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NORTH CAROLINA FLUTED PROJECTILE POINTS SURVEY REPORT NUMBER ONE

Phil H. Perkinson

This survey is intended to support the research of professionals and serious amateurs on the location and distribution of fluted points in North Carolina. Many students are familiar with Dr. Ben C. McCary's, SURVEY OF VIRGINIA FLUTED POINTS in which more than 420 specimens were recorded. A high point in this survey was the reporting of the Williamson Paleo Site in Dinwiddie County, Virginia. The Williamson Site was the first Paleo-Indian camp/quarry site to be reported in the east (McCary 1951). This survey, however, is the first time that an effort has been made to gather and publish fluted point data for North Carolina. At present the basic format of the survey is as follows: 1. A description of the point, source attributions of stone material, and generalized location and type of site from which the point came. 2. Compile a page of basic statistics. 3. Utilize the actual size photograph of one face and rubbings of both faces of the point. 4. Credits and Bibliography. Report Number One is numerically small and consists of only thirty fluted points. These thirty points, however, represent available specimens from twenty North Carolina counties and establish the presence of fluted points in each geographical section of the state. The stone material, projectile point size, and type outline represented here is reasonably comprehensive. More points have been recorded and will be utilized in subsequent reports of this survey.

For this survey "fluted point" is defined as Clovis, Folsom, or Cumbeland-*like* points or their generalized forms as are represented in this state. The stone source attributes are based on their proximity to the site of the find or the closest or more likely source. The photographs and rubbings are actual size. The rubbings, however, may not be in proportion with the photo. This is because in rubbing the actual curvature of the point is followed with the resultant rubbing from a thick point

appearing wider than the point in the photo. The lines drawn at the point margins are indicating the length of grinding.

Every effort has been made to keep this report as objective as possible. Much conjectural data has been considered but deleted. The primary emphasis in this first survey has been to illustrate the spatial distribution of fluted points in North Carolina and to describe each point so that amateurs and professionals alike may make their own interpretations.

Credit and appreciation is extended to the other committee members: to Bill West for the photography, the use of his points, and for locating point No. 19; to Charles Carey and Thomas Blackburn for their interest, support, and for locating point nos. 26 - 30; to Eldon Allen of the N. C. Department of Mineral Resources for his time and effort in defining many of the stone types and for assistance in establishing possible and probable sources; and to Joseph McAvoy for the use of his comprehensive reference collection of Virginia Paleo-Indian material and for his most objective observations on lithic technology. Most sincere appreciation is extended to all who have made their points available for this first survey and to those who have in other ways offered support. It is these serious amateurs who will keep ths a viable and continuing survey.

I invite all who receive this first survey to appraise the contents and inform me of any shortcomings so that future surveys may be of more interest and consequence.

418 South Boylan Avenue
Raleigh, North Carolina 27603

DESCRIPTION

Survey
Point Number

1 Point made from a bifacially worked preform. Outline: concave sides grading to a convex blade, a concave to convex form. The point has apparently been worked down from a larger form and the entire margin and blade face shows fine secondary pressure flaking. Obverse flute was obtained from removal of multiple flakes. Reverse has one large flake with two long thinning flakes to either side forming the flute. Material is clear quartz and is native to the county. This and the following point were found on a low sandy loam ridge in a cultivated (1962) field, but will be considered isolated finds as they comprise all the material located. Site is on high grounds near the Roanoke River, NE of Littleton, Halifax County, North Carolina.

2 Point made from a bifacially worked preform. Outline: slightly convex. Fluting on either face of this point was obtained by removal of a single flake. Obverse flake carried to the tip of the blade, but the reverse flake hinged up midway the blade. Margins show fine secondary pressure flaking and the basal area on both faces has additional thinning flakes. The stone is a felsic volcanic crystal tuff, rhyolite silicified to a chert-like texture. No other stone fragments or artifacts of this type have been noted. A possible source is the western piedmont, but it may have come from the Roanoke River in the form of a water-carried pebble or cobble. Same Halifax County site as above.

3 Point made from a bifacially worked preform. Outline: parallel sided. The margin has been lightly retouched and no basal or lateral grinding or smoothing is present. Obverse has one flake

removed to form the flute with several secondary basal thinning flakes. Reverse has one crude flute with secondary multiple thinning flakes. Material is green to brown translucent rhyolite showing crushing, welding and a secondary silicification containing included Magnetite crystals altering to Red Hematite. Microscopic examination shows crazing of the stone and the Magnetite has altered near the surface only. This may indicate that the point was subjected to heat after this stage of completion. Only other note of this material is from a site in Nash Co., N. C. (Ns^{v}9). The Nash material is identical except for the Magnetite inclusion. This is from a single component site located on a high ridge near the Cape Fear River, N. of Lillington, Harnett County, N. C.

4 Point made from bifacially worked preform. Outline: Parallel sided. Has overall secondary flaking with fine marginal retouch. Fluting on either side is by removal of one flake. Shortness of flute is likely due to the tough, granular and included nature of the stone. Reverse of point shows higher degree of patination than obverse. The translucent orange colored material has pockets of quartz crystals with areas of stringing or fibrous rays (possibly caused by included felspar). This unusual material seems to be Siliceous Senter but the character tends toward a granular or incompletely silicified chalcedony. Outcrops and points of this material have been noted in Stokes Co., N. C. and in Sussex and Hanover Counties, Virginia. Point was an isolated find in a cultivated (1971) field E. of Red Oak, Nash County, North Carolina.

5 Point made from a bifacially worked preform. Outline: eared, concave to convex. Has fine overall marginal retouch with several primary flake scars not erased. Base has been steeply chipped

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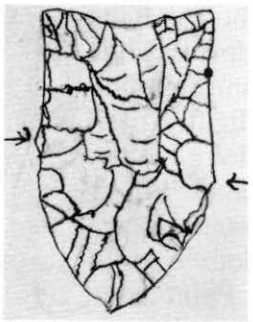

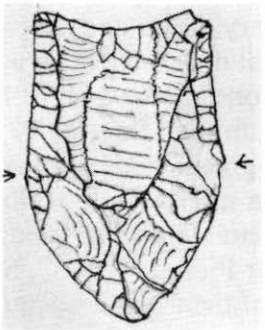

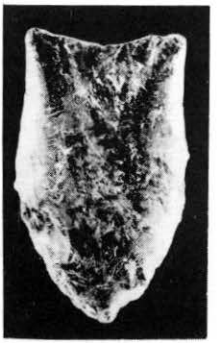

POINT NUMBER

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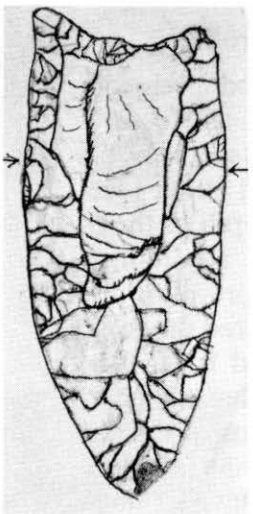

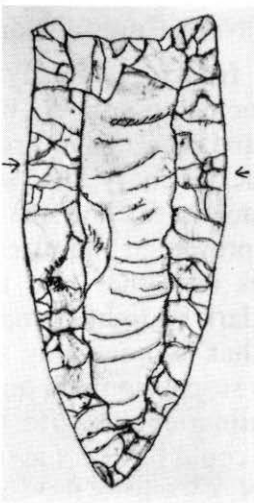

No. 2

No. 3

after fluting. Obverse has one deep, well-defined flute which hinged up at or in a large laterally struck primary flake and has one shorter flake taken off what may have been a high dorsal ridge. Reverse has one shallow, short flake and thinning forming the flute. Material is of a lightly patinated, black-green, close grained banded rhyolite. Color is from microscopic Chlorite flakes. Points of this and later cultures from this material are noted all over Piedmont N. C. Stone source could be any area of the Carolina Slate Belt. Point came from a multicomponent site on a cultivated ridge; bordered by swamp on three sides. Found near White Oak, Nash County, North Carolina.

6 Point made from a bifacially worked preform. Outline: concave to convex. It has fine pressure retouch around margins, but retains several large laterally struck primary flake scars on either face from the biface stage. The size and depth of these could have prevented the attempt of any longer flutes. Flutes on either side are short multiple flutes. The dark to light orange colored stone is unusual in that it shows tiny silicified fossil marine shells in suspension and one side has a higher degree of patination. This, fossiliferous quartz of chalcedony, could have come from some location in Eastern N. C. where the Castle Hayne Limestone Formation has outcropped and has silica filling cavities or replacing the limestone in the upper layer. No other artifacts of this material have been noted thus far. Point came from a multicomponent site on a low sand ridge in a cultivated field near the Tar River, NE of Rocky Mount, Edgecombe County, N. C.

7 Point made from a bifacially worked preform. Outline: convex sided. Point has possible light marginal retouch, but a severe faulting of this material makes any accurate observation difficult. Rubbing has indicated one crude flute on either

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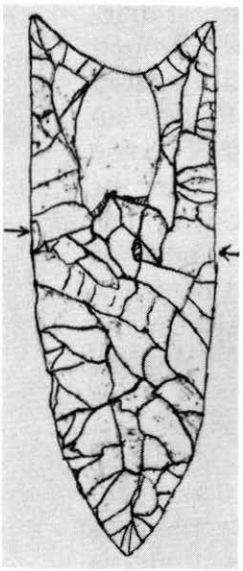

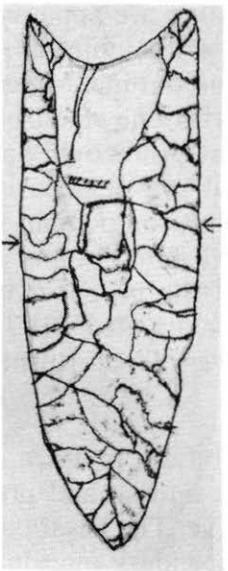

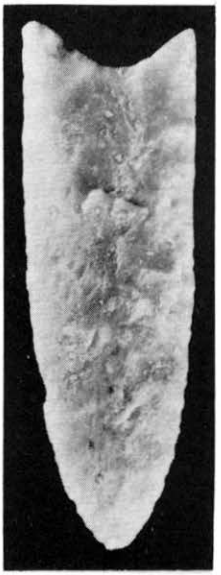

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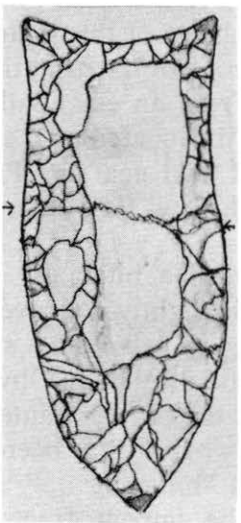

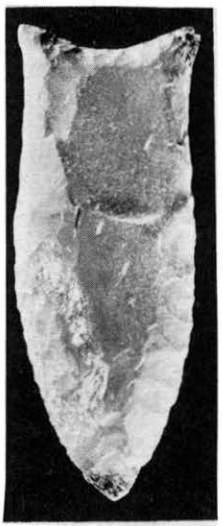

No. 5

face. The blade margin is still uneven and very few trimming flakes are apparent. The best diagnostic features of this point are the well ground basal margins and outline. Material is a fractured Milky Quartz with one small oxidized pyrite inclusion. Stone material could have possibly come from some local gravel deposit as a pebble or cobble. This multicomponent site ($Cm^{v}1$) has produced several fluted points and a number of early tools. The site proper is situated on a low sandy rise in a cultivated (1973) field near the Pasquotank River, S. of Burnt Mills, Camden, Co., N. C.

8 Possibly from biface preform. Short length of fragment makes outline and preform determination too subjective. The basal portion represented here has fine secondary marginal retouch and is well ground. Obverse face has two short flakes forming the flute while the reverse has one large flake and one smaller flake forming the flute. The flutes carry past the point where this specimen was broken. Material is clear or Crystal Quartz. Source is possibly the local gravel deposit since pebbles and cobbles of this material are found in them. This site is not far from the above Camden County site. From an essentially "pure" surface Paleo site ($Pk^{v}1$) located on a silty loam ridge in in a cultivated field near the Pasquotank River, N. of Elizabeth City, Pasquotank Co., N. C.

9 Point made from a bifacially worked preform. Outline: eared, slightly concave to convex. Both sides of the point have well struck flutes, and some fine marginal retouch. Obverse face has one flake removed to form the flute. This continued past the point where it has been broken. Reverse flute evidences "hingeing up" at the end of the flute before the impact fractured area is approached. Two flakes of about the same size

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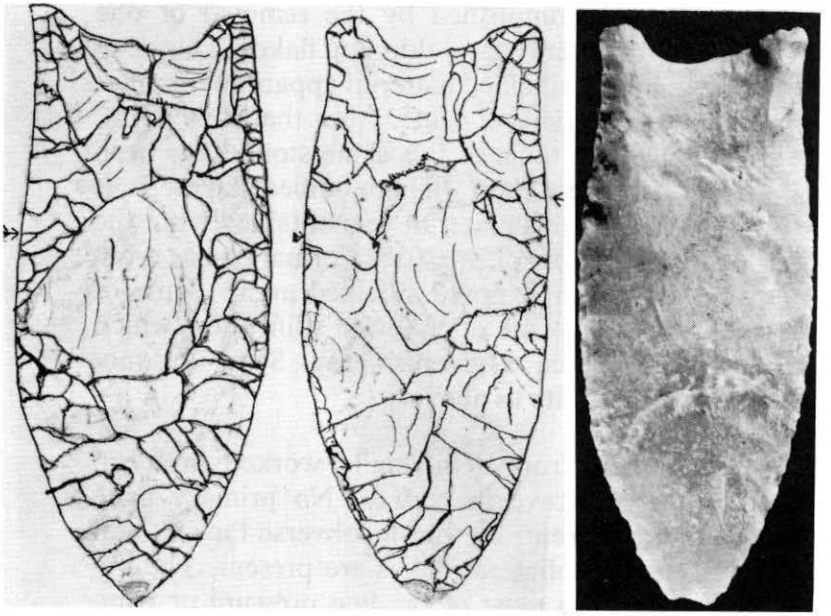

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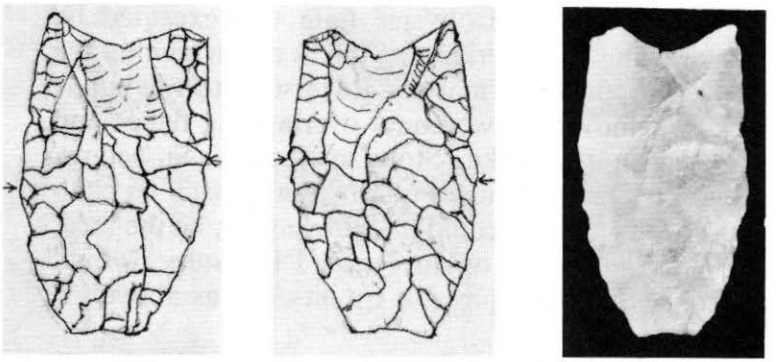

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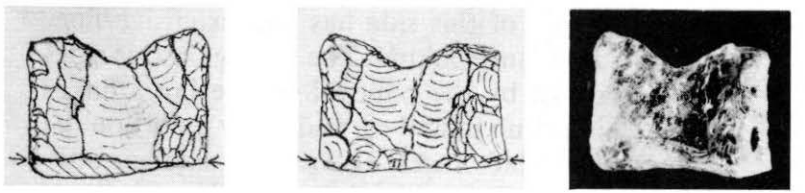

No. 8

formed the flute on the reverse face. The obverse flute was accomplished by the removal of one flake with several basal thinning flakes. This deep green, highly silicified material apparently is chert or a local variety of flint. Other than this point, 35 Paleo-like tools of this same stone have been found, but less than 40 unmodified flakes. It is posisble that this material was obtained from the nearby Yorktown Limestone Formations as eroding nodules or exposed silicified areas. Some of the tools have areas of lower silification which have weathered a greenish-gray. Same Pasquotank County site as above.

10 Point made from a bifacially worked preform. Outline: concave to convex. No primary flake scars are present, but on the obverse face several well drawn collateral flakes are present. The obverse face has most of the fine pressure or trimming flakes. Reverse face has several collateral-like flakes. The obverse flute was executed by drawing two overlapping flakes and trimming the basal concavity margin. Reverse flute was made by removal of two equal overlapping flakes and one shorter flake. Stone material is a yellow-orange close grained quartzite approaching chalcedony. Source could possibly, again, be the local gravel deposits or an exposed limestone formation. Same Pasquotank County site as above.

11 Point made on a triangular or faceted blade preform. Outline: parallel sided. Obverse face retains two facets of the unmodified blade surface. The entire margin of this side has had extensive fine marginal pressure flaking. The fluting on this side was obtained by the removal of one large flake which hinged up in and carried away a portion of the primary blade facet. The reverse side has one plane blade surface which has some fine marginal secondary and pressure flaking. Fluting on this

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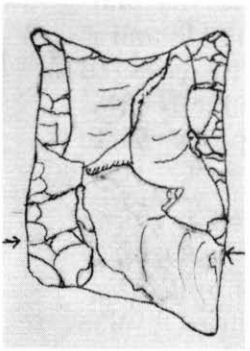

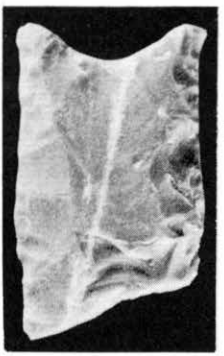

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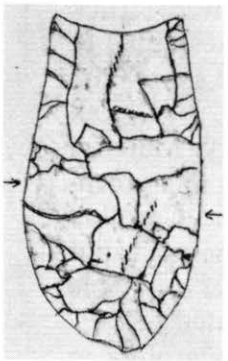
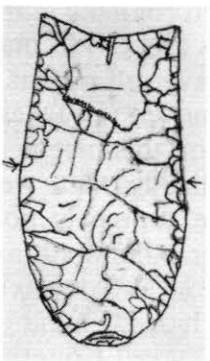


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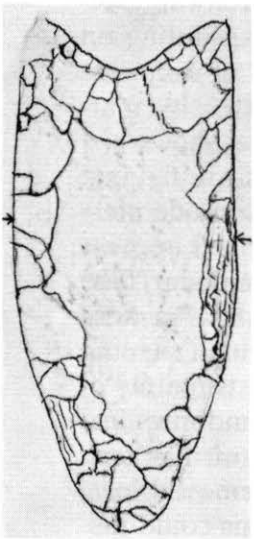
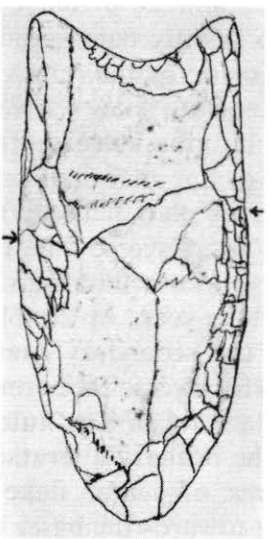


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side was obtained by removal of three medium thinning flakes. The entire basal concavity margin has fine pressure flaking on either side and is heavily ground. Material is a light to dark red fine grained quartzite. The stone source for this point is possibly the local gravel deposits. Same site as preceeding point.

12 Point made from a bifacially worked preform. Outline: concave to convex. The obverse face has one wide deep flute with well controlled secondary flakes along the blade margins. Obverse blade surface is of interest in that it shows many primary or preform flake scars which were struck from all angles and the secondary flakes failed to remove. The reverse face has multiple short thinning flakes removed to suggest fluting. Nearly all of the flaking on this face is secondary. Material is dark green silicified slate weathering to a greenish-gray. Stone source is possibly the Carolina Slate Belt, over a hundred miles to the west, but the occurrence as a river carried cobble or pebble cannot be precluded. Found in cultivated field E. of Columbia, Tyrrell County, North Carolina.

13 Point made on a uniface or blade preform. Outline: parallel to slightly convex sides. Fluting on both faces was made by the removal of one wide well drawn flake. Both sides show extensive marginal retouch, but the obverse face shows the largest amount of fine marginal pressure flaking. The basal concavity on either face has moderately steep chipping. The obverse flute hinged up near the center of a primary flute scar remnant. The large primary flake scars in the blade area were not erased by the secondary marginal shaping and chipping. The reverse face consists mainly of a large plane blade facet. The flute and marginal retouch being the primary alteration of the facet. There is one large, off-center, flake removed from the tip traveling towards the base. This could rep-

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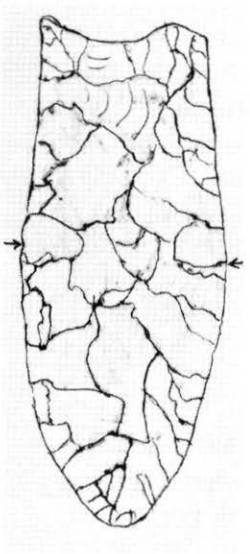

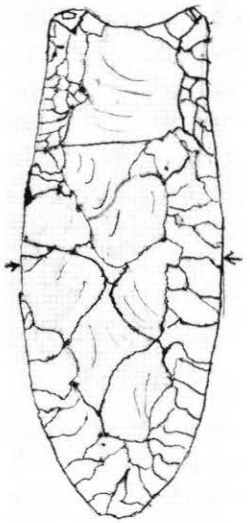

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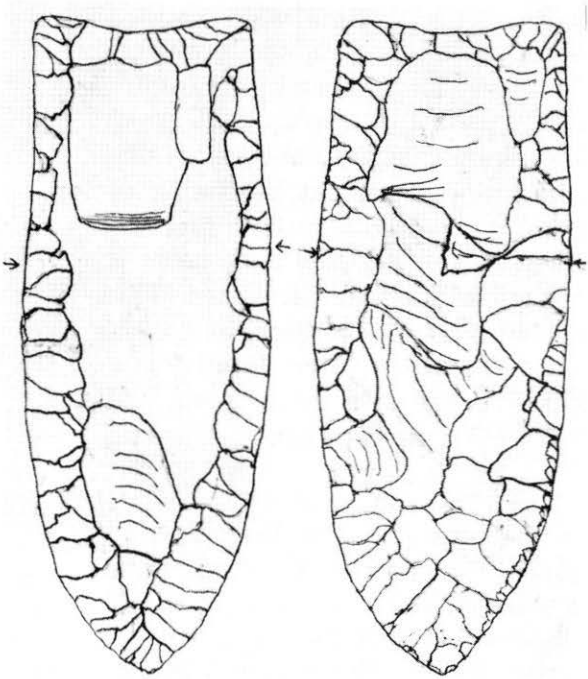

No. 13

resent an impact, intentional thinning or an anvil contact removed flake. Note the position of the flake and lines of force in the rubbing. Material is a light to chocolate brown jasper with small included quartz crystals. No particular local source of this material is presently known, but fluted points of this material have been noted in each geographical division of North Carolina. It is noted that the Cape Fear River bisects Bladen County and the possibility of a source as a river carried cobble is strong. No exact location is known other than Bladen County, North Carolina.

14 Point made on a bifacially worked preform. Outline: parallel to convex sided. The overall flaking on this point is very uniform and well controlled. The entire margin on both faces had fine secondary and pressure flaking. The basal concavity is unusual in the "V" shape, rather than the usual concave form. The obverse flute was executed by the removal of one wide, thin, shallow flake. The obverse has two small areas in the center which retain remnants of the primary flake scars. The obverse has a large primary flake scar which extends from margin to margin in the center of the blade. The stone material is a close grained, black-green silicified rhyolite. The dark color is from included microscopic Chlorite flakes. This material, associated with the Carolina Slate Belt, could be and is, native to this area. Point found on a multicomponent site in a sandy loam field near the Flat River, Carr Township, Durham Co., N. C.

15 Point made on a uniface preform. Roughly parallel sided outline. Has very little marginal retouch. Fluting was accomplished by the removal of two short flakes on either face with several thinning flakes trimming the higher dorsal ridges.

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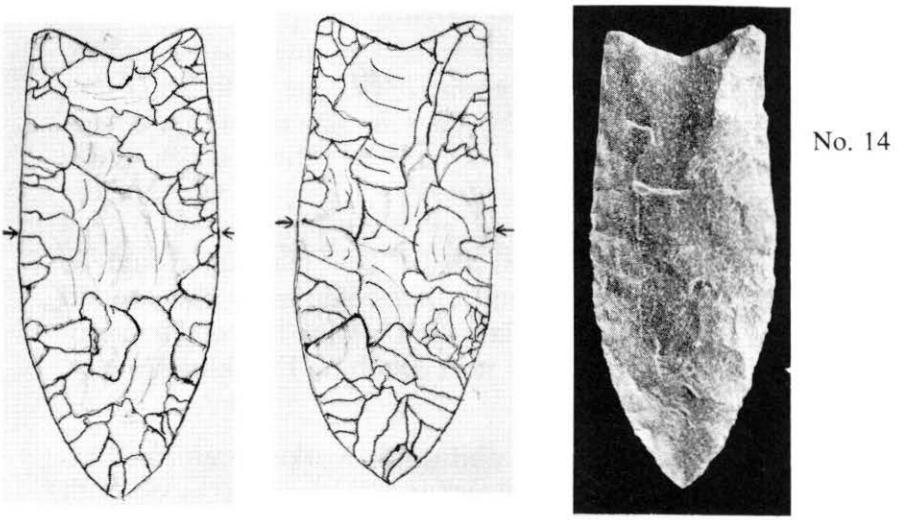

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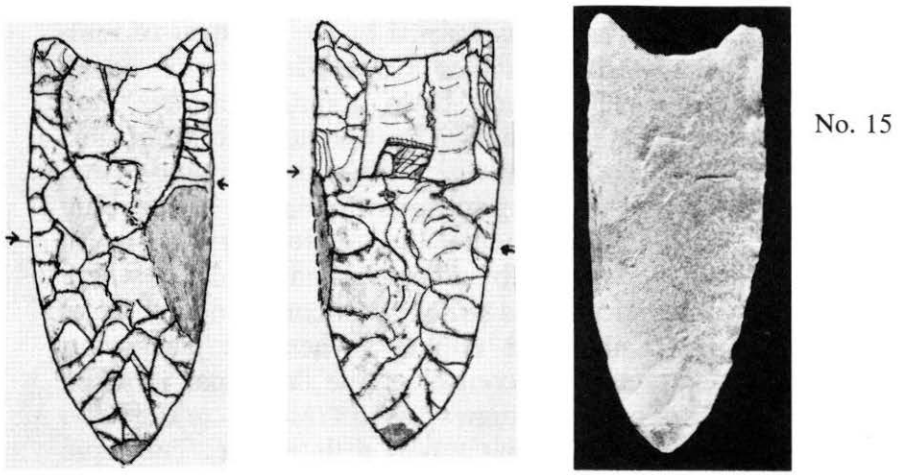

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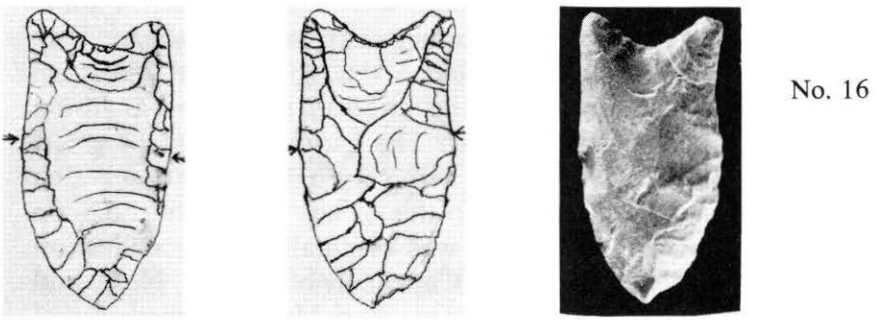

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Reverse is plane and retains much of the original preform face. Apparently the preform was thin enough since little reverse fluting was done. Material is a fine grained siliceous Chlorite Gneiss which patinated deeper in some areas than others due to varying degrees of silicification. Color ranges from a light gray to yellowish white on the patinated surface to deep black-green in the freshly damaged areas. This material would be native to this and other counties in and around the Carolina Slate Belt. Point is from a multi-component site near Bobbitt, Franklin County, North Carolina.

16 Point made on a bifacially worked preform. Outline: concave to convex. Entire margin on both faces has fine pressure flaking. The obverse flute is short and was formed by the removal of multiple thinning flakes rather than a true fluting flake. The reverse basal thinning has the same sort of treatment. The unique feature of this point is the flute-like flake scar beginning at the tip and traveling towards the base. (See rubbing and note conchodial lines of force.) This could be the scar left by a large primary flake or where the preform was struck from core. An anvil flake is possible, but unlikely, when the placement, character and control of the flake scar is taken into consideration. An interesting, and likely, possibility is that this is a flute scar. The large primary fluting flake was removed, but for some reason the preform was rotated, the base (intended base) became the tip, and at this stage the thinness of the preform precluded anything but basal thinning. The material is a black-green silicified rhyolite with very light patination which could be native to this or any county in the Slate Belt. This point was originally in the collection of the late A. D. Capeheart of Oxford, N. C. and was pictured in a plate of Mr. Capehart's fluted

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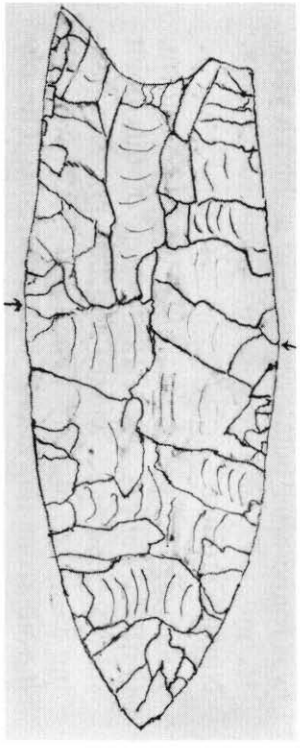

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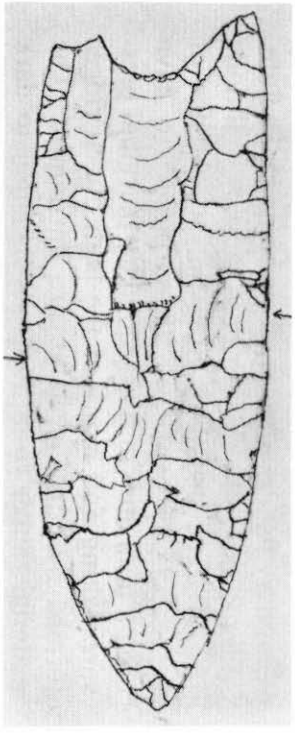

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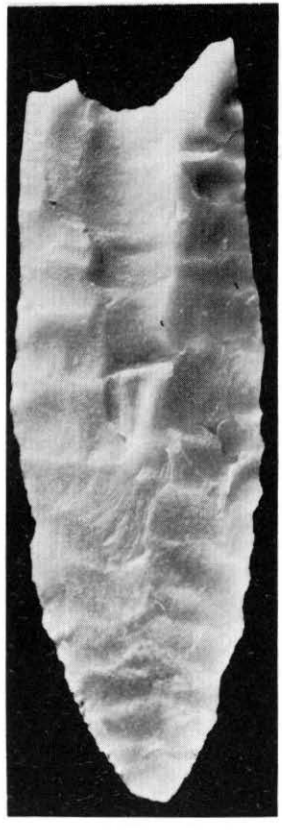

No. 17

points by Dr. Ben C. McCary in the September 1949 *BULLETIN OF THE VIRGINIA ARCHAEOLOGICAL SOCIETY*. This was some of the preliminary work on fluted or "Folsom" points in the Eastern U. S. The only location known for this point is western Granville County, North Carolina.

17 Point made from a bifacially worked preform. Outline: parallel to convex. Both faces of this point show one long, apparently narrow, shallow flake removed to form the flute. The base having additional thinning flakes of varying lengths removed. The obverse and reverse flute scars possibly being narrowed by the relatively large deep secondary flakes carrying off portions of the flute. The secondary flaking on both faces is well done and in some instances gives the appearance of being collaterally struck. There seems to have been a minimum of fine secondary marginal pressure flaking and many of the high dorsal ridges formed by adjacent flakes are untrimmed. The material ranges from dull to waxy/light to dark colored chalcedony with microscopic particles in suspension. An outcrop of chalcedony of a comparable quality has been noted in Stokes County, N. C. and an almost identical fluted point was found in Princess Anne County, Va. This point was found after bulldozer work in a church yard, 10 miles E. of Greensboro, Guilford County, North Carolina.

18 Point made from a bifacially worked preform. Outline: convex sided. Both faces of this point show extensive secondary and fine pressure flaking along the margins. The finest flakes were removed from the lateral basal margins. The obverse flute was formed by two, fairly wide, overlapping flakes and one long narrow flake. No clearly identifiable primary flake scars can be seen on this face. The reverse flute was formed

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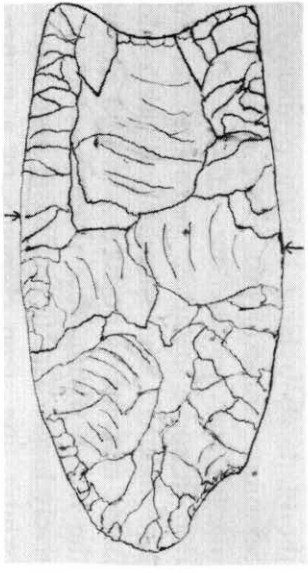

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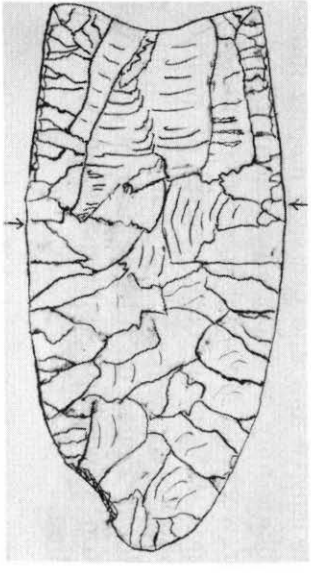

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No. 18

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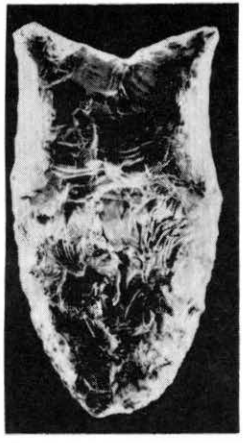
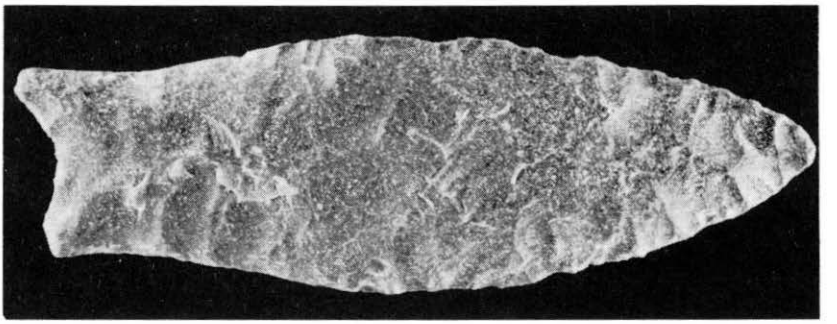


No. 19

by the removal of one long, wide flake. This large flake failed to completely hinge up and the remaining hinge flake left on the point has filled under with red clay. This side has one collateral-like primary flake scar left, but does not show the amount of fine secondary work as seen on the obverse. The stone material is a very high quality clear quartz. Clear to milky quartz outcrops have been noted at several locations in Alamance and other nearby counties, so a local source is quite probable. Point was an isolated find on a small cultivated knoll adjacent to a creek near Ossippee, Alamance Co., N. C.

19 Point made from a bifacially worked preform. Outline: concave to convex. Flutes on both sides of this point were obtained by the removal of two overlapping flutes. The "V" shaped base is very similar to the one on the point described from Durham County (No. 14). The apparent extensive and fine pressure flaking indicates the blade may have once been longer and has been reworked. No rubbings are available of this point. Stone is clear quartz of nearly flawless quality and again the source is quite possibly local. Found on hillside near Stony Creek, Morton Township, Alamance County, North Carolina.

20 Point made from a bifacially worked preform. Outline: parallel to convex sided. Both faces of the blade show large shallow primary flake scar remnants. Some of these were struck from either margin and are shallow but so well controlled that in some instances the blade has collateral-like flaking. The secondary flaking along the blade margins on both faces is well executed, but the flakes which were removed tend to be relatively large. The lateral basal margins, however, exhibit fine steep chipping of a nature that is



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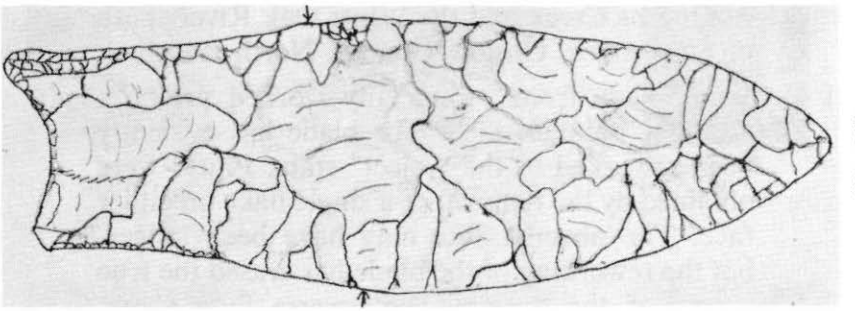

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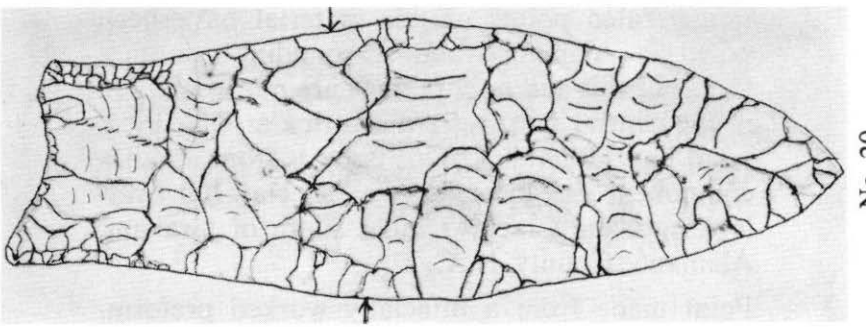

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No. 20

usually seen only in the basal concavity area. The obverse flute was obtained by the removal of one relatively short shallow flake and two thinning flakes. The reverse flute was formed by the removal of three short thinning flakes. The basal concavity shows very little fine secondary flaking. The stone material is a lightly patinated black-green fine grained highly silicified rhyolite. The stone material may have come from the Carolina Slate Belt several hundred miles to the west in the Piedmont. The possibility, however, that it was obtained from a river carried boulder is likely since the counties to the immediate north and south are both outlets for a major river drainage which has its source in the Piedmont. The point was found eroding from a bank near a later period shell midden (On^{v}37) near the confluence of Queens Creek and the White Oak River south of Swansboro, Onslow County, North Carolina.

21 Point made from a bifacially worked preform. Outline: parallel sided. The blade has evidently been reworked to the "reject" state. Flutes were obtained by the removal of a single flake on either face. The obverse flute may have been longer, but the reworking of the blade has erased the true extent of the fluting. The reverse flute shows "stepping up" possibly just before hingeing out or terminating. The material is a grayish-white translucent chalcedony. Flakes, tools and additional Paleo points of this material have been noted in Alamance and surrounding counties. Points of this and later periods are more common in the central and western North Carolina Piedmont and Mountains. This point is from a multicomponent site located on a red clay hill overlooking Cane Creek, 7 miles south of Graham, Alamance County, N. C.

22 Point made from a bifacially worked preform. Outline: parallel sided. A crudely made point

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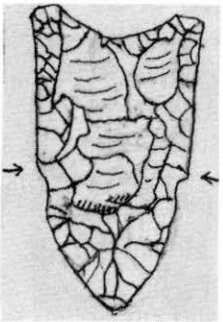
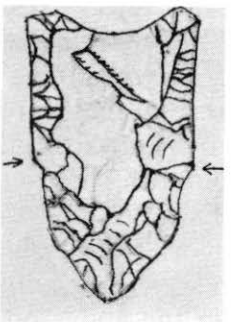
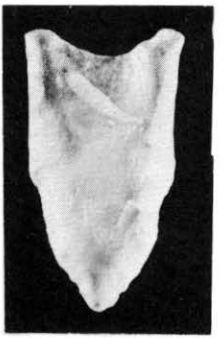

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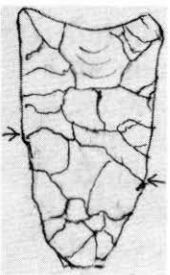

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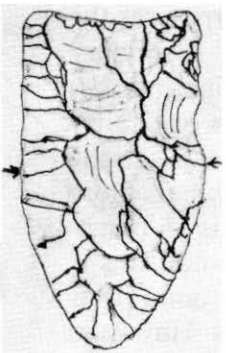
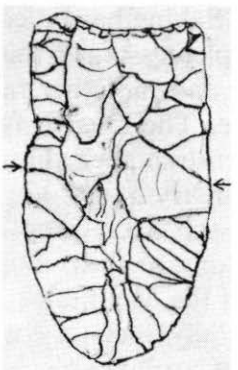
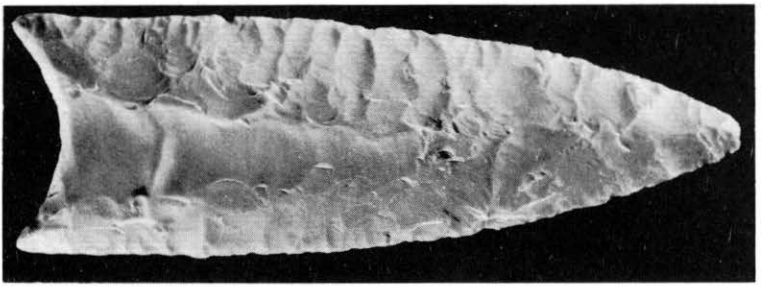




No. 23

which has possibly been reworked down to the small unusable or "reject" size as noted in the above point. The obverse has more thinning than true fluting. The thinning was executed by the removal of several relatively long and narrow thinning flakes. This obverse side has most of the fine marginal retouch. The reverse has one large short thinning flake forming the flute. The material is a gray-white translucent chalcedony. Stone provenance would quite possibly be the area discussed in the above point. Found on an Archaic site E. of Prospect Hill, Caswell County, North Carolina.

23 Point made from a bifacially worked preform. Outline: roughly parallel sided. The fluting on either face of this point has been formed by the removal of multiple flakes, closer to thinning than fluting. The stone material has tended to flake better than many of those previously discussed. This is most apparent in the fine secondary and marginal work seen on both faces. An interesting feature of the obverse face is the medial ridge in the center of the blade showing where several large primary flakes have met and overlapped. The secondary flaking has failed to carry over the face and completely erase this. The secondary flaking on this and the other face is fine, narrow and ribbon-like. The reverse face has one fairly large and several smaller thinning flakes at the base. The primary scars are somewhat more prominent on this face. The stone is a black-brown chalcedony or flint, more common in the western area of the Mountains. Point found prior to 1912 and only locality known is Haywood County, North Carolina.

24 Point made on a bifacially worked preform. Outline: parallel to triangular sided. This point has the finest flake work yet noted. The obverse face



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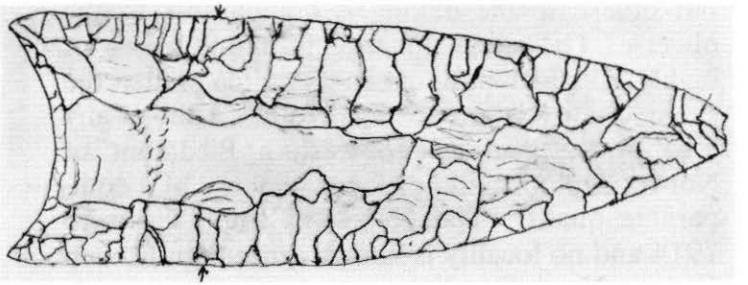

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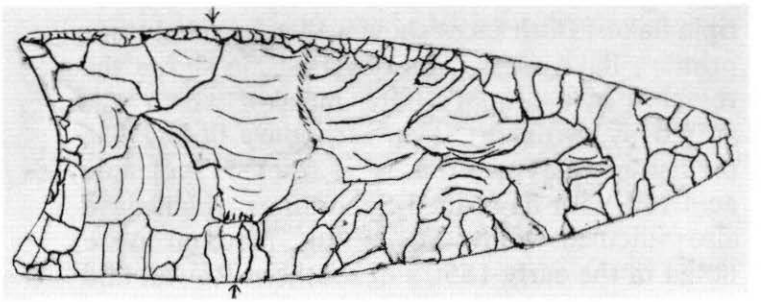
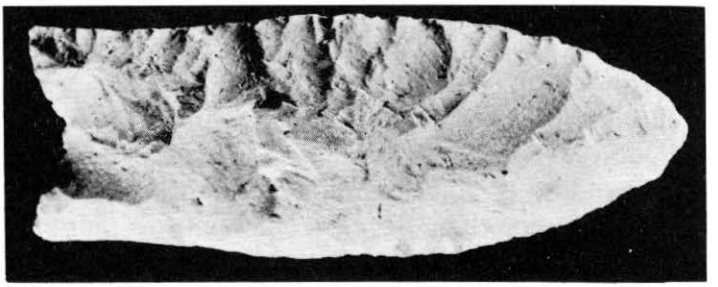


REVERSE No. 24

has a single, long, shallow flake removed to form the flute. The apparent narrowness of this flake could be due in part to the fine secondary and marginal retouch which carried over into portions of the shallow flute. No remnants of the primary flake scars are apparent on the obverse. The fine pressure flaking has been carried to the extent that many of the medial ridges formed by adjacent flakes have been trimmed or pushed off. The basal concavity has fine, steep flaking on either face. This, as well as the absence of the fluting flake bulb of percussion, suggests that this point may have had a greater length at one time. The reverse face has one large flake removed to form the flute; this hinged up in a wide primary flake scar. This side has several large primary scars, but otherwise the flaking is comparable to the obverse. The stone material is a fine grade of highly silicified dark green Carolina Slate, the stone quality approaching exotic. Almost any area in the central and western Piedmont of North Carolina could produce material of a comparable quality. The point was found prior to 1914 and no locality is known other than Rowan County, North Carolina.

25 Point made from a bifacially worked preform. Outline: concave to convex. The point shows some well controlled secondary flaking on both faces, but very little marginal pressure retouch. Fluting on both faces is by the removal of multiple flakes. Both faces show well controlled large primary flake scars. The obverse side shows the remnant of a primary flute, most of which was erased by two short steep secondary flutes. The pinkish-orange material is a silicified volcanic acid tuff with devitrified Spherulites which have also silicified. Outcrops of this material were noted in the early 1850's in southern Rowan and surrounding counties and the Spherules were



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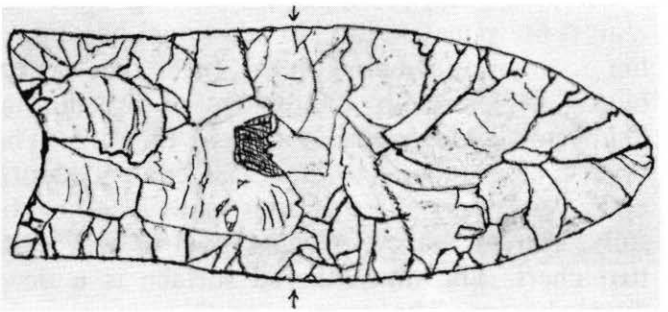

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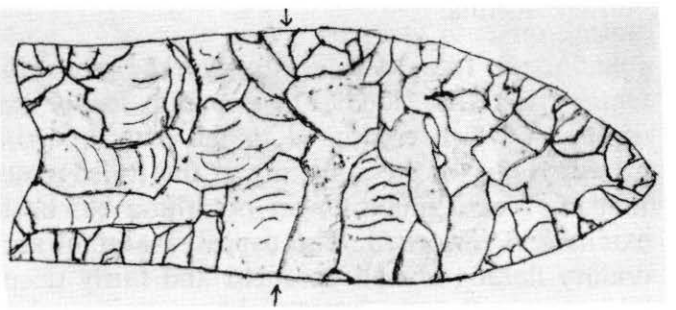

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No. 25

thought to be fossils. Stone source is quite possibly Rowan County. Point was found prior to 1914 and no locality is known other than Rowan County, North Carolina.

26 Point made from a bifacially worked preform. Outline: parallel to slightly convex sided. Both faces of this point retain several primary flake scars, some when struck from opposite margins have the appearance of a collateral flake. The blade margin on either face of this point shows well drawn secondary flakes with the majority of the fine secondary flaking being on the obverse left-hand margin. The obverse flute was executed by removal of two, long overlapping flakes of almost the same length. No additional basal flaking or thinning is noted on this face. The reverse fluting was formed by the removal of three fluting flakes and additional minor basal thinning. The reverse face retains several well controlled primary flake scars. This point is made of a beautifully mottled, waxey, purple-brown to gray mottled chert. The unweathered surface is a deep purple-brown. The source for this stone could quite possibly be local, as this and other types of chert are found in massive and nodular forms in the local limestone deposits in this portion of the state. Point was an isolated find near Laurel Creek, west of Big Laurel, Madison County, North Carolina.

27 Point made from a bifacially worked preform. Outline: parallel sided. The apparent stubbiness of the tip when compared to the length of the grinding and the steep flaking at the tip suggests that this was a much longer point and has been extensively reworked. The overall marginal secondary flaking is well executed and fairly deep. The obverse flute was executed by the removal of one wide, long flake which hinged up just above

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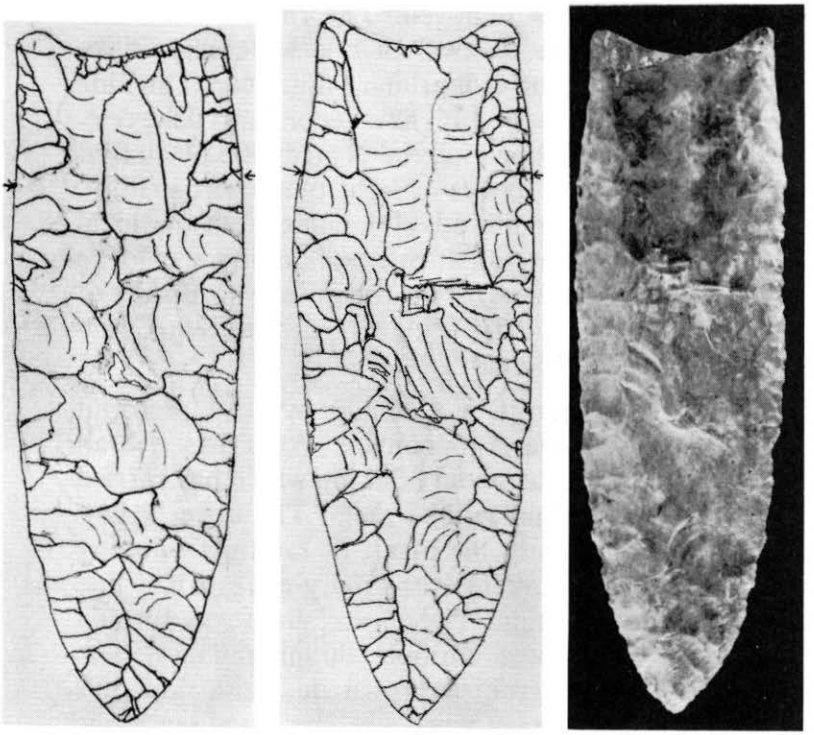

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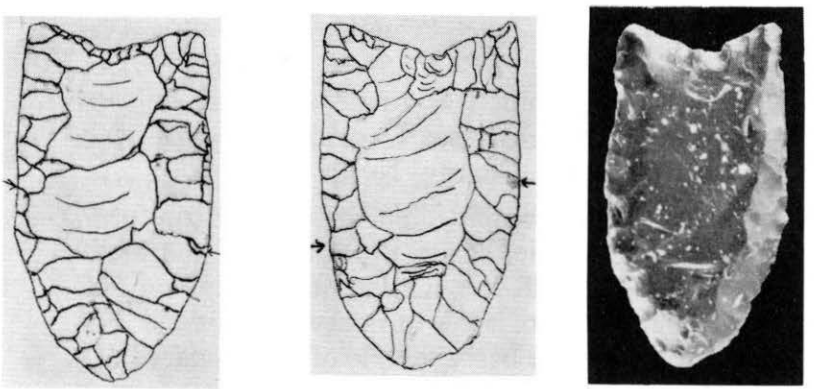

No. 27

the present tip. The obverse base has additional thinning flakes removed. The reverse flute was formed by the removal of one wide short flake which hinged up in a primary flute scar. This side of the base has only fine secondary flakes removed. The stone material is an exotic black flint with included specks of light blue chert or flint. The material quite possibly came from the local limestone formations as a nodule and would be native to the area. Point was found northwest of Marshall near Little Pine Creek, Madison County, North Carolina.

28 Point made from a bifacially worked preform. Outline: concave to convex. Point has overall well executed secondary flaking which has carried away any primary flake scars. The obverse fluting is apparently the result of multiple thinning flakes. The obverse basal margin has some fine secondary flaking. The reverse flute was formed entirely by short mutliple thinning flakes. The sharp coarse grained brown quartzite does not lend itself to easy working. The stone source is most likely local as quartzite boulders are quite common in the local rivers and streams. This point has been called "Cumberland" and was reported in the *TENNESSEE ARCHAEOLOGIST*. The point was found near the railroad trestle across Hiwassee Lake northwest of Murphy, Cherokee County, North Carolina.

29 Point made from a bifacially worked preform. Outline: parallel sided. Both faces of the blade show very well executed secondary flaking and the remnants of some primary flake scars. The obverse has the best example of the primary flake scars on this point. The obverse flute was formed by the removal of three long narrow flakes of almost equal length. The reverse flute was formed by the removal of three flakes also, but not as fine or well controlled as the obverse. This reverse

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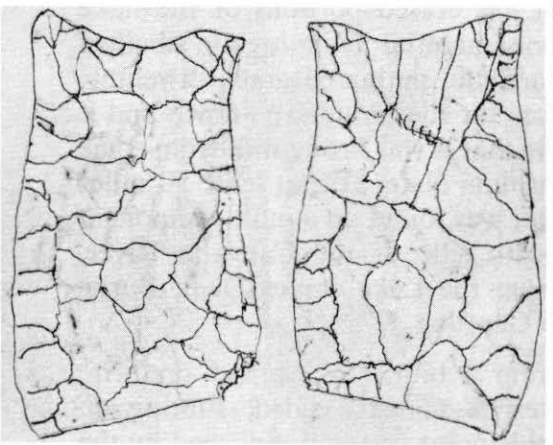

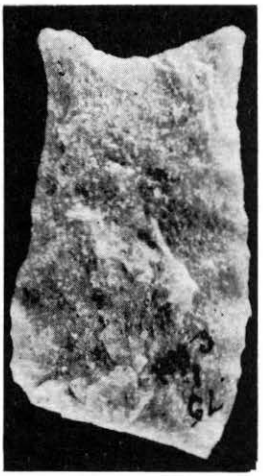

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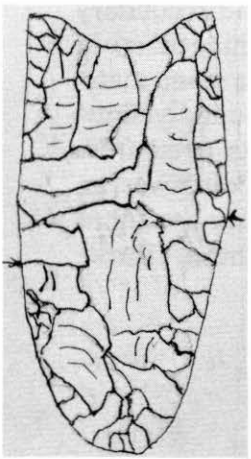

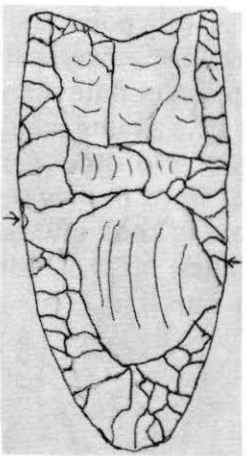

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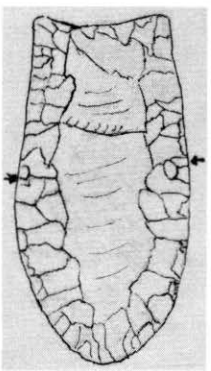
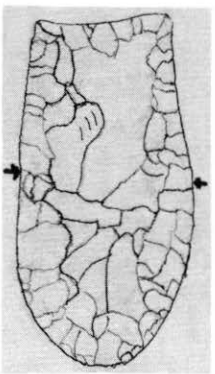
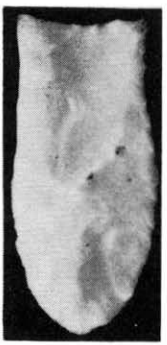


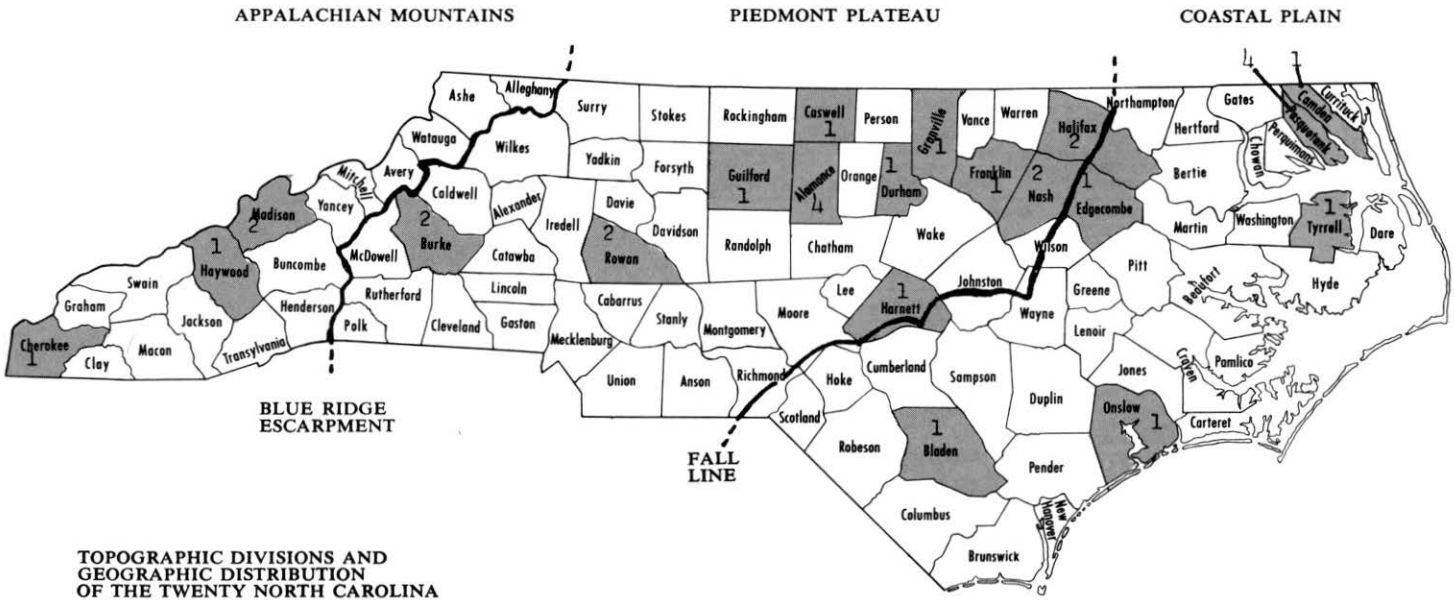




No. 30

flute may have been longer as the marginal secondary flaking has erased portions of the flake scar. The stone material is a highly silicified green Carolina Slate, patinated greenish-yellow. No local sources for this stone are known and it is quite possible that it was brought in from some area in the Carolina Slate Belt, at least 50 miles to the east. Point was found on a multicomponent site on the north side of the Catawba River, downstream from the Lake James Dam, Burke County, North Carolina.

30 Point made from a bifacially worked preform. Outline: convex to concave sided. Fluting on either face of this point was accomplished by the removal of a single relatively large flake. Margins on both faces of this point show fine secondary pressure flaking. The obverse flute hinged up in a well defined primary flute scar. The stone material appears to be a granular or included yellow-green chalcedony. No other artifacts or sources of this material have been noted. Point was an isolated find on clay knoll in valley near the Johns River, Four miles NE. of Morganton, Burke County, North Carolina.



TOPOGRAPHIC DIVISIONS AND GEOGRAPHIC DISTRIBUTION OF THE TWENTY NORTH CAROLINA COUNTIES AND THIRTY FLUTED POINTS REPRESENTED IN THIS SURVEY

N. C. FLUTED POINT DESCRIPTION AND LOCATION

N. C. ARCH. SURVEY SITE #	SURVEY POINT #	LENGTH	WIDTH	THICKNESS	LENGTH & NO. OF FLUTES EACH FACE		LENGTH AND DEGREE OF GRINDING	BASAL CONCAVITY	ISOLATED OR SITE FIND	LITHIC MATERIAL	LOCATION
					OBV	REV					
Hx^{v}27	1	38	22	6	22 3	18 3	16 and 21 Heavy	2	Isol.	Clear Quartz	NE. of Littleton, Halifax County, N. C.
Hx^{v}27	2	58	22	6	49 1	32 1	19 and 20 Medium	3	Isol.	Gray-Brown Felsic Crystal Tuff	NE. of Littleton, Halifax County, N. C.
	3	39	17	6	19. 1	18 1	None	2	Site	Green Secondary Silicified Rhyolite	NW. of Lillington, Harnett County, N. C.
	4	77	27	8	17 1	17 1	30 and 30 Heavy	4	Isol.	Yellow-Orange Siliceous Senter	E. of Red Oak Nash County, N. C.
Ns^{v}10	5	60 Br.	24	7	22 1	17 1	25 and 29 Heavy	3	Site	Banded Black-Green Silicified Rhyolite	S. of White Oak, Nash County, N. C.
Ed^{v}28	6	74 Br.	30	9	15 2	8 2	22 and 29 Medium	4	Site	Fossiliferous Orange Chalcedony	NE. of Rocky Mount, Edgecombe County, N. C.
Cm^{v}1	7	41 Br.	23	7	14 1?	14 1?	23 & 16(Br.) Medium	3	Site	Milky or White Quartz	S. of Burnt Mills, Camden County, N. C.
Pk^{v}1	8	17 Br.	23	7	12 2Br.	13 2Br.	13 and 17 Heavy	3	Site	Clear Quartz	N. of Elizabeth City, Pasquotank County, N. C.
Pk^{v}1	9	40 Br.	25	5	25 1Br.	16 2	26 and 30 Heavy	4	Site	Dark Green Chert or Flint	N. of Elizabeth City, Pasquotank County, N. C.
Pk^{v}1	10	42 Br.	20	6	11 2	13 3	24 and 25 Light	2	Site	Yellow-Orange Close Grained Qtz.	N. of Elizabeth City, Pasquotank County, N. C.
Pk^{v}1	11	67	27	6	22 1	8 3	31 and 33 Medium	6	Site	Red Quartzite	N. of Elizabeth City, Pasquotank County, N. C.
	12	67	26	7	16 1	6 3	29 and 31 Medium	3	Isol.	Green Carolina Slate (Silicified)	E. of Columbia, Tyrrell County, N. C.

CODE: Br. = Broken Th. = Thinned Obv. = Obverse Rev. = Reverse

N. C. ARCH. SURVEY SITE #	SURVEY POINT #	LENGTH	WIDTH	THICKNESS	LENGTH & NO. OF FLUTES EACH FACE		LENGTH AND DEGREE OF GRINDING	BASAL CONCAVITY	ISOLATED OR SITE FIND	LITHIC MATERIAL	LOCATION
					OBV	REV					
	13	85	30	8	30 1	25 1	30 and 30 Heavy	2		Lt. to Dark Brown Jasper	Bladen County
	14	61	25	6	18 1	6 1	25 and 28 Medium	4	Site	Black-Green Silicified Rhyolite	E. of Flat River, Carr Twp. Durham County, N. C.
	15	54 Br.	23	7	20 2	16 2	27 & 19(Br.) Medium	4	Site	Black-Green Silicified Rhyolite	S. of Bobbitt, Franklin County, N. C.
	16	38	19	3	10 Th.	5 Th.	16 and 17 Medium	4		Black-Green Silicified Rhyolite	Western Granville County, N. C.
	17	93	32	9	32 1	31 1	40 and 42 Light	10	Isol.	Light to Dark Orange Chalcedony	E. of Greensboro, Guilford County, N. C.
	18	72	32	8	22 3	25 1	29 and 30 Heavy	4	Isol.	Clear Quartz	NW. of Ossippee, Alamance County, N. C.
	19	52	28	9	23 2	21 2	20 and 22 Heavy	5	Isol.	Clear Quartz	NW. Morton Township, Alamance County, N. C.
On'37 2299A12	20	107	32	6	23 1	15 3	44 and 46 Heavy	5	Site	Black-Green Highly Silicified Slate	Queens Creek, S. of Swansboro, Onslow County, N. C.
	21	38	21	6	22 1	20 1	20 and 20 Heavy	4	Site	Translucent White Chalcedony	S. of Graham nr. Cane Creek Alamance County, N. C.
	22	33	18	6	14 Th.	9 1	16 and 22 Medium	2	Site	Transclucent White Chalcedony	E. of Prospect Hill, Caswell County, N. C.
	23	44	22	5	17 Th.	15 Th.	19 and 20 Light	2		Black-Brown Flint or Chalcedony	Haywood County, N. C.
	24	95	32	7	46 1	20 1	25 and 26 Light	5		Dark Green Silicified Slate (Caro.)	Rowan County, N. C.
	25	85	32	8	32 3	19 3	37 and 37 Medium	4		Pink-Brown Sil. Rhyolitic Acid Tuff w. Spherulites	Rowan County, N. C.

CODE: Br. = Broken Th. = Thinned Obv. = Obverse Rev. = Reverse

N. C. ARCH. SURVEY SITE #	SURVEY POINT #	LENGTH	WIDTH	THICKNESS	LENGTH & NO. OF FLUTES EACH FACE		LENGTH AND DEGREE OF GRINDING	BASAL CONCAVITY	ISOLATED OR SITE FIND	LITHIC MATERIAL	LOCATION
					OBV	REV					
	26	91	27	7	31 2	29 3	20 and 29 Medium	3	Isol.	Purple-Brown to Gray Mottled Chert	Laurel Creek, W. of Big Laurel, Madison County, N. C.
	27	33	24	6	27 1	16 1	32 and 21 Medium	4	Site	Black Flint with Blue Chert Specks	NW. of Marshall, nr. Little Pine Creek, Madison County
	28	56 Br.	32	5	23 Th.	10 Th.	None	4	Site	Coarse Grained Brown Quartzite	N. of Murphy, nr. Hiwassee River Trestle, Cherokee County
Bk'28	29	56	24	6	22 3	14 3	26 and 32 Medium	5	Site	Highly Silicified Green Caro. Slate	N. side of Catawba R., 1 mile below Lake James, Burke County
	30	43	19	7	22 1	14 1	20 and 22 Medium	2	Isol.	Light Yellow Granular Chalced.	4 miles NE. of Morganton, Burke County, N. C.

CODE: Br. = Broken Th. = Thinned Obv. = Obverse Rev. = Reverse

THE 30 POINTS IN THIS SURVEY ARE IN THE FOLLOWING COLLECTIONS UNLESS OTHERWISE NOTED:

Owner/Finder	Point Number
Blackburn, Thomas A., P. O. Box 801, Marion, N. C. 28752	26
Carey, Charles, 132 Pearson Drive, Morganton, N. C. 28655	29
Harris, Andrew, Rt. 6, Box 172-DD, Durham, N. C.	14
Harwood, C. R., 58 West Mildred Avenue, Asheville, N. C. 28806	27, 28
Littleton, Tucker R., Swansboro, N. C. 28584 Donated to R.L.A. at Chapel Hill R.L.A. Acc. No. 2299a12	20
Lowrance, Carlos, Catawba, N. C. 28609	13
McAvoy, Joseph M., 6808 Jean Drive, Raleigh, N. C. 27612	11, 16, 23, 24
Perkinson, Phil H., Box 114, Norlina, N. C. 27563	1-7, 15, 21, 25
Pritchard, James, 1908 King Charles Ct., Virginia Beach, Va.	8, 9, 10
Stine, Tom, 1200 24th Avenue NE., Hickory, N. C. 28601	30
West, William R., 2569 Hyde Street, Burlington, N. C. 27215	12, 17, 18, 22
Wilkins, Henry B., Rt. 1, Blanch, N. C. 27212	19

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SALVAGE ARCHAEOLOGY

William R. West

Mention the term Indian artifact and the general public and many amateur archeologists think of a stone projectile point. Artifacts of stone usually found by the surface collecting amateur are all too often all that remain of a wide variety of tools, weapons, and other items made and used by the American Indians.

In Piedmont North Carolina and Virginia there are sites at which objects of bone, antler, shell, and similar animal materials are found. At these sites, often in dam impoundments, fast erosion uncovers the animal remains and associated artifacts. A small fast-eroding island in Virginia, formerly investigated by trained archeologists and then by several Virginia chapters, has yielded the information presented in this report. Although the site has been thoroughly spoiled for useful excavation it still produces artifacts and information to salvage archeology.

Soil conditions at the site enabled bone, shell, and charred materials to remain in good condition. Freshwater mussels, land snails, and at least three species of freshwater snails were used in great numbers for food. The abundance of shell probably influenced the pH of the soil so that even very small bones and fish scales survived.

The most commonly encountered animal bones are those of the Virginia white tail deer. Although one utilized antler and another antler fragment have been found, deer remains usually consist of teeth and bone fragments. Other animal remains include bones and teeth of elk, oppossum, raccoon, muskrat, rabbit, squirrel, and other species as yet unidentified. Turtles, tortoises, frogs, and an occasional snake were apparently used as food. Fragments of turtle carapace are common. Carp or common sucker, gar, bullhead, and other fish were important food. Wild turkey was the most important bird but other species were utilized.

Vegetable remains are rare but charred corn cob does occur. Charcoal is common as small bits but walnut size pieces do turn up.

The discarded bones tell more than just the variety of animals used for food. Cutting scars indicate butchering techniques and the sharpness of the butchering tools. The fact that nearly all long bones are broken and splinered indicates that bone marrow was important as a source of food or grease.

Bone tools and other artifacts are found with the refuse. Many of the tools and utensils demonstrate the Indian's common sense approach in fashioning such items. All of the items illustrated are shown natural size unless otherwise indicated.

The tortoise or turtle carapace dish is a prime example of the use of a slightly altered natural object (Plate I:1). The horny scales which covered the carapace were removed, the shell edges were ground to remove all traces of the plastron attachments, the fused ribs and backbone were removed, and the entire inner surface was scraped. One end of the carapace was left full thickness for use as a handle, but the remainder of the periphery was ground thin. A final smoothing of the ground rim produced the finished utensil which was useful as a ladle, soup bowl, or small dish.

Fish hooks were usually made from the long bones of large mammals but smaller bones were also used. The bone was broken or sectioned and ground to a flat, slablike form (Plate I:2). Scraping or gouging on both flat surfaces near one end of the slab produced an elongate oval (Plate I:3). Opposite the thinner end of the oval, both sides were notched and snapped off to produce an elongate U-shaped hook blank. One side was made into a long, sharp, barbless point. The base was thinned and the remaining side was made into the shank (Plate I:5). Shanks were notched, knobbed, or left plain where the line was attached. The portion of the blank that was detached from the hook was used to make another hook or an awl if long enough or simply discarded (Plate I:4). In two instances deer ulna bones were first made into awls and then the awls used as fish hook blanks. The basal portion of one such awl was found associated with the point (undamaged)

of the other. One must wonder why good tools were used for blanks when there was apparently plenty of bone debris available.

Bone needles, often found on Woodland sites, have not turned up at the island. The needles, commonly made from deer rib bones, are large and many have been used for purposes other than clothes making (Plate II:6).

The most common tool at the site is the bone splinter awl. In its simplest form it is a sharp splinter which shows use polish but no indication of intentional sharpening (Plate II:7). Some of the splinters were provided with well ground points (Plate II:8). There is a full sequence of awls from the unsharpened splinter to fully ground types (Plate II:10). Larger awls for heavy duty were made from deer ulnae and cannon bones with an articulating surface retained as a handle (Plate II:9). Fish spines, particularly the fin spines of catfish, were used as awls. The barbs were cut or ground off and the points were sharpened.

Rarely, awls and other artifacts were decorated with small notches or tally marks. Such marks are often found on the buttress splints of turkey tarsometatarsus awls (Plate III:11).

Deer antler tines were utilized as arrow points (Plate III:12). The tine was broken from the main antler beam by a sharp blow. The detached tine was thinned and sharpened by scraping or abrasion parallel to its length. The ground tine was then notched and the unwanted basal portion snapped off (Plate III:15). A hole drilled into the base of the prepared point completed the process.

One trash pit produced a large antler from which all of the tines had been broken. Three of the discarded tine bases and a complete point made from a tine were found in the same pit. The antler was apparently picked up in the woods and brought into camp as indicated by the abscission scar at the base of the beam.

Sections of long bone were used as flakers in stone working. One such flaker was made from a section of rather thick bone and it is shaped somewhat like a spoon handle (Plate III:13).

Tubular beads and longer tubes of unknown use were cut from the bones of turkeys, other large birds, and small mammals (Plate III:14). Two grooves were cut around the bone and the pieces snapped apart. The broken ends were ground smooth and the bone polished to complete the bead. Notches cut into the ends of the bead were added as decoration.

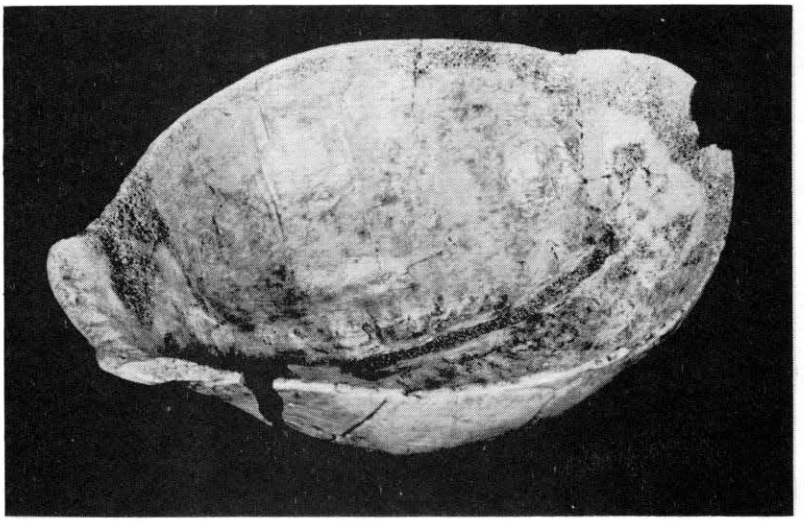
The deer phalange or toe bone projectile point clearly shows the Indian's utilization of naturally shaped objects. The toe bone is light in weight, triangular in cross section, and sharp pointed (Plate III:16). Thickened areas at the base were ground away and a hole was drilled into the base. An unfinished toe bone point shows the preliminary grinding and the just started drill hole (Plate III:17). The fully ground and drilled point was probably attached to the arrow shaft with glue (Plate III:18).

A bipyramidal crystal of milky quartz was made into either a pendant or sinker by simply grinding a notch around the smaller end (Plate IV:19).

Quartz, both milky and transparent, was the stone material most preferred for projectile points at the site. Silicified slate was used sparingly. The most prevalent point type is the small Woodland triangle (Plate IV:20 & 21). Sides were straight or concave and straight sided forms were often serrated. A small lanceolate point occurs in limited numbers (Plate IV:22). Archaic types such as Halifax (Plate IV:23) and Savannah River indicate use of the area over a long period of time. Broken point bases are far more common than broken tips suggesting that damaged arrows were returned to camp for refitting with new points.

Potsherds occur in profusion. Fabric and cord marked surfaces are common. Rims and shoulder areas commonly show parallel or zig zag lines, concentric rectangles or squares, punctuation marks, and marks made with a fingernail. Fabric impressions with overlaid lines are common combinations (Plate IV:24). Smooth surfaces are found but they are not common (Plate IV:25). Some of the pottery utensils were fitted with simple handles. Fragments of pottery spoons and undecorated elbow pipes are found occasionally.

Plate I



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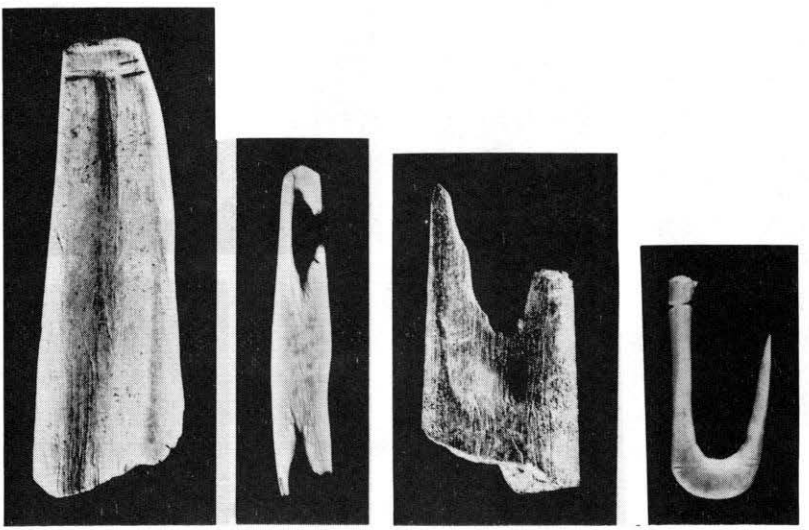

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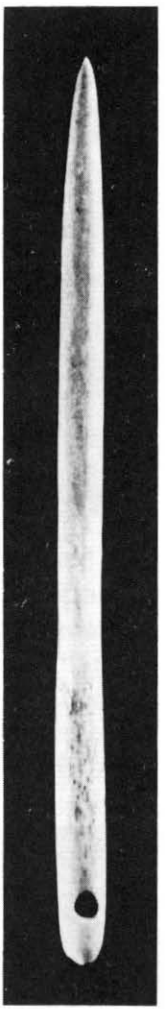
Plate II



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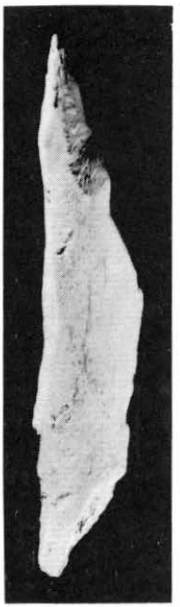

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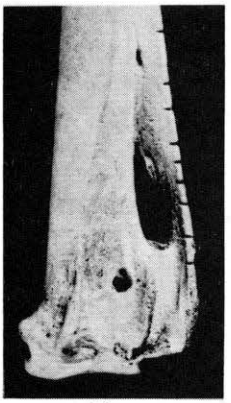
Plate III



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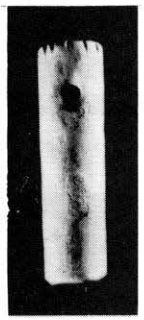

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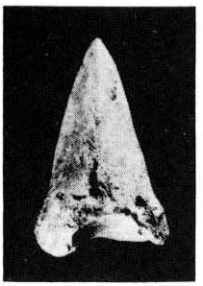

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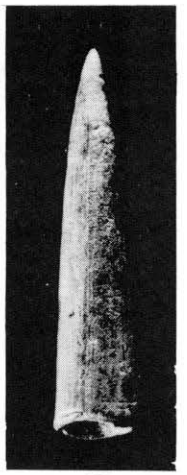

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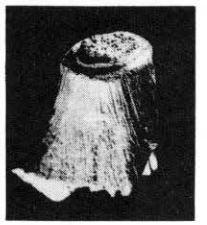

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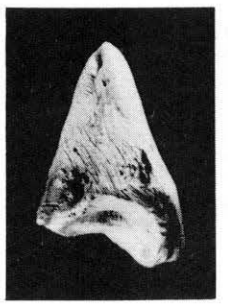

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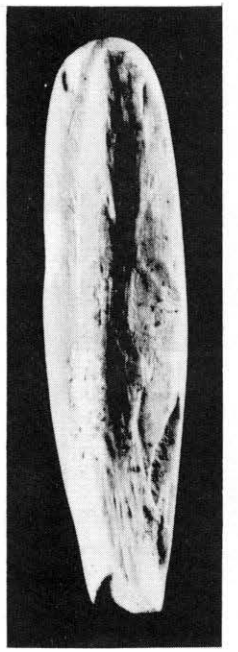

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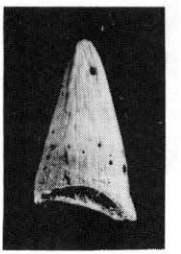

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Plate IV

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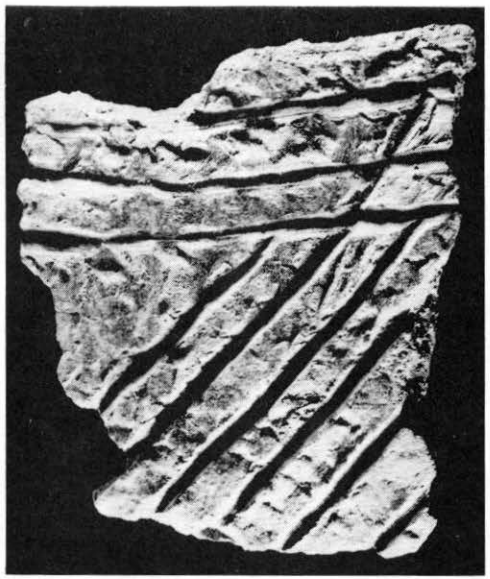

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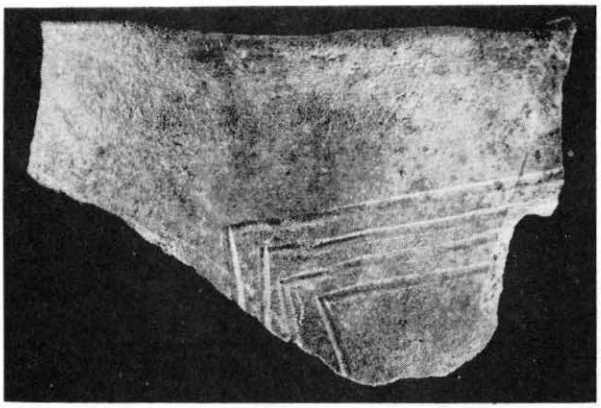

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There is a variety of pottery tempering material represented in the sherds. Mussel shell tempering occurs rarely. More common is very fine mica which may have occurred naturally in the clay. The mica usually occurs in black or very dark pottery and such utensils must have been attractive. Sand tempering is common and some stone fragments are up to 4 or 5 mm in diameter.

The site is a highly interesting one. Today, few intact features are found after years of excavation and pot hunting but information is still furnished by the site. Bone tools in all stages of manufacture show the step by step progression. Perhaps these are the most interesting aspects of the site.

2569 Hyde Street
Burlington, N. C.

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