edge of alternate faces. The basal edge was thinned by removal of shallow flakes. Local materials, generally quartzites, were used.

COMMENTS: The point is named from sites on Sand Mountain in North Alabama where the type was first recognized. The illustrated example was recovered from Hulse site 39 near Decatur, Alabama. No examples were recognized from the control sites in the Tennessee Valley. Examples from Sites Lo 32 and Lo 13 in Jones Bluff Reservoir, Lowndes County, Alabama, were recovered from Levels 1 and 2 in association with Weeden Island pottery. This suggests an Early Mississippian association at these sites. In Autauga County, Alabama, examples were found in association with Autauga Check Stamped, McLeod Check Stamped and





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Wright Check Stamped pottery. This suggests a late Woodland association in this area. At Site Dk-101 in DeKalb County, Alabama, three examples were recovered from Level 1 and two from Level 3. This suggests a late Woodland and Mississippian association at this site. The type seems to have appeared in late Woodland times and lasted into Mississippian times.



# SAVAGE CAVE, Cambron (Cambron, 1974): A-124

GENERAL DESCRIPTION: This is a medium to large, side-notched point with excurvate blade edges, biconvex cross-section, deep side notches and finely retouched blade edges.

MEASUREMENTS: The range of measurements of 14 examples; 7 from New York, 5 from Savage Cave and 2 from the Pine Tree Site (Cambron, 1956) at Decatur, Alabama, are: length 44-75 mm.; shoulder width, 23-30 mm.; stem width, 18-25 mm.; stem length, 9-10 mm., thickness, 6-9 mm.; notch width, 7-9 mm.; notch depth, 3-5 mm.

FLAKING: Good random flaking was employed to shape the faces of the blade and hafting area. Fine retouch is evident along the edges. The deep side notches were finished by the removal of one large flake from both sides of each notch.

FORM: The cross-section is biconvex. The blade is excurvate and is finely serrated. The distal end is acute. The hafting area is deeply side notched. The basal edge is nearly always straight, but may be slightly excurvate. Light grinding may be evident on most examples. The part of the hafting area between the notches and the base is expanded. All examples were patinated.

COMMENTS: This type is named from Savage Cave, Kentucky, where 8 whole or broken examples were recovered. One example was recovered from the surface, two from Level 1, one from Level 2, three from Level 3, one of which was worked to a drill, and one from Level 4. All examples except one from the surface were recovered from Stratum II. It appears that the Savage Cave point overlaps in time with Big Sandy points at this site, with Savage Cave points appearing later. One example illustrated as

that the Savage Cave point overlaps in time with Big Sandy points at this site, with Savage Cave points appearing later. One example illustrated as an Otter Creek point in Plate 21, Fig. 2 from Malta, Saratoga County, New York, (Ritchie, 1971) appears to be a Savage Cave point.

#### SAVANNAH RIVER, Coe (Coe, 1959): A-5a

GENERAL DESCRIPTION: A medium to large stemmed point often made of quartzite.

MEASUREMENTS: Coe (1959) lists some measurements of North Carolina examples as follows: length—maximum, 170 mm.; minimum, 70 mm.; average, 100 mm.: width—maximum, 70 mm.; minimum, 35 mm.; average, 50 mm. These measurements exceed those from six examples, including the illustrated example, from Elmore County, Alabama, and one from Buncombe County, North Carolina, which are as follows: length—maximum, 70 mm.; minimum, 50 mm.; average, 56 mm.: shoulder width—maximum, 40 mm.; minimum, 30 mm.; average, 34 mm.: stem width—maximum, 25 mm.; minimum, 21 mm.; average, 22 mm.: stem length—maximum, 14 mm.; minimum, 12 mm.; average, 13 mm.: thickness—maximum, 13 mm.; minimum, 10 mm.; average, 11 mm.

FORM: The cross-section is usually biconvex but may be flattened, rarely plano-convex. Shoulders are usually tapered but may be straight. Blade edges are excurvate, but may be parallel from the shoulders for one-third to one-half the length of the blade. The distal end is acute. The stem may be straight or tapered, with incurvate or straight side edges and a straight or incurvate basal edge that is usually thinned.

FLAKING: Broad, shallow flaking was employed to shape the blade and stem faces, with some retouch along all edges. Local materials were used.

COMMENTS: The point is named from points of the Savannah River Focus of the Archaic period in Redmont, North Carolina. The illustrated example is from Amling Site El 4 in Elmore County, Alabama. This type includes points illustrated in Caldwell (1947) as belonging to the Savannah River Focus of Georgia. Similar points from Camp Creek were illustrated by Lewis and Kneberg (1957) as Appalachian Stemmed, but they seem more acceptable as Savannah River points. One example each was recovered from Level 3 and 4 (pre-pottery) at the University of Alabama Site 1 Ru 28 in Russell County, Alabama, on the Chattahoochee River. Coe

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(1959) found Savannah River to be late Archaic. Further excavation in the Roanoke River area revealed Savannah River points in early Woodland association (Coe, personal communication). Savannah River points overlay the "Old Quartz" industry in Georgia. The above evidence places Savannah River points in late Archaic and early Woodland associations.

# SMITHSONIA, <u>Allen and Hulse</u> (This Paper): A-136

GENERAL DESCRIPTION: This is a medium to large sized, straight stemmed point with finely serrated blade edges.

MEASUREMENTS: Thirteen cotypes from sites at Smithsonia, Beacon Island and Waterloo along the Tennessee River below Florence, Alabama, provided the following measurements: length—maximum, 96 mm.; minimum, 61 mm.; average, 77 mm.: shoulder width—maximum, 35 mm.; minimum 28 mm.; average, 30 mm.: stem width—maximum, 16 mm.; minimum, 13 mm.; average, 14 mm.: stem length—maximum, 15 mm.; minimum, 12 mm.; average, 13 mm.: thickness—maximum, 10 mm.; minimum, 8 mm.; average, 9 mm. Measurements of the illustrated example are: length, 82 mm.; shoulder width, 33 mm.; stem width, 15 mm.; stem length, 13 mm.; thickness, 11 mm.

FORM: The cross-section is usually biconvex but may be flattened. Shoulders are usually barbed but may be inversely tapered. Blade edges are serrated and are usually straight or excurvate but some examples may have one straight and one excurvate blade edge. The basal edge and sides of the stem are thinned, straight and may be lightly ground. The distal end is acute. Serrations on the blade edges are finely executed as opposed to deeper serrations on the Kirk Serrated projectile point. The shoulders are usually barbed. The stem and base are always straight whereas the Kirk Serrated base may be incurvate.

FLAKING: The blade and hafting area were formed by broad, shallow, random flaking. The blade edges were then finely serrated.

COMMENTS: The type was named from Ralph Allen Site 41 at Smithsonia, Alabama, where the type was first recognized. The illustrated example is from this site located on the north side of the Tennessee River in Lauderdale County, Alabama. Three examples are illustrated in Plate 152 (Webb and DeJarnette, 1942). One is in the top right of the plate and two are in the upper left of the lower figure on the same plate. These examples were

recovered from the Bluff Creek Site Lu<sup>o</sup> 59. This site was located fourteen miles west of Florence, Alabama, on the banks of the Tennessee River. These points were associated with burials along with other artifacts that indicate a late Archaic and early Woodland placement, as does the formal attributes of this point type.

# SOUTH PRONG CREEK, <u>Lewis</u> (This Paper): A-138

GENERAL DESCRIPTION: The South Prong Creek point is a large, broad, stemmed, and serrated point.

MEASUREMENTS: Examples which provided the features, including the illustrated example, ranged in measurements as follows: length—maximum, 101 mm.; minimum, 46 mm.; average, 72 mm.: shoulder width—maximum, 59 mm.; minimum, 46 mm.; average, 38 mm.: stem width—maximum, 18 mm.; minimum, 17 mm.; average, 18 mm.: stem length—maximum, 12 mm.; minimum, 8 mm.; average, 11 mm.: thickness—maximum, 10 mm.; minimum, 8 mm.; average, 9 mm.

FORM: The cross-section is flattened. The blade edges are usually straight but may be slightly excurvate or recurvate and are always serrated with an acute distal end that is devoid of serrations. Shoulders may be straight or tapered. The stem is short and thinned at the base and along the side edges. The basal edge may be straight or excurvate and may exhibit light grinding.

FLAKING: The thin blade is shaped by good, broad, and shallow random flaking on the faces. The removal of small deep flakes along the blade edges, starting above the shoulders and ending below the distal end, produced strong serrations and a beveling effect. The removal of fairly large flakes at the junction of the stem and shoulders thinned the sides of the stem as well as the shoulders at this point.

COMMENTS: The type was named from a surface site on South





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Prong Creek in Richmond County, Georgia, near Augusta, in the Red Hills fall line and approximately 300 feet above mean sea level. Eight examples, including the illustrated example, were recovered from this site (Lewis Site No. 606). Two examples of unknown origin from the Augusta-Richmond County Museum helped provide additional measurements and features for the type. Other artifacts recovered from the type site include: 13 Big Sandy points, 1 Greenbrier Dalton point, 1 Ecusta point, 1 Plevna point, 26 Morrow Mountain points, 1 Morrow Mountain Straight Base point, 3 Morrow Mountain Rounded Base points, 3 Guilford Rounded Base points, 1 Guilford point, 8 Savannah River points, 1 Gary point, 1 Wade point, 1 Yadkin point, 2 Madison points, 25 P-1 Stemmed points, 1 used scraper, 1 flint gouge, 7 mortars, 3 manos, 1 hammer-abrader, 7 steatite hammers, and 1 perforater. These artifacts suggest a Transitional Paleo-Early Archaic and Archaic occupation of the site with a sparse occupation by Woodland and Mississippian people. An age of 3000 to 4500 years B. P. is



suggested for the type (Michie, personal communication, 1975). The association of other artifacts from the site indicates an earlier date for the type (Lewis, personal communication, 1975).

# STANFIELD. <u>Cambron and Hulse</u> (DeJarnette, Kurjack and Cambron, 1962): A-80

GENERAL DESCRIPTION: A medium to large sized, narrow, triangular point with biconvex blade.

MEASUREMENTS: Nine autotypes from North Alabama, including the illustrated example, provided the following measurements and traits: length—maximum, 118 mm.; minimum, 54 mm.; average, 73 mm.: width at base—maximum, 30 mm.; minimum, 18 mm.; average, 22 mm.: thickness—maximum, 13 mm.; minimum, 7 mm.; average, 9 mm.

FORM: The cross-section of the blade is biconvex, and most hafting area crosssections are flattened. Blade edges are usually parallel, rarely excurvate. The distal end is acute. The hafting area includes an undetermined basal portion of the side edges. It is parallel sided, with a straight, rarely slightly excurvate, basal edge that is thinned. The hafting area is usually flattened.

FLAKING: From fairly deep to shallow random flaking was used to shape the faces. Usually one third to two thirds of the total length from the distal end is flaked to median ridge, and broader shallower flakes were removed from the hafting area. Short, broad, and deeper flakes were removed in retouching the side edges of the blade and all edges of the hafting area. Local materials were usually employed, and all examples were patinated.

COMMENTS: The type was named from examples recovered from the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) in Colbert County, Alabama. The illustrated example is from the Pine Tree Site (Cambron Site 76) in Limestone County, Alabama. Examples recovered at Stanfield-Worley were all in Zone D, two in Level 1 and one in Level 5. Radiocarbon dates from this zone are  $8920 \pm 400$  and  $9640 \pm 450$  B. P. Four examples were recovered from Stratum III

(Cambron and Hulse, 1960a) at the Quad Site in association with Dalton, Lerma, Big Sandy I, and other points and were listed as Type P-11. All surface finds are made from sites that have produced early materials. It is suggested that this type be placed in the transitional Paleo-Indian cultural stage with a date of somewhere around 10,000 years ago.

#### STANLEY, <u>Coe</u> (Coe, 1959): A-79

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GENERAL DESCRIPTION: The Stanley is a medium sized point with "a broad triangular blade, a small squared stem and a shallow notched base." (Coe, 1959).

MEASUREMENTS: Seven plesiotypes from North Alabama and South Tennessee provided the following measurements and traits: length—maximum, 47 mm.; minimum, 42 mm.; average, 46 mm.: shoulder width—maximum, 33 mm.; minimum, 27 mm.; average, 31 mm.: stem width—maximum, 18 mm.; minimum, 14 mm.; average, 16 mm.: stem length—maximum, 9 mm.; minimum, 7 mm.; average, 8 mm.: thickness—maximum, 8 mm.; minimum, 7 mm.; average, 7 mm.

FORM: The cross-section may be biconvex or plano-convex, rarely flattened. Shoulders are usually horizontal or tapered, rarely inversely tapered, and may be expanded. Blade edges may be excurvate, straight, or recurvate and usually have an angular break in the blade outline near the distal end. Blade edges may be serrated near the base. The distal end is usually acute, but may be somewhat apiculate. The stem is usually straight. Stems of the plesiotypes are shorter and broader than stems of the cotypes. Thus, the basal edge of the plesiotypes is more incurvate than notched, as it is in the cotypes.

FLAKING: Blade scars and/or rather long, shallow, random flakes are in evidence on the faces of the blade and stem. On the serrated examples the serrations are broader and deeper near the shoulders, and the points are usually serrated no more than half the length of the blade. Fine regular retouch was carried out along the blade edges near the distal



end. Fairly long, often broad, flakes were removed in order to thin the basal edge. Local materials were used, and all points show some patination.

COMMENTS: The type was named from points found in Piedmont, North Carolina, especially at the Doerschuk and Hardaway Sites, where they were found above Kirk and below Morrow Mountain occupation levels and are placed somewhere above 5000 B. C. (Coe, 1959). The illustrated example is from Cambron Site 146 in Limestone County, Alabama. An example was recovered from Level 11 of Zone A at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962). Also in this level (145 trench) were Eva and Morrow Mountain points. One example was recovered from Zone C (upper Archaic) at the Flint River Shell Mound (Webb and DeJarnette, 1948a).



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### SUBLET FERRY, Cambron (This Paper): A-115

GENERAL DESCRIPTION: This is a small to medium sized, serrated, shallowly side notched point.

MEASUREMENTS: Eleven cotypes, including the illustrated example, provided the following measurements: length—maximum, 48 mm.; minimum, 28 mm.; average, 42 mm.: shoulder width —maximum, 22 mm.; minimum, 16 mm.; average, 19 mm.: stem length—maximum, 10 mm.; minimum, 7 mm.; average, 8 mm.: thickness—maximum, 8 mm.; minimum, 5 mm.; average, 6 mm.

FORM: The cross-section is biconvex. Shoulders are tapered and narrow. Blade edges are usually excurvate, but may be parallel-angular, and are finely serrated. The distal end is acute. The hafting area is shallowly side notched near the base, with the shoulders and stem usually nearly the same width. The basal edge is straight and thinned.

FLAKING: Shallow to deep flaking was used to shape the blade and stem faces. Long, narrow flakes were removed to form serrations along the blade edges. The hafting notches were formed by the removal of a fairly large deep flake from each side of each face near the base and were sometimes finished by the removal of several small flakes in the notches. Broad, thin flakes were removed in thinning the basal edge. Local materials were used.

COMMENTS: The type was named from points found on sites near Sublet Ferry on the Tennessee River in Jackson County, Alabama. The illustrated example is from W. H. Baker Site 16 in the area. Other artifacts from this site suggest early Woodland and possibly late Archaic assemblages. Typologically the Sublet type seems intermediate between Damron Side Notched and Knights Island. Cultural association of the type is at present

uncertain, but surface collection associations indicate that it is an early Woodland type.

#### SWAN LAKE, Cambron and Hulse (Cambron and Hulse, 1960b): A-81

GENERAL DESCRIPTION: This is a small, thick point with shallow side notches.

MEASUREMENTS: Fourteen plesiotypes, including the illustrated example, from Hulse Site 54 in Limestone County, Alabama, provided the following measurements and traits: length—maximum, 41 mm.; minimum, 30 mm.; average, 38 mm.: shoulder width—maximum, 20 mm.; minimum, 12 mm.; average, 17 mm.: stem width—maximum, 17 mm.; minimum, 13 mm.; average, 16 mm.: stem length—maximum, 12 mm.; minimum, 9 mm.; average, 11 mm.: thickness—maximum, 9 mm.; minimum, 5 mm.; average, 7 mm.

FORM: The cross-section is usually biconvex, but is sometimes near medianridged. Shoulders are narrow, tapered, and may be expanded. Blade edges are usually straight but may be incurvate or excurvate. Distal ends are acuminate. The hafting area is shallowly side notched. Side edges of the stem are incurvate. The basal edge may be excurvate or straight. Nearly all examples retain some rind on the base, and many basal edges are unfinished. A few basal edges are lightly ground.

FLAKING: Short, random flaking was used to shape the faces of the blade and stem. Flakes removed in retouching the blade and stem edges are short and fairly deep. Several flakes were usually removed to form the side notches. Local materials were used.

COMMENTS: The type was named from points recovered from the Swan Lake area of Limestone County, Alabama. The illustrated example is from Hulse Site 54 in this area. The type may be related to Trinity points (Suhm and Jelks, 1962) and Halifax points (Coe, 1959). The side notched variant of Archaic Lamoka points of New York (Ritchie, 1961) may be an early variation of the Swan Lake type. Radiocarbon dates from 3500 B. C. to 2500 B. C.







have been obtained for Lamoka points (Ritchie, 1961). At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) most Swan Lake points were concentrated in the first two levels of Zone A, but a few examples were found as deep as Levels 7 and 8, with one from Level 1 in Zone B. This indicates Woodland association at this site, with possibly an Archaic connection. Four of eight examples from the University of Alabama Site Ms 201 in Marshall County, Alabama, were in the two top levels. All six examples from Flint Creek Rock Shelter (Cambron and Waters, 1961) were from Stratum I (Woodland). At Flint River Shell Mound (Webb and DeJarnette, 1948a) four examples were recovered from Zone A, one from Zone B (Woodland) and one from Zone C (Archaic). The Swan Lake point appears to have been introduced in the Archaic period but reached a climax in the Woodland period.

#### TURKEY TAIL, Scully (Scully, 1951): A-82

GENERAL DESCRIPTION: This is a medium to large, double pointed lanceolate point with side notches.

MEASUREMENTS: The type ranges from about 3 inches to 8 inches in length with an average length of about 6 inches (Bell, 1960). The illustrated plesiotype provided the following measurements: length, 174 mm.; width at widest part of blade, 42 mm.; thickness, 8 mm.; length of stem, 17 mm.; width of stem, 18 mm.; notch depth, 3 mm.; notch width, 6 mm.

FORM: The cross-section is flattened. Shoulders may be horizontal or tapered. Blade edges are excurvate. The distal end may be acute or broad. The stem is expanded and pointed with an acute or broad basal edge that is thinned.

FLAKING: Broad, shallow, random flaking was used to shape the blade and stem. Short deep flakes may be removed to retouch the edges. One or several flakes were removed from the sides of each face to form shallow side notches. A good grade, often exotic, material was used.

COMMENTS: The type was named because of the resemblance of the hafting area to a turkey's tail. The illustrated example is the shortest of four Turkey Tail points and one similar unnotched blade 8 inches long which were recovered from a shellmound burial by Harry Smith from Cambron Site 14 in Limestone County, Alabama. "The type commonly occurs in caches of several points, ranging from 4

or 5 up to 40 or more." (Bell, 1960.) This indicates a ceremonial usage. A late Archaic or early Woodland association with a date range from about 2000 B. C. to 500 B. C. is suggested by Scully (1951).

### WADE, <u>Hulse</u> (Cambron and Hulse, 1960b): A-84

GENERAL DESCRIPTION: This is a medium sized, barbed, straight stemmed point.

MEASUREMENTS: Fourteen cotypes, including the illustrated example, provided the following measurements and traits: length—maximum, 70 mm.; minimum, 39 mm.; average, 51 mm.: shoulder width—maximum, 42 mm.; minimum, 27 mm.; average, 34 mm.: stem width—maximum, 16 mm.; minimum, 10 mm.; average, 14 mm.: stem length—maximum, 12 mm.; minimum, 9 mm.; average, 11 mm.: thickness—maximum, 9 mm.; minimum, 5 mm.; average, 7 mm.

FORM: The cross-section is biconvex or flattened. Shoulders are barbed, with barbs often as long as the stem. Blade edges may be excurvate or straight. The distal end is acute. The stem is usually straight but may be slightly expanded. Side edges of the stem are usually straight, and the basal edge may be straight or slightly incurvate. It is thinned and may be slightly ground.

FLAKING: Deep to shallow, random flaking was used on the blade and stem faces. Short, fairly deep, flakes were removed in retouching the blade and stem edges. One large, broad, deep flake was removed from the basal corners of each face to form barbs. The resulting notched edges were usually retouched by the removal of several small flakes. Local materials were used.

COMMENTS: The type was named from points from several sites near Wade Landing on the Tennessee River, Limestone County, Alabama, where they were first recognized. The illustrated example is from Cambron Site 148 (Ray Site) in Limestone County, Alabama. Three Wade points were found with pre-ceramic sitting burial No.

66 at the University of Alabama Site Lu 59 (Webb and DeJarnette, 1942) along with one beaver incisor, three bone awls, one distal end of a point or knife, one two-hole stone gorget, and one gorget fragment. At the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), points were more numerous in late Archaic and early Woodland levels. At the University of Alabama Site Ms 201 in Marshall County, Alabama, one example was recovered from Woodland Level 2. One example was recovered from the Woodland stratum at Flint Creek Rock Shelter (Cambron and Waters, 1961). At the Little Bear Creek Site (Webb and DeJarnette, 1948b) one example was recovered from the Woodland stratum and one from late Archaic. Three examples were recovered from the Woodland stratum and seven from late Archaic at the Flint River Shell Mound (Webb and DeJarnette, 1948a). The above evidence indicates a strong late Archaic





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association and suggests that the type continued in use as late as middle Woodland, with a probable date of 2500 B. C. to 1500 B. C.

#### WASHINGTON, Cambron (This Paper): A-13

GENERAL DESCRIPTION: This is a small, thick, side notched, serrated point.

MEASUREMENTS: Nine cotypes, including the illustrated example, provided the following measurements and traits: length—maximum, 24 mm.; minimum, 16 mm.; average, 20 mm.: shoulder width—maximum, 13 mm.; minimum, 9 mm.; average, 10 mm.: stem width—maximum, 11 mm.; minimum, 7 mm.; average, 9 mm.: stem length—maximum, 8 mm.; minimum, 5 mm.; average, 7 mm.: thickness—maximum, 6 mm.; minimum, 4 mm.; average, 5 mm.

FORM: The cross-section is biconvex. Shoulders are inversely tapered. Blade edges may be excurvate or straight and are usually serrated. The distal end may be acute, sharply acute, or broad. The hafting area has broad, shallow side notches from 1 to 2 mm. deep and about 4 to 5 mm. wide. The expanded stem base may be excurvate or straight and is usually thinned.

FLAKING: Most of the points are made of white quartzite but show good workmanship. The blade and hafting area were formed by shallow, random flaking. The blade edges were serrated by the removal of broad, deep flakes. The side notches were formed by the removal of one broad, deep flake from each side of each face about one-third the length of the point from the base. Some retouching was carried out, especially near the distal end.

COMMENTS: The point was named for Washington County, Alabama, where the type was first recognized. Apparently an important type in this area of the state, it occurs in surface collections from late pottery-producing sites. The illustrated example is from Slater Site 7,

Washington County, Alabama. The size indicates an arrow point. Perino (personal communication) reports examples from Woodland sites in Clinton County, Illinois.

#### WASHITA, <u>Bell</u> (Bell, 1958): A-116

GENERAL DESCRIPTION: This is a small, thin, triangular, side notched point.

MEASUREMENTS: Bell (1958) lists length as 27 mm. to 19 mm. with the majority averaging slightly less than 25 mm. Suhm and Krieger (1954) give the width as 20 mm. to 12 mm. and state that the notches are usually 2 mm. to 3 mm. deep.

FORM: The cross-section appears to be flattened. Blade edges may be straight or excurvate. The distal end is acute. Side notches forming the hafting area "are cut in from the edge perhaps  $\frac{1}{4}$  to  $\frac{1}{3}$  of the distance from the base to the tip (distal end)." (Bell, 1958.) The base is straight or slightly incurvate and thinned.

FLAKING: Fairly broad, shallow, random flaking appears to have been used to shape the faces, with a minimum of retouch along the edges.

COMMENTS: The type was named for the Washita River Focus of Oklahoma. The illustrated example is after Bell (1958). The Washita was included in the Harrell type by Suhm, Krieger and Jelks (1954). The only appreciable difference between the two types is the notched basal edge of the Harrell points. According to Bell (1958), "the Washita point is found in Oklahoma, parts of the Great Plains, Mississippi Valley and in the Southwest. It is commonly associated with the Harrell point, pottery and

agriculture." He estimates the age from 1100 or 1200 A. D. up to 1500 or 1600 A. D. Twenty-one examples were in a cache found with a burial in a truncated mound in Elmore County, Alabama (Fundaburk and Foreman, 1957). Also in the cache were points similar to Alba, Bassett, Harrell, and Scallorn types as described and illustrated by Suhm, Krieger and Jelks (1954). Along with these were other small points (Plate 15, p. 36), two of which were made of obsidian. Since the type is associated with Harrell points, it is probably associated with early Mississippi Culture of the Mississippi and Missouri Valleys (Bennett, 1948 and Chapman, 1948).

#### WHEELER EXCURVATE, <u>Cambron</u> (Cambron, 1955a and 1957): A-85

GENERAL DESCRIPTION: This is a small to medium sized auriculate point with incurvate base, steeply worked basal edge, and excurvate blade edges.

MEASUREMENTS: Twenty points from 14 sites in the Tennessee River Valley (Soday and Cambron, n. d.) provided the following measurements: length—maximum, 67 mm.; minimum, 27 mm.; average, 48 mm.: width—average, 21 mm.: thickness—average, 6 mm. The illustrated example provided the following measurements: length, 46 mm.; width of blade, 20 mm.; width at





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base, 17 mm.; thickness, 5 mm.; depth of basal concavity, 6 mm.

FORM: The cross-section is usually biconvex, but may be plano-convex. Blade edges are excurvate. Distal ends are acute. The hafting area is parallel pointed, with deeply incurvate, steeply flaked basal edge. Some examples are fluted, and an occasional example is ground along the entire blade and hafting area edges.

FLAKING: Shallow, random flaking was used to shape the faces of the blade and hafting area. Fairly broad flakes were removed in shaping the blade edges, followed by very fine secondary retouching along the edges. Large flakes were often removed in forming the basal concavity, and several short narrow flakes were removed to form a steeply flaked basal edge. Local materials were used, especially Ft. Payne chert.

COMMENTS: The type was named from points found on the Stone Pipe Site (Cambron, 1955a) in the Wheeler Basin of the Tennessee River, Limestone County, Alabama. The illustrated example is from this site (Cambron, 1956). A fluted example is illustrated by T. M. N. Lewis (1960b) in Editor's Notes, page 45, left side of Fig. 3. An example was recovered from Stratum III in association with transitional Paleo-Indian materials at

the Quad Site (Cambron and Hulse, 1960a). The type is similar to the McKean point, but appears to be older and, unlike McKean points, the basal edge is steeply beveled. This type appears with Wheeler Recurvate and Wheeler Triangular points on pre-shellmound sites in North Alabama. Evidence indicates a transitional Paleo-Indian association. A reworked Wheeler point was recovered from Level 11 at the University of Alabama Site Ms 201 in Marshall County, Alabama. This also indicates an early provenience for Wheeler points.

# WHEELER RECURVATE, <u>Cambron</u> (Cambron, 1955a and 1957): A-86

GENERAL DESCRIPTION: This is a small to medium sized auriculate point with incurvate base, steeply worked basal edge, and recurvate side edges.

MEASUREMENTS: Nine points from six sites in the Tennessee River Valley provided the following measurements: length—maximum, 68 mm.; minimum, 27 mm.; average, 55 mm.: width —average, 19 mm.: thickness—average, 7 mm. The illustrated example provided the following measurements: length, 45 mm.; width of blade, 20 mm.; width at base, 13 mm.; thickness, 5 mm.; depth of basal concavity, 4 mm.

FORM: The cross-section is usually biconvex, but may be plano-convex. Blade edges are excurvate above the hafting area. Distal ends are acute. The hafting area is expanded pointed, with deeply incurvate, steeply flaked basal edge.

FLAKING: Shallow, random flaking was used to shape the faces of the blade and hafting area. Fairly broad flakes were removed in shaping the blade edges, followed by very fine secondary retouching along the edges. Large flakes were often removed in forming the basal concavity and several short narrow flakes were removed to form a steeply flaked basal edge. Local materials were used, especially Ft. Payne chert.

COMMENTS: The type was named from points found on the Stone Pipe Site (Cambron, 1955a) in the Wheeler Basin of the Tennessee River, Limestone County, Alabama. The illustrated example is from this site (Cambron 156). Two points similar to Wheeler Recurvate were found at the Scharbauer Site near Midland, Texas (Wendorf, Krieger, Albritton and Stewart, 1955). One was near human bones in Locality 1 and one was from Locality 2. Both were in association with early materials, especially Folsom materials. A

radiocarbon date of 20,000 years ago was secured from fire hearth at the site (Associated Press story in The Nashville Tennessean, Oct. 14, 1956). The type is similar to McKean points, but appears to be older and, unlike McKean points, the basal edge is steeply beveled. This type appears with Wheeler Excurvate and Wheeler Triangular points on pre-shellmound sites in North Alabama. Evidence indicates a transitional Paleo-Indian association.

# WHEELER TRIANGULAR, <u>Cambron</u> (Cambron, 1955a and 1957): A-87

GENERAL DESCRIPTION: This is a small to medium sized auriculate point with incurvate base, steeply worked basal edge, and straight blade edges.

MEASUREMENTS: In gathering data for the type, large Wheeler Excurvate points were included in the measurements; therefore, measurements of a series are not available. The illustrated example provided the following measurements: length, 81 mm.; width of blade, 24 mm.; width at base, 21 mm.; thickness, 8 mm.; depth of basal concavity, 8 mm.

FORM: The cross-section is usually biconvex, but may be plano-convex. Blade edges are straight. Distal ends are acute. The hafting area is parallel-pointed with deeply incurvate, steeply flaked basal edge.

FLAKING: Shallow, random flaking was used to shape the faces of the blade and hafting area. Fairly broad flakes were removed in shaping the blade edges, followed by very





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fine secondary retouching along the edges. Large flakes were often removed in forming the basal concavity, and several short narrow flakes were removed to form a steeply flaked basal edge. Local materials were used, especially Ft. Payne chert.

COMMENTS: The type was named from points found on the Stone Pipe Site (Cambron, 1955) in the Wheeler Basin of the Tennessee River, Limestone County, Alabama. The illustrated example is from this site, Cambron 156. At the Quad Site (Cambron and Hulse, 1960a), an example recovered from Stratum I had probably weathered from Stratum III, where it would have been in association with transitional Paleo-Indian materials.

### WHITE SPRINGS, <u>Hulse</u> (DeJarnette, Kurjack and Cambron, 1962): A-88

GENERAL DESCRIPTION: This is a medium sized point with short, broad stem and excurvate blade edges.

MEASUREMENTS: Fourteen paratypes, including the illustrated example, provided the following measurements: length-maximum, 66 mm.; minimum, 42 mm.; average, 50 mm.: shoulder width -maximum, 36 mm.; minimum, 28 mm.; average, 32 mm.: stem length-maximum, 24 mm.; minimum, 17 mm.; average, 20 mm.: stem length-maximum, 7 mm.; minimum, 3 mm.; average, 6 mm.: thickness—maximum, 10 mm.; minimum, 3 mm.; average, 9 mm.

FORM: The cross-section may be biconvex or flattened. Shoulders are horizontal and narrow. Blade edges are slightly excurvate, rarely incurvate. The distal end is acute. The hafting area is stemmed, with straight side edges. The basal edge is thinned and usually straight, but may be incurvate and may be ground.

FLAKING: Shallow, random, rarely transverse oblique, flaking was used to shape the blade and stem faces. Blade and stem edges were retouched by removal of short, probably pressure, flakes.

COMMENTS: The type was named from points found in the White Springs area on the north side of the Tennessee River in Limestone County, Alabama. The illustrated holotype is from Hulse Site 17 in Limestone County, Alabama. Examples appear to be more numerous in the Tennessee River Valley of North Alabama, where they are found on early Archaic sites. Three points (l, n, and o, Plate 12, Page 45) listed among examples of Sykes points from the Eva Site (Lewis and Lewis, 1961) appear to fit into the White Springs type. Most examples found at Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and

Cambron, 1962) were from the lower levels of Zone A (early Archaic), and one example was among the artifacts associated with Burial 8 at this site. This was an early Archaic burial featuring Morrow Mountain points. Examples were illustrated (Webb and DeJarnette, 1942) from sub-mound Burial 88 from Site Ct 27 in the Pickwick Basin of the Tennessee River. Observed materials from many North Alabama sites suggest a typological relationship between White Springs, Benton Stemmed, and Buzzard Roost Creek points. Benton Stemmed is thought to have been in use later than White Springs and possibly than Buzzard Roost Creek. An early Archaic association is suggested, with an estimated date of 5000 B. C. to about 4000 B. C. or later.

# **PROVISIONAL POINT TYPES**

This group includes points that are probably extreme variants of named types, unfinished points, and points that have not proven distinctive enough to be recognized as a definite type. As further work is carried out and more materials become available for observation, some named types may be separated from these generalized types as has been done with some of the provisional types originally set up.

Illustrations are oversize to show the flaking more clearly.

GENERAL DESCRIPTION: Small to large sized, straight stemmed points that do not conform with certainty to any of the named type descriptions.

COMMENTS: At Flint Creek Rock Shelter (Cambron and Waters, 1961) examples from the Archaic Stratum II were slightly larger than examples from Woodland and Mississippian Stratum I. At Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) this was the most numerous provisional type, and most examples appeared in the upper half of Zone A (Archaic and later).





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Provisional Type 1—Stemmed, <u>Cambron and Waters</u> (Cambron and Waters, 1961)



A-91

Provisional Type 2—Expanded Stem, <u>Cambron and</u> <u>Waters</u> (Cambron and Waters, 1961)

GENERAL DESCRIPTION: Small to large expanded stem points that do not conform with certainty to any of the named type descriptions.

COMMENTS: At Flint Creek Rock Shelter (Cambron and Waters, 1961) the type was slightly smaller than Provisional Type 1—Stemmed, and examples from Stratum I (Woodland and Mississippian) were slightly longer than examples from Stratum II (Archaic). At Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) practically all examples were recovered from Zone A (Archaic and later), with most examples from the upper half of this zone.

Provisional Type 3—(See Crawford Creek)

Provisional Type 4—Stemmed Barbed, <u>Cambron and Waters</u> (Cambron and Waters, 1961)

GENERAL DESCRIPTION: Usually small to medium sized, stemmed points, with barbed shoulders, that do not conform to a named type description.



A-93

COMMENTS: At Flint Creek Rock Shelter (Cambron and Waters, 1961) examples from Stratum I (Woodland and Mississippian) were slightly larger than examples from Stratum II (Archaic). Of the few examples recovered from the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962), most were from late Archaic or early Woodland strata.



A-90



A-92

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Provisional Type 5—Stemmed and Serrated, <u>Cambron and Waters</u> (Cambron and Waters, 1961)

GENERAL DESCRIPTION: Small to large stemmed points, with serrated blade edges, that do not conform to a named type description.

COMMENTS: Examples are more likely to occur in Archaic than Woodland association.

Provisional Type 6—Unfinished Base, <u>Cambron and Waters</u> (Cambron and Waters, 1961)

GENERAL DESCRIPTION: Usually medium sized points with finished blade and unfinished base that do not conform to any named type description.

COMMENTS: The only two examples recovered from Flint Creek Rock Shelter (Cambron and Waters, 1961) were from Stratum I (Woodland and Mississippian). The three examples from Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962) were from the upper half of Zone A (Archaic and later).

Provisional Type 7—(See Elora)

Provisional Type 8—Corner Notched, <u>Cambron and Waters</u> (Cambron and Waters, 1961)

GENERAL DESCRIPTION: A small to large sized corner notched point that does not conform to a named type description.

COMMENTS: Basal edges may be ground and blade edges may be serrated or beveled. Larger examples are usually associated with early Archaic cultures.







A-95



A-97

Provisional Type 9—Side Notched, <u>Cambron and</u> <u>Waters</u> (Cambron and Waters, 1961)

GENERAL DESCRIPTION: A small to large side notched point that does not conform to a named type description.

COMMENTS: May appear in association with Archaic or Woodland cultural materials.

Provisional Type 10—Eccentric Notched, <u>Cambron and Waters</u> (Cambron and Waters, 1961)

GENERAL DESCRIPTION: A medium sized, stemmed point with several eccentric notches along the blade edges that does not conform to any named type description.

COMMENTS: This is a relatively rare point. One example was recovered from Stratum II

(Archaic) at Flint Creek Rock Shelter (Cambron and Water, 1961). One example of unknown provenience was illustrated as type 51 by Webb and DeJarnette (1942, Plate 294-1) from Ct 27. An example was illustrated by Travis and Lenser (1960, Fig. 7-G) from the Sugar Creek area of the Tennessee Valley.

Provisional Type 11—Triangular, <u>Cambron and</u> <u>Waters</u> (Cambron and Waters, 1961)

GENERAL DESCRIPTION: A small to large triangular point that does not conform to a named type description.

COMMENTS: May appear in association with Transitional Paleo and later cultural materials.



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A-96



A-98

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A-99

Provisional Type 12—Rounded Base, <u>Cambron and Hulse</u> (Cambron and Hulse, 1960b)

GENERAL DESCRIPTION: Small to large, rounded base, trianguloid point that does not conform to the description of a named type.

COMMENTS: Examples were recovered from early Archaic through late Woodland strata at Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962).

Provisional Type 13—Notched Convex Stem, <u>Cambron and Hulse</u> (Cambron and Hulse, 1960b)

GENERAL DESCRIPTION: A medium to large point that usually has a rounded stem with notches in the stem adjacent to the shoulders and that does not conform to the description of a named type.

COMMENTS: A comparatively rare point that may prove to be a definite type, although at present the few examples are too variable to define as a type. An example was recovered from Level 2 (Woodland) of Zone A at Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron, 1962).



A-100

# ALABAMA COUNTIES



#### **DISTRIBUTION CHART**

n n o w 0 s e е а n i e i Aanr k nrenw n th tan n n s Mtiu tcruekoae reru gha sbebht lae oor Auwo noeobottk ueecansm alrmatkvn ytse Badbbullhmrlcrybfbe sinlelaoawe n eeerskf Atlrboltlaeioaaefln ovelllKmcoy a nelnucf Luaailuuahhhhlllo oo ooruaaelsta r eraeo ae AABBBBBBCCCCCCCCCCCCCCDDDEEEF F GGHHHJJ

A1		1	13		A1
A1a		4	7		A1a
A2					A2
A4			2		A4
A5		2 1			A5
A5a			2		A5a
A6		4	3	2	A6
A7			1		A7
A9		33	301	14	A9
A9a			18		A9a
A10	1	11	11	22	A10
A11	1	14	17	10	A11
A12		5	3	1	A12
A13			5		A13
A14	1	7	1	1	A14
A16	2	215	25	33	A16
A17				1	A17
A18		1		5	A18
A19		3	3		A19
A19a					A19a
A20		2	4	3	A20
A20a			17	5	A20a
A21		2	5	3	A21
A21a		1			A21a
A21b					A21b
A22		1 1	4	1	A22
A23					A23

[Pg 136]

A: A: A:	24 24a 25		1		2 1 1	8 18 4		6 21 13		18 1 8	A24 A24 A25	4 4a 5
A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	26 27 28 29 30 31 32 33 34 34a		3		7 3 6 6	9 2 5 2 8 1 2		2 8 12 3 1 9 67 10 4		6 6 1 1 1 4 3	A20 A21 A22 A30 A31 A32 A32 A32 A34 A34	6 7 3 9 0 1 2 3 4 4 4 4
A: A: A: A: A: A: A: A: A: A: A: A: A: A	35 36 37 38 39 40 41 42 43 44		1		1 13 41	10 31 1 3 14		35 164 1 8 2 9		15 32	A35 A36 A37 A38 A38 A40 A42 A42 A42 A42 A42	5 6 7 8 9 9 0 1 2 3 3 4
	e l dc rn ree adr muwe aaae LLL	e n t e e t e t t t t t t t t t t t t t	sn eo dns noi wcd oa a LMM	l g n a g n o h e i s r r r l a a a a MMMM	y r e m e e o z l o g i r t b n n o o o MMM I	s n n aye grke rrck oeii MPPP	aa rass higoo pla eoo lllyrdpl oeCbeaaa ds ltllo ns.emlls authuaau RRSSSTTT	n n o t r n x c i o t c i o t c k h c s c l s l r n a a i i TWWWW	e 1 c n 2 n l 3 e o 5 N r c 1 N w n 1 E a i VT L L	e n. yC a. WN	e b o c n u B	
A1 A1a A2 A4 A5 A5a A6 A7 A9 A9a	2 1 51 12	25 13 1 15 14 25 17 319 3	8 1 1 2 16 85 10		1	4 2 2 25		2 29 7	3 1 1 1416 2		22 27	A1 A1a A2 A4 A5 A5a A6 A7 A9 A9a
A10 A11 A12 A13 A14 A16 A17 A18 A19 A19a	4 6 4 2 2	697 39 58 20 128 10 11 19 4	194 193 15 26 75 24 19 2		3	81 1 4 4 21 4 3 3 1	1	86 2 1	12 9 217 9 1 9	1	1 1 5	A10 A11 A12 A13 A14 A16 A17 A18 A19 A19a
A20 A20a A21 A21a A21b A22 A23 A24 A24a A25	1 2 2 1 3 1 48 5	134 259 36 10 4 5 1 69 51 124	10 14 14 1 1 1 18 20 35		3 5 2 1 1	32 59 27 2 5 2 5 2 0 8 1		1	1 7 3 1 2 1111 27	1		A20 A20a A21 A21a A21b A22 A23 A24 A24a A25
A26 A27 A28	1 2 4	27 151 12	6 89 18			1 1		8 1	1 1			A26 A27 A28

[Pg 137]
A29	1	46	72	5		4	4	A29
A30		38	3			1		A30
A31	3	54	46				4	1 A31
A32	1							A32
A33	19	202	26	16			14 8	A33
A34	3	141	53	12		5	37	A34
A34a	1	105	6	3		3	2	A34a
A35		42	3	6			14	A35
A36		3						A36
A37	61	292	54	52	1	12	502645	A37
A38		11	14	5		3	6	A38
A39		12	3	11				A39
A40		39	23		1		3	A40
A41	1	28	5	28				A41
A42		9	1	1			1	A42
A43	9	145	51	42	1	3	2 3	A43
A44		1						35 A44

0 W s e е а n 0 k nrenw n th Aanr tan i e i n n s Mgiu tcruekoae reru gha sbebht lae o o r Auwo noeobottk ueecansm alrmatkvn ytse Badbbullhmrlcrybfbe sinlelaoawe n eeerskf Atlrboltlaeioaaefln ovelllKmcoy a nelnucf Luaailuuahhhhlllooo ooruaaelsta r eraeoae AABBBBBBCCCCCCCCCCCCCCDDDEEEF F GGHHH J J

n

A44a					A44a
A45			9		A45
A46		1	2	1	A46
A47		2			A47
A48		1	1	5	A48
A49		1	1		A49
A50		2 1	7	8	A50
A50a		3	16	12	A50a
A51		1 6	17	3	A51
A52		1 1	29	11	A52
A53		1		1	A53
A54					A54
A55		1			A55
A56		18	31	3	A56
A57			6	1	A57
A58					A58
A59		3			A59
A59a					A59a
A60		1 33	160	36	A60
A60a					A60a
A61		8	9	11	A61
A61a			2	3	A61a
A61b		3	21	4	A61b
A62		3	3	1	A62
A63	3	1			A63
A64			1		A64
A65					A65
A66				5	A66
A67			1		A67
A68				1	A68
A69	1	7 4	23	9	A69
A70		4	12	8	A70
A70a		6 2	6	4	A70a
A71					A71
A72		1	4	4	A72
A72a					A72a
A73		2	3		A73
A73a					A73a
A74		1			A74
A75					A75

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n

A A A A A A A A A A A A	A76 A77 A78 A79 A80 A81 A82 A84 A85 A86	2		16 2 7		10 21 35	A76 A77 6 A78 A79 A80 6 A81 A82 10 A84 A85 A86	
	e l d c r n r e e a d r mu w a a a e L L L L	e n os te sdn eno emwc eioa LLLM	l nogna snoh ieis drrr aaaa MMMM	y r e m s e e o n n l o g a ye i r t g rke b n n r rck o o o o e i i MMM M PPP	aa r ass h i goo pla eoo lllyrdplr oeCbeaaae ds ltllck ns.emllsl authuaaua RRSSSTTTW	n o t e g n c r n x o n l i o t . e c h c s N r c s l n N w r a i i E a i W W W T L I	e b m e o c n . c i y C n a . u . W N B	
A44a A45 A46 A47 A48 A49 A50 A50a A51 A52	1 1 1 1 4 5 3	54 14 19 46 131 262 122 90	6 10 4 16 2 55 82 17 60	3 1 7 156 22 19 20	1	1 1 3	65 A 5 A 1 A 9 A 7 A 1 A 5 A 7 5 A	44a 45 46 47 48 49 50 50a 51 51
A53 A54 A55 A56 A57 A58 A59 A59 A59a A60 A60a	1 23 3 19 4 4	22 5 46 61 51 10 2 560 160	2 1 27 10 4 2 1 2 68 9	2 2 1 6 2 5 1 60 20	1 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1 A 1 A 1 A 2 3 A 4 A 4 A 3 4 A 1 A	53 54 55 56 57 58 59 59 60 60 a
A61 A61a A61 A62 A63 A64 A65 A66 A66 A67 A68	3 A 1 D 1	138 89 97 199 52 4 5 13 10	83 9 74 14 2 2 5 13	16 6 3 8 2 2 1 2 1 2 1 1		2 41 1 2 11	1 27 A 1 A 2 16 A 3 A A 6 A 6 A A	61 61a 61b 62 63 64 65 66 66 67 68
A69 A70 A70a A71 A72 A72a A73 A73a A73a A74 A75	13 2 1 2 1 1	181 240 17 1 29 12 15 1 10 2	59 39 13 47 1 13 12	8 6 2 1 1 1 1		20 81 2 1	5 1 3 A 1 A A A A A A A 29 A A	69 70 70a 71 72 72a 73 73a 73a 74 75
A76 A77 A78 A79 A80 A81 A82	3 22	28 16 5 155	15 2 3 166	1 44	1		A A 6 1 8 A 1 1 A A 1 1 A A	76 77 78 79 80 81 82

[Pg 139]

	A84 A85 A86		1 1	79 13 3	25 3			58		3	610 1	A84 A85 A86	
													[Pg 140]
	Aa Mg Au Ba At Lu AA	nr iu wo dbb lrb aai BBB	k t cu u l l o l t l uu B BH	s nr cue eob lhm tla iah 3CC	e enw koae ottk rlcr eioa hhhl CCCC	e n r e u e y b f a e f l l o C C C	t h r u e c b e l n o o C C	n ow tan gha ansm sinle ovell oorua CCCCI	a isbebh alrma elaoaw llKmco aaelst DDDEEE	n e i t lae t kvn e neee y anel a rera F FGGH	n o o or y t eer r s kfa n u cfm e o aea H H JJL	e a e n d c o r w t e e s d r e u wem a a e i L L L L	
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## GLOSSARY

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This glossary was compiled from words used in the text and with the illustrations used to illustrate nomenclature in this paper, and from A Glossary of Flint Flaking Terms in "A Comparative Study of Some Unfinished Fluted Points and Channel Flakes from the Tennessee Valley" (Cambron and Hulse, 1961), "Principles of Stratigraphy" (Grabau, 1960), and a glossary of archaeological terms by T. M. N. Lewis (1958). Words defined by Lewis are followed by the initial "L" and those by Grabau by the initial "G".

Aborigine (L)—a native inhabitant of a country; in America, the Indian.

Acuminate—See <u>Fig. 28</u>.

Acute—See Fig. 27.

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Apiculate—See Fig. 31.

Archaic (L)—The culture which followed the Paleo-Indian period and preceded the early Woodland culture in the eastern United States. This was a pre-agricultural, pre-pottery culture. Food was obtained by hunting and gathering. Earliest date (Rocha-Carbon) in Tennessee is about 5000 B. C. Arrowhead, Arrowpoint (L)—a weapon point generally regarded to be less than  $2\frac{1}{2}$  inches in length. Longer points are regarded as spearpoints and knives.

Artifact (L)—an object of human workmanship, especially one of prehistoric origin.

Assemblage—a group of artifacts representing a culture.

Atlatl (L)—the Aztec word for spear-thrower. The device is a wooden stick with a hand grip at one end and a spur or hook at the other which fits into the socketed end of a spear shaft. The device lengthens the throwing arm and gives greater force to the spear.

Auricle—applied to the ear-like parts of a projectile point.

Auriculate—having auricles or ear-like parts. See Fig. 33-38 & 63.

Autotype (G)—a specimen not belonging to the primary material but identified with an already described and named type and selected by the nomenclator himself for the purpose of further illustrating his type.

Barb—a barbed shoulder of a point. See Fig. 13-14.

Base—the proximal end or area of a point nearest the haft. In describing point types, the base is assumed to be the lowest part of the point, thus the distal end is the uppermost part.

Basal Constriction—See Hafting Constriction.

Basal Grinding (L)—the grinding away of the sharp basal edges and lateral edges near the base of a projectile point to prevent cutting of the lashings.

Basal Notching—See Fig. 39-41.

Basal Thinning (L)—produced to remove small, longitudinal flakes from the basal edge of a projectile point. <u>See Fig. 68</u>.

Baton Flaking—removal of flakes from stone by striking blows with a baton-like tool. A method of direct percussion flaking.

Beveled—See Fig. 23, 24, 64 and 69.

Beveled Base—See <u>Fig. 69</u>.

Biconvex—See <u>Fig. 1</u>.

Bifaced (L)—a term applied to flaked stone artifacts that have been worked on both faces.

Bifurcated Stem—See Fig. 61.

Blade—that part of a projectile point above the hafting area.

Blade Scar—a uniface scar surface resulting from a blade having been struck from a core. As another blade is struck from the core, it bears the blade scar of the previous blade.

Bulb of Percussion—a bulb resulting from a conchoidal fracture of stone.

Bulbar Depression—the depression left from the bulb of percussion when a blade or flake is struck from a core.

Ceramic (L)—pertaining to pottery.

Chalcedony—a flint-like stone with a waxy appearance. Alabama sources are usually nodular.

Channel Flake (L)—a long flake removed longitudinally from the face of a blade to form a flute or channel.

Chert (L)—an impure variety of flint.

Chip—See Flake.

Chronology (L)—the arrangement of events, or the material representing them, in the order of their occurrence in time.

Collateral Flaking—See <u>Fig. 71</u>.

Concave—See <u>Incurvate</u>.

Conchoidal (L)—shaped like half of a clam shell; refers to the characteristic fractures resulting from pressure and percussion flaking of flint.

Conglomerate (L)—conglomerate rock is composed of rounded pebbles and sand cemented together into solid rock.

Conoidal Theory of Flint Fracture—the theory that ideally a cone will be punched out of a piece of flint when it is struck with sufficient force.

Contracted Pointed—See Fig. 54.

Contracted Rounded—See Fig. 53.

Contracted Stem—See Fig. 52.

Core (L)—a stone, usually flint, from which flakes have been removed by percussion.

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Corner Notched—See Fig. 40.

Cotype (G)—an example of the original series when there is no holotype, the describer having used a number of examples as of equal value.

Culture (L)—the way of life of a group of people, comprising all their activities and beliefs. Archaeologically, a culture is represented by the material remains left by a group.

Cultural Complex (L)—a group of traits whose associations in time and space indicate that they were the products of the activities of a specific human group.

Deposit (L)—any accumulation laid down by human occupational activities.

Diagonal Notches—See Fig. 40.

Direct Percussion—flaking flint by striking it directly with a hammerstone or other object.

Distal (L)—when applied to a bone, it is the end farthest from the body.

Distal End—when applied to a projectile point or other hafted artifact, it is the end farthest from the point of attachment.

Drift—an implement, usually made of antler, used in indirect percussion flaking.

Ear—See <u>Auricle</u>.

Early Archaic—an early phase of the Archaic culture that may be represented by notched projectile points and is considered pre-shellmound in North Alabama.

Excurvate Base—See <u>Fig. 48</u>.

Excurvate Blade—See Fig. 16.

Excurvate-Incurvate—See Fig. 21.

Expanded Barbs—See <u>Fig. 14</u>.

Expanded-Pointed—See Fig. 34.

Expanded-Rounded—See Fig. 36.

Expanded Shoulder—See Fig. 12.

Expanded Stem—See Fig. 51.

Expanded Stem Side Edges—See Fig. 57.

Face—the area of a projectile point or tool between the edges. This may include the blade and hafting area.

Flake—in flint work it is a thin piece split from the parent material or core; to remove flakes from parent materials in flint work.

Flake Scar—a scar on the parent material resulting from the removal of a flake.

Flaking—the removing of flakes from a core or artifact in flint working.

Flaking Tool—an implement used in flaking stone tools; it is often made from an antler tine.

Flat Flaking—See <u>Shallow Flaking</u>.

Flattened—See <u>Fig. 4</u>.

Flute or Flute Scar—the scar left on the face of a projectile point as a result of fluting or removal of a channel flake.

Fluted Cross-Section—See Fig. 6.

Ground—areas, especially hafting area edges, that have been abraded smooth.

Haft (L)—a handle (or shaft); to provide with a handle.

Hafting Area—the area of a point or tool that receives the lashings, etc. in hafting procedures; the proximal end of a projectile point.

Hafting Constriction—a hafting area that is constricted along the side edges.

Hammerstone (L)—a hard pebble showing battering from use as a hammer.

Hinge Fracture—when the terminal end of a blade or flake, being struck from the parent material, makes a sharp dip into the material causing a deep fracture, it is called a hinge fracture. If a fracture of this type occurs during the removal of a channel flake from a projectile point it usually breaks at the terminal end of the channel flake.

Holotype (G)—among the primary types a holotype is the original specimen selected as the type, and from which the original description (protolog), or the original illustration (protograph), is made.

Homotype (G)—a homotype is a specimen not used in the literature but identified by a specialist, after comparing with the holotype.

Horizontal Shoulder—See Fig. 7.

Horizontal Transverse Flaking—See Fig. 72.

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Impact Fracture—a fracture of a projectile point resulting from impact during use; a shattering of the distal end of a projectile point as a result of impact with a resistant object.

Incurvate Base—See Fig. 47.

Incurvate Blade—See Fig. 17.

Incurvate Stem Side Edges—See Fig. 56.

Indirect Percussion—flaking flint by striking a drift which has been placed against the flint.

In Situ (L)—in place.

Inversely Tapered—See Fig. 8.

Lanceolate—shaped like the head of a lance; of leaves, etc., narrow, and tapered toward the apex, or (sometimes) toward each end.

Lithic (L)—pertaining to stone.

Main Flute—the central flute struck from the face of a projectile point. This is usually the longest flute occurring during multiple fluting of a projectile point.

Median Ridge—a ridge left along the center of the blade of a projectile point during manufacture.

Midden (L)—the deposit of refuse generally present on a village site.

Mississippian Culture (L)—the culture that appeared in the Southeast around 1000 years ago. Shows strong Mexican influences and is associated with many groups ancestral to the historic Muskhogean speaking tribes of the Southeast.

Mucronate—See Fig. 29.

Multiple Fluting—multiple fluting is the result of the removal of more than one channel flake from one face of a projectile point. This is usually accomplished by two primary flutes and a main flute being made.

Notched Blade Edge—See Fig. 26.

Oblique Transverse Flaking—See Fig. 73.

Obsidian (L)—a volcanic glass; may be black, brown, or green in color.

Obtuse—See Fig. 30.

Obverse Face—as a means of identifying the faces of projectile points, the obverse face is the one without marks, such as site number, etc.

Paleo-Indian (L)—a name assigned to nomadic groups who were the first inhabitants of the new world. Their culture was comparable to that of the late Paleolithic of the old world.

Paleolithic (L)—a term applied to the Stone Age of the old world. During this period man had no knowledge of plant and animal domestication and no knowledge of pottery and metals.

Parallel-Angular Blade—See <u>Fig. 19</u>.

Parallel Blade—See Fig. 18.

Parallel-Pointed—See Fig. 33.

Parallel-Rounded—See Fig. 35.

Patina (L)—an adhesive crust or discoloration produced by weathering of an object. It does not necessarily imply great age.

Percussion Flaking (L)—removal of flakes from stone by striking blows with a stone or other hammer.

Pitch of Striking Platform—the degree of angle resulting from the removal of flakes from the base of a point to make a striking platform.

Plano-convex (L)—a term used to describe an object that is flat on one face and convex on the other.

Plesiotype (G)—a plesiotype is a specimen not belonging to the primary material but identified with an already described and named type and selected by someone else than the original describer for the purpose of further illustrating the type.

Pointed Base—See Fig. 42-45.

Pointed Stem—See Fig. 62.

Pressure Flaking (L)—shaping a stone such as an arrowpoint by removing flakes from the edges by pressure with a pointed implement made of material such as bone or antler.

Primary Flaking—the first rough series of flakes removed in shaping blade or hafting area edges of projectile points or tools.

Primary Flute-usually one of two short flutes removed from the basal face of a point in

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order to leave a striking nipple.

Projectile Point (L)—a pointed artifact used on a spear, arrow or dart.

Proximal End—the end of a projectile point to which a haft is attached. This is part of the hafting area.

Quartz (L)—a material frequently used in projectile points and other artifacts. When quartz is clear and colorless, it is called rock crystal; milky quartz is milky white; smoky quartz is a cloudy brown color; rose quartz is a pale red color; sugar quartz is the color of brown sugar.

Quartzite—a granular form of quartz, often quartz fragments cemented together.

Random Flaking—See Fig. 74.

Recurvate Blade—See Fig. 20.

Resolved Flaking (L)—the method of striking flakes from a flint core by directing the blow inward. A resolved flake struck off in this manner is thinner and narrower at the percussion end; the flake is thicker and wider at the opposite end, and, when it does not extend the full length of the core, it usually ends in a hinge fracture.

Retouch (L)—a term applied to the secondary removal by pressure of small flakes from the edge of a flaked stone artifact to produce sharpness.

Reverse Face—the reverse face of a point may be designated as the one with the site number, etc., marked on it. This is assumed to be the less finished side.

Reworked—a projectile point or other artifact is said to be reworked when the shape has been altered by flaking, grinding, etc., either by the manufacturer or other people.

Rhomboid—See <u>Fig. 2</u>.

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Rind—a deeply weathered area on the outer surface of a nodule or chunk of flint or like material.

Rounded—a term applied to a relatively symmetrical curved area of a projectile point.

Rounded Base—See Fig. 46.

Rounded Stem—See Fig. 53.

Secondary Flaking—the removal of small flakes, usually by pressure flaking, with a piece of bone or antler. The secondary flaking along the edge of the blade of a point is usually designed to finish the blade edges.

Serrated—having intentional toothed projections along an edge.

Shallow Flaking—the removal of shallow flakes in shaping a projectile point or tool.

Shellmound Archaic—that part of the Archaic period when shellfish middens were formed as residue of the gathering economy of the people in an area.

Shoulders—See Fig. 7-12.

Side Notched—See Fig. 39.

Spall (L)—waste flake struck from a larger piece of flint.

Spear Thrower (L)—<u>See Atlatl</u>.

Stem—a type of hafting area of projectile points. See <u>Fig. 50-54</u>.

Straight Base—See Fig. 49.

Straight Blade Edge—See Fig. 15.

Straight Stem—See Fig. 50.

Straight Stem Side Edges—See Fig. 55.

Stratification (L)—formation in strata or layers. When village site deposits show more than one stratum formed by successive occupations by groups of people, the lowest stratum is the oldest.

Stratigraphy (L)—the arrangement of strata with respect to position in which they were laid down by human occupation or from natural causes.

Striking Nipple—a nipple left near the center of the striking platform where a drift may be set to strike the main flute. Usually the nipple is formed by the removal of two primary flutes.

Striking Platform—a prepared basal edge of a projectile point. This edge is beveled to a degree of pitch that will allow a drift to be set at the proper angle to strike off a channel flake.

Tapered—See <u>Fig. 9</u>.

Thinned—See <u>Fig. 68</u>.

Trait, Culture Trait (L)—any object or other evidence that is the result of human behavior or action.

Transitional—of, pertaining to, characterized by, or involving transition; intermediate.

In archaeology, usually pertaining to evidence of transition from one culture to another.

Transitional Paleo-Indian—a cultural period intermediate between Paleo-Indian and Archaic.

Typology (L)—a study of arrangement of specimens separated into types.

Unifaced (L)—a term applied to flaked stone artifacts that have been worked on one face only.

Variant—in projectile point typology a variation of the type described as of the original series.

Vein Quartz—a relatively pure type of quartz found in veins in igneous areas.

Woodland Culture (L)—a widespread culture in eastern America which appeared in the Southeast about 2000 B. C. The presence of pottery differentiates it from the Archaic which preceded it.

Worked—in projectile point descriptions, describes an area of an artifact that has been shaped or altered by man—such as the removal of flakes along a blade edge.

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#### TRANSCRIBER NOTES:

Original scale of drawings has not been retained.

Missing punctuation has been added and obvious punctuation errors have been corrected without note.

Archaic, obsolete and misspelled words have not been changed with the exception of those listed below.

Page numbers have been added to the Contents as an aid to the reader. They do not appear in the original.

Page xiii, ACKNOWLEDGMENTS: "member" changed to "members" (many members of the Alabama Archaeological Society).

Page 11: "Archiaic" changed to "Archaic" (Woodland and Archaic point types.)

Page 24: deleted duplicate word "the" (One example from the Big Sandy Site in Tennessee).

Page 30: "suggest" changed to "suggests" (This evidence suggests a Woodland association in Alabama.)

Page 82: "on" changed to "one" (and one each from Level 4, 5 and 7.)

Page 83: "of" changed to "or" (rarely, excurvate or recurvate.)

Page 95: "asymetrical" changed to "asymmetrical" (and may be asymmetrical.)

Page 103: "asymetrical" changed to "asymmetrical" (of the measured examples had asymmetrical shoulders.)

Page 106: "shoulders" changed to "shoulder" (Where shoulder barbs are present).

Page 114: "overly" changed to "overlay" (Savannah River points overlay the "Old Quartz").

Page 115: "followin" changed to "following" (provided the following measurements).

#### \*\*\* END OF THE PROJECT GUTENBERG EBOOK HANDBOOK OF ALABAMA ARCHAEOLOGY: PART I, POINT TYPES \*\*\*

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