1974 EXCAVATIONS WITHIN THE NEW HOPE RESERVOIR

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CHAPEL HILL

FINAL REPORT

1974 EXCAVATIONS WITHIN THE

NEW HOPE RESERVOIR

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Abstract

The construction of the New Hope Reservoir on the Haw and New Hope Rivers of central North Carolina necessitated an evaluation of the archaeological resources of the area to be impounded. The initial survey and testing of sites within the reservoir had been completed with the recommendation that four of the sites tested be excavated more extensively. Excavations at $Ch^{v}29$ showed evidence of site occupation during Early and Late Archaic times and later during the Late Developmental Period. The unearthing of the Developmental component at $Ch^{v}29$ served as the focus of the summers' work. The Paleo-Indian occupation at $Ch^{v}159$, Early and Middle Archaic materials at $Ch^{v}33a$, and a Middle Archaic component at $Ch^{v}231$, coupled with the $Ch^{v}29$ excavation, provides additional information concerning the range of prehistory of the Carolina Piedmont.

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INTRODUCTION

The summer of 1974 saw the continuation of the archaeological investigation of the New Hope Reservoir with the completion of the second season of excavations. The initial survey of the New Hope Reservoir in 1964 by Gerald Smith had compiled a total of 172 archaeological sites. Olin F. McCormick returned to the New Hope during 1968 and 1969, conducting additional survey work, and testing 11 sites. As a result of McCormick's testing operations, further excavation was recommended for four sites--Ch^{v}29, Ch^{v}33a, Ch^{v}159, and Ch^{v}231.

In light of the amount of material recovered from the 1969 excavations, it was decided that Ch^{v}29 warranted most attention during the 1974 excavations. The presence of 16 features, and possible postholes uncovered by McCormick at Ch^{v}29 was thought to indicate the existence of a Developmental village.

Following excavations at Ch^{v}29, attention was turned to the three sites which produced materials ranging from Paleo-Indian to the Middle Archaic periods. Ch^{v}33a possessed an Early Archaic and a Middle Archaic component. Paleo-Indian Hardaway materials and artifacts ranging into the Middle Archaic had been recovered from surface collecting Ch^{v}159 during 1968. A test pit dug there in 1969 revealed, however, no buried in situ components. McCormick's excavation at Ch^{v}231, consisting of two test pits, produced Middle Archaic Morrow Mountain materials. Thus, the entire range of the North Carolina Piedmont was in evidence at these four

sites. Excavations within the New Hope in 1974 was to investigate this 10,000 years of prehistory.

In any excavation, unforeseeable problems arise during the course of work which affect the excavation and recovery of information. Dirt roads to the four sites had deteriorated rapidly during the five-year span between excavations. Bad weather, logging operations, and general lack of upkeep had all but made the dirt roads into the sites impassable. Twenty-five percent of the 386 man hours expended during May, the first month of actual fieldwork, were spent on general road repair. Included in these 97 man hours was the cutting of a path one-half mile through dense underbrush to $Ch^{v}29$ from $Ch^{v}8$, the nearest point accessible to the site. Logging operations during June and early July of 1974 contributed to the further deterioration of the roads. With the advent of rainy weather in August, passage into the sites became impossible except on foot.

This heavy rainfall during late summer resulted in one last major problem being added to the difficulties already encountered during the 1974 excavations in the New Hope Reservoir. Coupled with the nearly completed New Hope Dam, the heavy rainfall resulted in $Ch^{v}29$, $Ch^{v}33a$, and $Ch^{v}231$ being flooded by approximately 20 feet of water, and a one inch thick deposit of mud being laid down over the open excavation at $Ch^{v}29$. Field equipment, which was stored on the site at $Ch^{v}29$, and the site itself suffered extensive damage. Valuable time was lost to the cleanup and repair of field equipment and the cleanup of $Ch^{v}29$. The loss of this time, during the climax of the summer field season, resulted

in the postponement of excavations at Ch^{v}33a, Ch^{v}159, and Ch^{v}231 until the fall and winter months. The following report gives the results of the 1974 excavations in the New Hope Reservoir.

I. ENVIRONMENTAL SETTING

Physiography

The New Hope Reservoir lies in northeast Chatham County along the Haw and New Hope Rivers. The area of the lake to be impounded is 7,200 acres at the bottom of conservation pool and 32,000 acres at the top of flood control pool. The dam for the reservoir is two miles north of Moncure, North Carolina, on the Haw River. Essentially, the majority of the reservoir lies along the western border of the Durham Triassic Basin. The Carolina Slate Series lies west and northwest of the reservoir, forming the western boundary of the reservoir and the Durham Triassic Basin.

The original beds of slate-like rock of the Carolina Slate Series were laid down during Pre-Cambrian times, as no fossils are to be found in these slates (Bowman, 1954:75-76). Great intruding magmas of greenstone were deposited over the slate. This was followed by the folding and schistosity of the older slates during the late Paleozoic. The Triassic era was a time of great displacement when most of the Piedmont area became disrupted by great normal faults. The Durham Triassic basin was faulted downward into older volcanic sedimentary rocks and the Late Triassic Neward Series was deposited in the trough. No further structural changes occurred following the Triassic era. Only the natural forces of erosion and deposition along river banks continued.

Within the reservoir area itself, the New Hope River flows southward across Triassic sediments for more than 20 miles before leaving to flow across more resistant slates and then into the northern end of a Triassic embayment (Harrington, 1948:19-22). The New Hope River joins

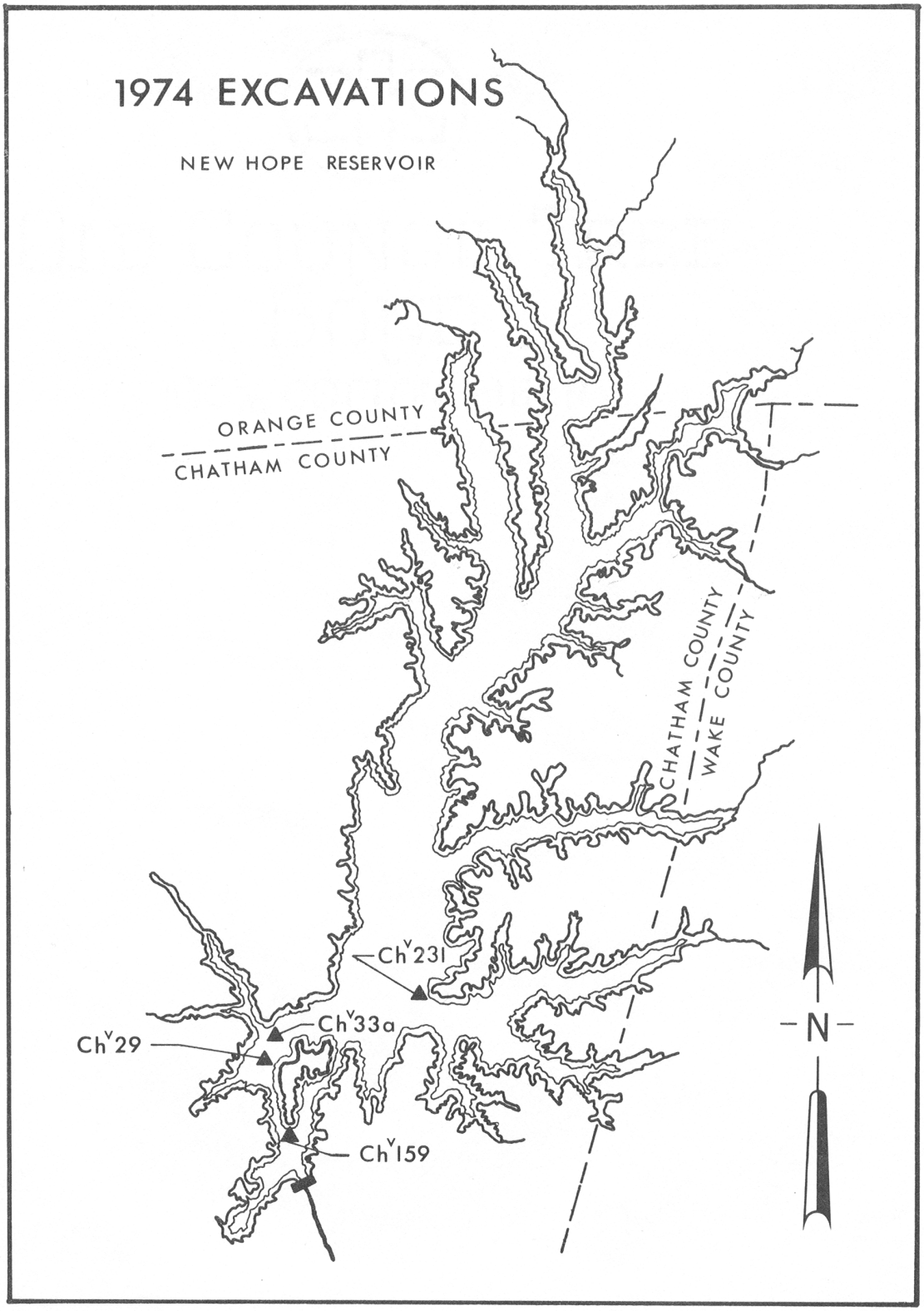


Figure 1. Sites Excavated, 1974 Season

the Haw River in the embayment which the Haw River has entered from the Carolina Slate Series to the west. From here the Haw River flows southward, leaving the Triassic embayment and flowing across slates again for about a mile before entering the main Triassic basin. The New Hope Reservoir Dam is located at the deep gorge which the Haw River has cut through the slates just after leaving the Triassic embayment.

$Ch^{v}29$ lies on recent alluvium in a Triassic embayment two miles north of the one in which the New Hope joins the Haw River. The Haw River flows out of Carolina Slate, across the Triassic embayment which contains $Ch^{v}29$, and cuts across a point of Carolina Slate before entering the Triassic embayment where the New Hope joins the river. $Ch^{v}29$ is on the west bank of the Haw along a large sandy levee composed primarily of Congaree fine sandy loam (Jurney, 1933:23). Triassic sandstone forms a ridge one-third mile east of the site paralleling the Haw River. High ground north and south of $Ch^{v}29$ is formed by the Carolina Slate Series. It is of interest to note that Congaree fine sandy loam is well supplied with all plant nutrients, and the production of corn is especially good on such soils even without the aid of fertilizer (ibid:2).

Approximately one mile north of $Ch^{v}29$ and east of the Haw River lies $Ch^{v}33a$. The site is tucked against a ridge paralleling the Haw. This ridge is made up of a series of weathered slate outcropping undergoing erosion and peneplaination.

$Ch^{v}159$ is located 2,000 feet north of the confluence of the Haw and New Hope Rivers. The site lies on the edge of the reservoir on the 220, contour line. The area is relatively high ground overlying

a weathered slate dike with lower Triassic embayments lying to the north and south.

The last of the four sites, Ch^{v}231, is situated on an old natural levee on a loop of the New Hope River. The site had not been plowed for 20 years, and a layer of humus had built up over the sand (McCormick, 1970:44).

Flora

As is true of most of coastal and piedmont North Carolina, practically all the original timber has been cleared from Chatham County. Before the advent of the white man, the territory was covered with forests of pine and oak (Jurney, 1933:1). In the original growth, there was probably an upper dominant story of short leaf pine, with an undergrowth of post oak, Spanish oak, black-jack oak, white oak, and white hickory (Pinchot and Ashe, 1897:191). This community type often merged into post oak and black-jack oak flats, especially along the river banks.

Large areas of abandoned agricultural land in the area is now under the cover of short leaf and loblolly pines. At Ch^{v}29, the site area itself had been planted in short leaf pine, most of which had been removed during logging operations between 1969 and 1974. West of the site, off the levee on the flats along the Haw River, post oak, black-jack oak and white hickory are to be found. The cleared area around the site has grown up in various kinds of underbrush which have intertwined with the tree toppings left behind during logging operations. This undergrowth presented no small problem when time for its removal came. A few pines, not removed by McCormick nor the logging operations, had to be cut down to facilitate excavations.

The environmental reconstruction for any pre-historic setting is admittedly difficult, to say the least. A fairly accurate description can sometimes be obtained, if ideal conditions exist, by analysis of pollen profiles, and the ethnobotanical analysis of feature fill. The latter pursuit would give only an idea of the types of wood being exploited by the aboriginal inhabitants for use as firewood. This short discussion of the flora may or may not reflect conditions during aboriginal times. However, in the absence of a methodology for accurately dealing with the prehistoric environment, reconstructions based on secondary information will have to suffice for the present.

Fauna

The various animals mentioned and discussed by Lawson presents a very formidable picture. Twenty-seven "Beasts" of Carolina are listed including the buffalo, bear, otter, rabbit, beaver, elk, and deer. The various delicacies produced by the numerous animals, and the uses to which their parts, especially their furs, could be put are highly praised by Lawson (1709:120-131). One-hundred and eight different kinds of birds, including eagles, pheasants, crows, passenger pigeons, ducks and turkeys, are listed (ibid:140-155). Fish, shell fish, and reptiles which inhabit Carolina are also glowingly described and reported by Lawson.

Lawson's journey through North Carolina occurred at a time when the population pressures on the game animals of the Carolinas were just beginning to become a factor. The exploitation of the game animals was on the rise due to increased population and commercial pressures which

would eventually result in the extinction of some animals and the near extinction of others. Still it is felt that Lawson's description of the animals inhabiting the Carolina Piedmont in the early 1700's generally is applicable also to the prehistoric era.

II. EXCAVATIONS AT $Ch^{v}29$

Gerald Smith's 1964 survey of $Ch^{v}29$ recovered three miscellaneous potsherds and seven chips (Smith, 1964:17). The smallness of the collection can be attributed to the dense overgrowth present on the site at the time of the original survey. The three sherds were typed by Smith as belonging to pottery of the New Hope Series. On the basis of this survey and $Ch^{v}29$'s location on an extensive sand levee of the Haw River, limited testing was recommended for the site.

$Ch^{v}29$ was not re-visited until the end of the 1969 season when McCormick returned to conduct test excavations (McCormick, 1970:65-74). By 1969, the site had been planted in slash pine, and dense undergrowth had been allowed to grow up among the pines. Two potholes had been dug on the site by unknown persons. The second of these, when cleaned up, yielded 86 artifacts. During the closing weeks of the 1969 season, six ten-foot squares were excavated at $Ch^{v}29$ down through the plowzone, and fifteen features were uncovered. Late Developmental New Hope and Uwharrie ceramics, Uwharrie type projectile points, historic Hillsborough ceramics and points, glass trade beads, animal bone, and ethnobotanical remains were recovered from the features. No identifiable structural remains were uncovered, as very few postholes were encountered. McCormick observed that the main portion of the 1969 excavations was probably peripheral to the major occupation area of the site (ibid:74). It was with an eye towards isolating the main occupation area of the site and hopefully finding information pertaining to the temporal placement of New Hope ceramics that excavations were resumed in 1974 at $Ch^{v}29$.

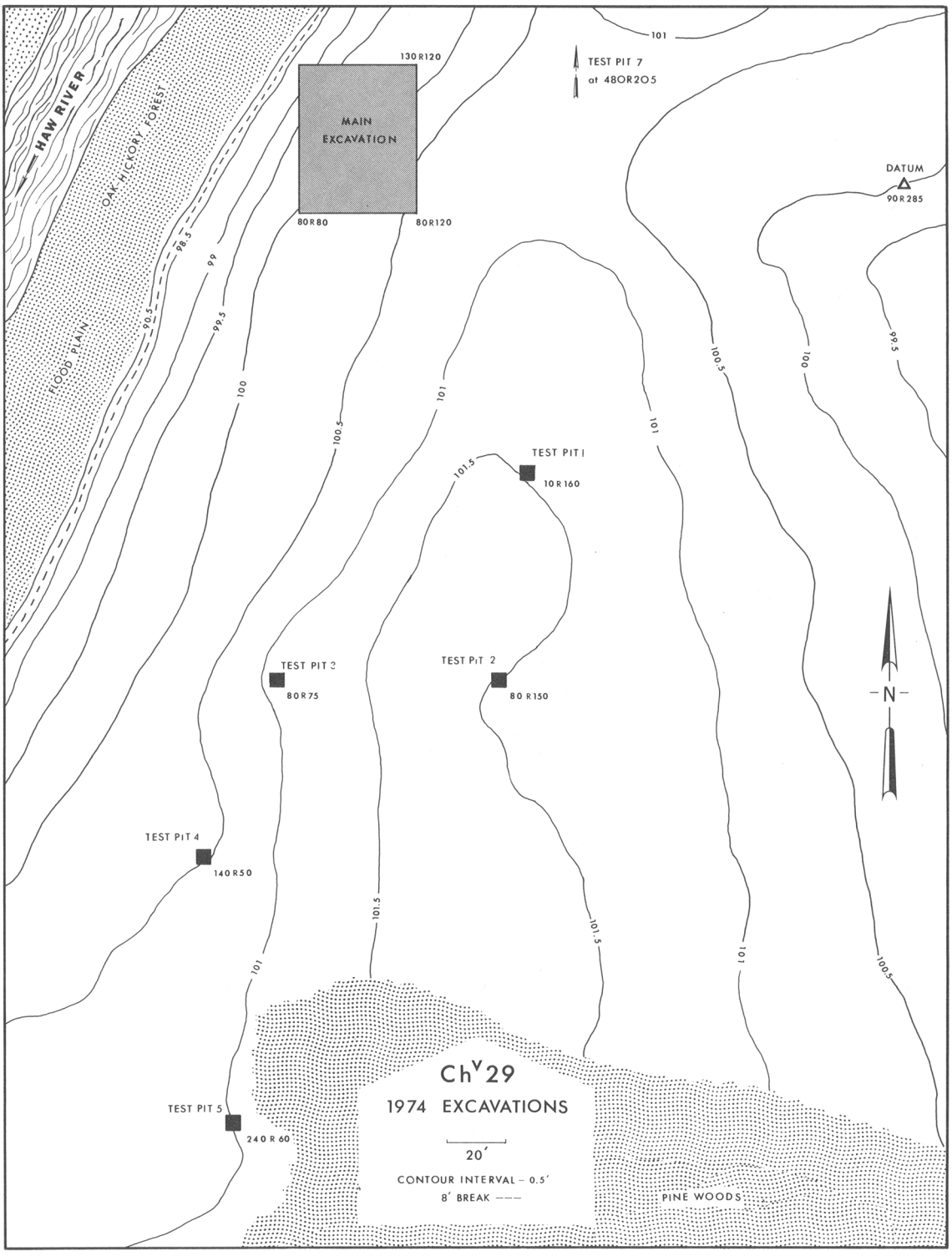


Figure 2. Contour Map, Ch^{V}29

Methodology

The initial work of the 1974 excavation at $Ch^{v}29$ consisted of the removal of vegetation and black plastic left by McCormick. The original profiles of the 1969 excavation had been greatly eroded by water action. These profiles were cut back about one inch to undisturbed soil in order to provide a better view of the excavation and to restore some of the vertical stability necessary for the beginning of the stripping off of plowzone. It was decided that a tier of squares surrounding the 1969 excavations would be removed first. This would provide some idea of possible trends in any structural remains (posthole patterns) or feature clusters which would be indicative of the orientation and relation of the main area of aboriginal occupation and the excavation.

In addition to the main excavation area, a series of test pits north, south, and east of the 1974 excavations along various portions of the levee was planned (See Figure 1). These test pits would hopefully be able to delimit the spatial boundaries of the Late Developmental Historic occupation. Two deep tests were also planned. One was to be an extension of Test Pit 1. Test Pit 1 was southeast of the main excavation on what appeared to be the highest piece of ground along the levee. The second deep test was to be in square 120R90. The second deep test was to be placed in the northernmost square of the main excavation which was also the closest to the river. The logic behind doing such is that the portion of the levee closest to the river and furtherest upstream is the oldest part of the levee (Coe, 1974:personal communication). It is upon the older section of the levee that

peoples of the Archaic and possibly the Paleo-Indian traditions would have encamped if they made use of the levee. Essentially, the second deep test was conducted to see if there were remnants of any cultures older than the Late Developmental and Historic ones at $Ch^{v}29$. Coupled with the deep test in Test Pit 1, the 120R90 deep test would also provide information on the stratigraphy of the levee.

Except for five-foot squares used for the test pits, the basic horizontal unit of excavation was the ten-foot square. A grid system, composed of ten-foot squares had been set up over the entire site by McCormick in 1969. The 1974 excavation was tied into this grid system. A 0-R-0 point was arbitrarily picked on the grid, and all squares within the grid were related to that point, with the southeast corner of the square serving as the square designation.

Within each horizontal unit of excavation, vertical control was exercised in the following manner. Plowzone constituted the first unit of excavation and varied in depth over the site, averaging around one foot. Plowzone was arbitrarily called Level 1. Level 2 consisted of plowscars and plowridges. The plowzone was excavated down until the top of subsoil, usually light brown to orange-tan in color, started to show up. The plowscars were assigned the designation Level 2A and removed as a unit. Level 2B was assigned to the plowridges which was undisturbed soil. As a cohesive entity, Level 2 was approximately 0.2' to 0.3' in depth. Level 3 was assigned to the undisturbed light brown to orange-tan soil which underlay Level 2. Excavation over the entire horizontal unit ceased when the top of Level 3 was reached and troweled. Drawings and photographs were made of the top of Level 2 and the top of Level 3.

Excavation of subsequent levels in the deep tests and test pits was done by arbitrary 0.2' vertical units. This was done because there were no natural zones in the stratigraphy which corresponded with any cultural grouping, and because the natural stratigraphy was not that well known. All soil was hand screened through either 1/2" or 1/4" mesh screen.

In retrospect, the above methodology was basically a sound one. The only change which could have been made would be to scrap the division of Level 2 into two units, plowscars and plowridges. The amount of time consumed in making and following this distinction would have been better used elsewhere.

Problems

The majority of the problems encountered during the 1974 excavations, other than the occasional unauthorized excavation by snapping turtles, could be attributed to the difficulty involved in excavating sandy soil. The walls of the features were difficult to discern in many cases. On the top of Level 3, the features appeared as a smeared area, with little definition. Features 16 and 19 were particularly hard to follow as they were being excavated. It goes without saying that the author wholeheartedly agrees with the statement that, "Loose sand is a joy to sift, but it creates many problems for archaeological interpretations" (Coe, 1964:26).

The other major problem was the flooding which damaged the site during August. Test Pit 1 was collapsed by the flood before any profile drawings or photographs could be made. The time lost because of damage to field equipment and its subsequent clean up was sorely missed as the end of the 1974 field season approached. Indeed, the most unfortunate occurrence of the 1974 season was the time and information loss as a result of this flooding.

Excavations

The initial work at any previously plowed site consists of stripping the plowzone from over the undisturbed subsoil. As might be expected from a Late Developmental-Historic site, no midden was preserved because of heavy plowing action. Information derived from the excavations are thus limited to that yielded by the disturbed plowzone, features, postholes, and excavated levels within the deep tests.

During the excavation of the main area at $Ch^{v}29$, it was hoped that some trend could be discerned in the feature and/or posthole patterns. This unfortunately did not happen. Nor were there any distinct patterns of post-holes which would indicate house patterns or a palisade line (see Figure 3).

In an effort to locate the exact limits of the site, five-foot test pits were dug along the levee to the south of the main excavation. These were dug down through plowzone and approximately 0.2' into undisturbed soil. Test Pits 1, 2, 3, 4, and 5 were dug in this manner. Except for tree stump holes in Test Pits 1 and 5, no subsoil features were discovered in this series of test pits. The main portion of the site did not lie south of the main excavation.

A series of test pits north and east of the main excavation were planned next in an effort to delimit the site. Only one of these, Test Pit 7, north of the main excavation, was dug. The other test pits were not excavated as the site was flooded before any action could be taken. In the aftermath of the flood, no time was given to the completion of these test pits, as other areas of the excavation were considered more important. Although 53 potsherds, 20 flakes, one projectile point, two pieces of daub were in the plowzone of Test Pit 7, no subsoil features

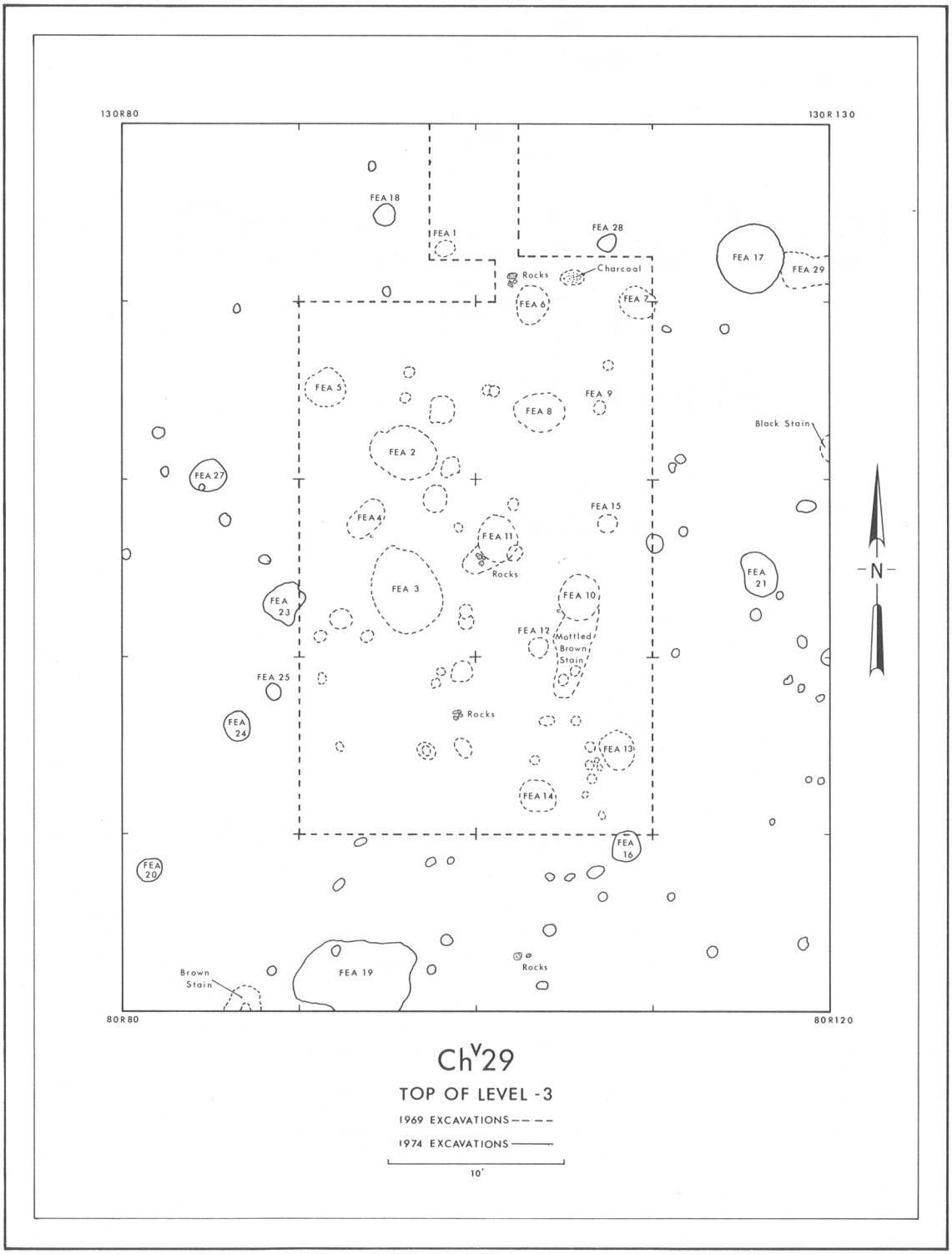


Figure 3. Ch^{V}29, Top of Level 3

were encountered. Adding this information to that obtained from the southern test pits, it can be seen that the main portion of the site is centered in the approximate area of the main excavations.

Deep Tests

Three deep tests were dug at Ch^{v}29, one in Test Pit 1, the second in Test Pit 2, and the other in square 120R90. These were to determine what, if any, older cultures had made use of the levee and the stratigraphy of the levee. The deep tests were excavated in arbitrary 0.2' levels from Level 3 to the bottom. Fill was screened through either 1/2" or 1/4" mesh screens.

McCormick, in the 1969 excavations, had encountered non-diagnostic Archaic materials in his Test 3, at a depth of 3.90' to 5.10' below the surface (1970:67). It was with hopes of identifying this Archaic occupation that the deep tests were started. The first cultural assemblage encountered, however, belonged to the early Developmental Badin focus. Both Test Pits 1 and 2 showed evidence of the Badin occupation. (Test Pit 2 became a deep test after the discovery of the Badin material in Test Pit 1). The Badin material proved not to be the oldest assemblage at Ch^{v}29, as the 120R90 deep test produced evidence of an Archaic habitation at the site.

120R90 Deep Test. Square 120R90 was the northernmost square closest to the Haw River within the main excavation at Ch^{v}29. From the plowzone, 67 potsherds, one biface, one scraper/knife, one broken hammerstone, and 77 flakes were recovered. No features or postholes were found within the square. 120R90 was excavated to a depth of 5.19' below the surface (see Plate VI and Figure 3). Plowzone was 0.90' deep and Level 2 was

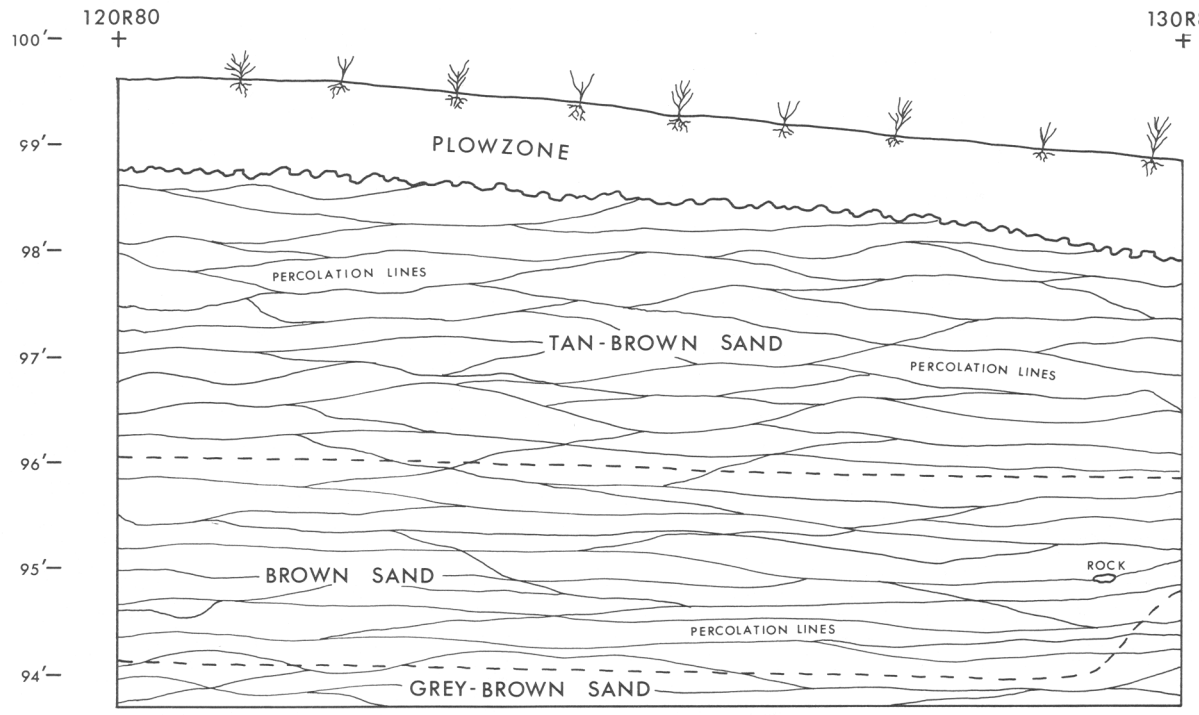


Figure 4. 120R90, Deep Test, West Profile

PLATE I. 120R90, Deep Test, West Profile

0.2' deep. The plowzone was a dark brown color, and the underlying undisturbed sand was tan to light brown in color which shaded gradually into brown-colored sand about halfway down. Perculation lines were encountered throughout the excavated levels of the square. Figure 3 shows the stratigraphy of 120R90. As can be seen, there was no evidence of a darker band of sand running in the profiles. Such a band would have been indicative of a build up in the humus content of the soil, possibly because of extended human occupation.

Since there were no visible natural stratigraphy, the excavation of the square by arbitrary levels was the only way to dig the deep test. In Level 2B, two projectile points, one a Hardaway-Dalton, the other a Hillsborough, were found along with 13 sherds, 20 flakes, and 12 pieces of daub. The 13 sherds broke down into five Uwharrie, five New Hope, and three Hillsborough. Below Level 2, from a depth of 1.17' to 1.57' below the surface, five potsherds of the New Hope series were found. One Badin Cordmarked sherd was also found at this same depth. At 1.57' to 1.97' below the surface, seven more sherds were encountered. Four of these belonged to the New Hope series, and three formed one large Badin Net Impressed rim sherd (see Plate II). From a depth of 1.97' to 2.17' below the surface, two more New Hope sherds were found. 179 flakes were found from the same levels as these 12 sherds. No projectile points were found with these sherds, however.

Savannah River material of the Late Archaic was encountered next in the excavation. Two Savannah River projectile points were recovered, one at a depth of between 2.17' and 2.37' below the surface. The second point was found at a depth of 2.42'. In addition to these points were 310 miscellaneous flakes.

Just below this Savannah River material was evidence of an Early Archaic occupation. At a depth of 2.65', a Kirk point was found. Five more Kirk points and an unidentifiable tip were found to a depth of 4.97'. In this same section, 671 flakes, 13 bifaces, three used flakes, one scraper, and four hammerstones were discovered in association with the Kirk points. Unfortunately, no features of any kind were found.

Excavation in 120R90 continued another 0.2' below the bottom of the Kirk material. Features 30 and 31, which appeared as dark circular stains in the floor, were unearthed. These two stains contained nothing, however. After flotation and water screening, no material of any sort remained. Excavation in 120R90 ceased after Features 30 and 31 were removed.

To summarize the information content of 120R90 deep test, stratigraphic evidence of Early Developmental, Late Archaic and Early Archaic usage of the levee was discovered. Unfortunately, none of these three components were restricted to any naturally occurring zone. Apparently, the constant buildup of the levee by flooding activities inhibited the accumulation of humus on any particular exposed surface of the levee. Features, such as stone hearths, were also lacking. All that can be said is that there was a heavy Early Archaic occupation of the levee, followed by a Late Archaic usage, and then an Early Developmental occupation before the final Late Developmental-Historic component appears.

Test Pit 1. Test Pit 1 was selected as the site of a deep test because it lay on the highest portion of the levee. As has already been noted, the amount of information which could possibly have been retrieved from the test pit was greatly reduced because of its destruction by the flood.

Very little material was recovered from the plowzone or Levels 2A and 2B. Levels 3 through 5 (1.05'-1.65' below the surface) contained only eight flakes. The prospects of finding any material of value from this test appeared to be poor indeed.

Level 6, 1.65'-1.85' deep, turned up two New Hope potsherds and three flakes. Level 7 yielded four more New Hope potsherds, along with a used flake and 49 miscellaneous flakes. Level 8A (2.05'-2.15') produced two more New Hope sherds, along with one Uwharrie Fabric Marked sherd. Forty-two flakes, one used flake, and two pieces of daub were also present. Most important, however, was the discovery of a single Badin projectile point within this level.

Level 8B was excavated to a depth of 2.25'. Eighty-one flakes and three pieces of daub were recovered. A single Randolph projectile point and one used flake were the only artifacts uncovered. The presence of the late Historic-Randolph point at this depth was surprising since Level 8B was over one foot below the plowzone.

The next 0.4' (Levels 9 and 10) were found to contain only one New Hope sherd (from Level 9), 57 flakes, a piece of ocher, and three pieces of daub. Level 11, 2.65'-2.85' below the surface, yielded another Badin projectile point. Beyond Level 11, no further diagnostic material was recovered. However, flakes were recovered to a depth of 5.7' within the test square. At this point, excavation was suspended as the soil had become a friable sandy-red clay. Before work could be resumed on Test Pit 1, the floods came, and the walls collapsed.

Test Pit 1, in spite of its early termination, yielded a good deal of information. Evidence, slender though it may be, of the Early Developmental Badin culture was produced. No indication of Badin material had previously existed. Because of the questionable context within which the Badin material was recovered, it was decided that Test Pit 2 would be excavated down to the approximate same depth as the Badin material in Test Pit 1.

Test Pit 2. This unit was located 70 feet south of Test Pit 2. Like Test Pit 1, Test 2 was positioned on the edge of the highest portion of the levee south of the main excavation. Originally intended only to help in delimiting the spatial bounds of $Ch^{v}29$, Test Pit 2 assumed added importance as a verification of the Badin usage of the levee was sought.

Again, as in Test Pit 1, very little material was present in either the plowzone or Level 2. Levels 3 through 7, 0.9'-1.9' in depth, contained two New Hope potsherds, 72 flakes, one used flake, and six pieces of daub. Finally, Badin material was located in Test Pit 2 within Level 8 (1.90'-2.10'). This appeared initially in the form of a Badin projectile point. Then two Badin Cordmarked sherds were recovered which fit together to form a single rim sherd. These two sherds were found approximately 2.5' apart towards the middle of the five-foot square.

At this point it was decided to halt the excavation in the test pit and expand it into a ten-foot square. This expanded square was dug down only to the top of Level 3 before the rains halted digging, and then the flood made further digging in the test pit prohibitive.

Corroboration of the existing Badin material in Test Pit 1 was found in the excavation of Test Pit 2. While more work and time could have been expended on delimiting the Badin occupation in the area of the two test pits, it was felt that the remaining time could better be spent digging the 120R90 deep test. The results and information derived speaks for itself.

Features

Seventeen units within the 1974 excavations at Ch^{v}29 required extraordinary measures when they were being excavated. These 17 units were designated features. All were located within the main excavation except for two, Features 22 and 26 which were located in Test Pits 1 and 5 respectively. Of these 17 features, five turned out to be either burnt tree stumps, or old stump molds (as the two features named above were).

Excavation of features proceeded as follows. Overburden was removed down to the top of Level 3. At this time they were drawn and photographed. Excavation from this point could proceed in either one of two ways. The first alternate was to remove each zone of the features as a unit starting from the top. This involved being able to discern changes in texture and color of the fill, so that zones are not mixed. This method necessitates a high degree of competency on the part of the excavator and a sharp contrast between the various zones of the feature and between feature fill and undisturbed subsoil.

The second method of excavating features involves bisecting the feature. One half of the feature is excavated in arbitrary levels to the bottom. This provides a profile within the feature for subsequent excavation by zones within the unexcavated half. Because of the poor definition involved with excavating the features, this second method of feature extraction was used.

Once a level or zone was excavated, the fill comprising this zone or level was water screened through 1/16" screen. Selected samples, usually from dark black, highly organic zones were floated. All material was not floated, since time would not permit such a lengthy treatment of feature material.

An observation on the features at Ch^{v}29 would seem appropriate at this point. The original tops of the features probably existed at one time on or near the top of the present day surface. Therefore, any where from 0.50' to 1.0' of the original feature had been disturbed by plowing activity. Sometimes the material in Level 2, directly over the feature, could be seen to be associated with the feature. In these instances it was possible to preserve information which otherwise would have been lost. Still a tremendous amount of information was lost because of the disturbance of the features, as can be seen by the amount of material extracted from the plowzone.

Feature 16. Feature 16 was a trash pit measuring 1.85' by 1.25' by 1.71' deep located in square 80R110. A dark black zone 0.2' deep constituted the top portion of the feature. This dark black zone contained a large number of Uwharrie potsherds, charcoal, bone fragments, daub, flakes, and ethnobotanical material. This dark black zone overlay dark

brown fill which comprised the rest of the feature. In this dark brown fill was found animal bone, flakes, charcoal, a portion of a deer mandible, Uwharrie and New Hope potsherds, and a single Uwharrie projectile point.

Feature 17. This feature, in 120R90, was initially thought to be a trash pit but turned out to be a burned tree stump. Various materials found in the very top of the feature in Levels 2A and 2B, one chipped stone drill, four small New Hope potsherds, and 109 flakes, were interpreted as being contained in slump from the plowzone which slipped into the stump when it was burned. The edges of the feature were very sharp, and the remnants of burned portions of the stump remained in situ, making positive identification very easy.

Feature 18. Feature 18 was located in the approximate center of 120R100. The dimensions of the feature were 1.22' by 1.00' by 1.20' deep. Four rather large rocks rested at the top of the feature clustered along the southern rim. Fill was of a light brown color and contained charcoal, flakes, and five pieces of daub. Feature 18 was probably a large posthole.

Feature 19. Feature 19 was rather amorphous and extremely difficult to follow. Located in the southern portion of 80R100, the basic shape was that of an elongated basin measuring 6.70' long, 4.85' wide, and 1.16' deep. Three hundred and seventy four flakes, 129 pieces of daub, two large chunks of charcoal, and a large quantity of miscellaneous charcoal were contained in the fill. The only diagnostic material recovered was

the broken base of a Uwharrie projectile point from the top of the feature, a Randolph point, one unidentified potsherd, and two small glass trade beads. The feature fill was only a slightly darker shade of light brown than the surrounding subsoil. The large amount of charcoal in the fill suggests that Feature 19 represented a fired area of some sort.

Feature 20. Feature 20 was situated in the southwest corner of square 90R80. The feature's dimensions were 1.0' by 0.65' by 1.08' deep. The feature fill was composed of a dark black lens 0.2' wide, overlying a dark brown/mottled black zone with a second zone of dark black fill originating 0.5' down and constituting the bottom portion of the feature. The two black zones contained most of the material recovered from the feature. Four New Hope potsherds, six flakes, one small white trade bead, a large amount of animal bone, and ethnobotanical remains, including two carbonized peach pits, were recovered. Feature 20 is thought to be a trash pit where remnants of at least two meals were deposited separately in the pit.

Feature 21. Feature 21 was an old tree stump situated in square 100R120.

Feature 22. This feature was an old tree stump which was located in Test Pit 1.

Feature 23. Feature 23, situated in square 100R90, measured 2.25' by 2.00' and was 1.25' deep. The pit fill consisted of a dark black/brown zone 0.2' thick, overlying a shallow mottled yellow zone 0.15' wide.

Under the mottled yellow zone was a dark black zone 0.90' thick. These three zones were surrounded on the sides by a dark brown ring varying from 0.25' to 0.5' thick. This feature had 20 rocks lining the bottom of the pit. Three large sherds, one Uwharrie and two Hillsborough, were lying on top of the rocks in the bottom of the pit. The presence of the rocks suggests that the feature could have initially been used for storage (or perhaps a fire?) before being used as a trash receptacle.

The dark black/brown, dark black, and dark brown zones contained large amounts of charcoal, ethnobotanical remains, flakes, 15 potsherds (four Uwharrie, three New Hope, and eight Hillsborough), animal bone, including the portion of a deer mandible, and a large quantity of daub. (See Appendix A for an analysis of the ethnobotanical remains from this feature and Feature 24).

Feature 24. Feature 24 was located in the approximate center of square 90R90. The feature measured 2.25' by 2.00' by 1.06' deep. The fill within the feature consisted of a dark brown zone about 0.30' thick, which overlays a light brown zone which constituted the bottom of the pit. Four sherds (two New Hope and two Uwharrie), the broken tip of an unidentifiable projectile point, flakes, animal bone, and charcoal were associated with the dark brown zone. The light brown zone contained less material of essentially the same kind except no potsherds or points were recovered. At a depth of 0.48', in the light brown zone, the shell of a box turtle was recovered. The inside of the shell had been scraped, indicating that it was probably used as a cup. A smooth polished stone was found in the upper portions of the feature.

Feature 25. This feature, situated in the northeast corner of square 90R90, is a cluster of five rocks in an area approximately 0.70' in diameter, extending approximately 0.40' into the subsoil. There was no disturbed soil lying underneath the rocks, and no cultural remains were found in association with this feature. Feature 25 appears to represent the remnants of a posthole, where the rocks served as a wedge and platform for support of the post.

Feature 26. This feature was an old tree stump located in Test Pit 5.

Feature 27. Feature 27 situated in square 110R90 was another old tree stump.

Feature 28. This feature lies in the southeast corner of square 120R110 and measures 1.35' by 1.20' by 1.07' deep. The fill was a homogenous brown color. Two Uwharrie sherds, some animal bone, flakes, and charcoal were recovered from the fill. Feature 28 is thought to be a large posthole.

Feature 29. Feature 29 was a stain in Level 2B, east of Feature 17. It was decided that the feature would be excavated to see if it had any relationship to Feature 17, or if it were a true feature in its own right. A chipped stone hoe, visible at the top of Level 2B, and the smeared condition of the sand, which resembled the surface appearance of many of the other features, were the reasons for designating this stain a feature. Excavation showed that the stain disappeared 0.10' below the top of Level 3. Within the stain fill was two Uwharrie potsherds, a portion of a broken stone platform pipe, 37 flakes, and charcoal, in

addition to the hoe. The exact nature of the feature is unknown although it may represent a portion of undisturbed midden.

Features 30 and 31. These two features were located in square 120R90, in Level 16, at a depth of 5.19'. Feature 30 appeared as a dark stain 0.90' by 0.50' by 0.51' deep. Feature 31, also a dark stain, was 1.1' by 0.55' by 0.29' deep. Both features were in the southwest quadrant of the square approximately two feet apart. As stated earlier, no material was found within the stain, and it appears that they represent only burned areas of sand.

Artifact Analysis

Over 8,000 specimens were recovered from the excavations at $Ch^{v}29$. The materials associated with the Late Developmental and Historic occupation of the site were most prominent. Although the greatest proportion of material came from the plowzone, it is felt that an excellent sample of the non-perishable material culture and ethnobotanical resources were obtained. Description of these remains follows.

Pottery

The 1974 dig recovered a total of 2,758 potsherds. Of these, 2,581 were used in analysis. The remaining 177 sherds were found in disturbed situations. The majority of the sherds recovered came from the plowzone and, as was expected, Late Developmental ceramics predominated although a trace of Early Developmental and some Historic pottery were also present. The still not so well known New Hope Series pottery was encountered in large quantity. Hopefully, new light can be shed on the New Hope ceramic series.

Badin Series (Plate II). Only nine of the 2,581 sherds analyzed could be classified as belonging to this series. Of these nine sherds, one came from the plowzone, and the remaining eight came from undisturbed excavated levels. Four of these eight potsherds (three net-impressed and one cord-marked) came from the deep test in 120R90. They were found at a depth of 1.37' to 1.97' below the surface. The other four sherds, all cord-marked, were found in Test Pit 2 at a depth of 1.70' to 2.10' below the surface. The sherds from Test Pit 2 were found in stratigraphic association with a single Badin projectile point.

Level	BADIN			UWHARRIE						TOTAL
	NET	CORD	TOTAL	NET	FABRIC	CORD	PLAIN	UNID.	TOTAL	
Plowzone	1		1	272	33	27	190	403	925	926
Level 2A				18		1	7	23	49	49
Level 2B				7		2	10	2	21	21
Level 3				1				2	3	3
Test Pit 1 Plowzone				1					1	1
Test Pit 1 1.65'-2.45'					1				1	1
Test Pit 2 Plowzone				1					1	1
Test Pit 2 1.70'-2.10'		4	4							4
Test Pit 3 Plowzone				5			1	2	8	8
Test Pit 3 Level 2				1			1		2	2
Test Pit 7 Plowzone				5			2	1	8	8
120R90 1.17'-1.57'		1	1	1					1	2
120R90 1.57'-1.97'	3		3							3
TOTALS	4	5	9	312	34	30	211	433	1020	1029

Table 1. Developmental Pottery Distribution, Excavated Area, Ch^{v}29

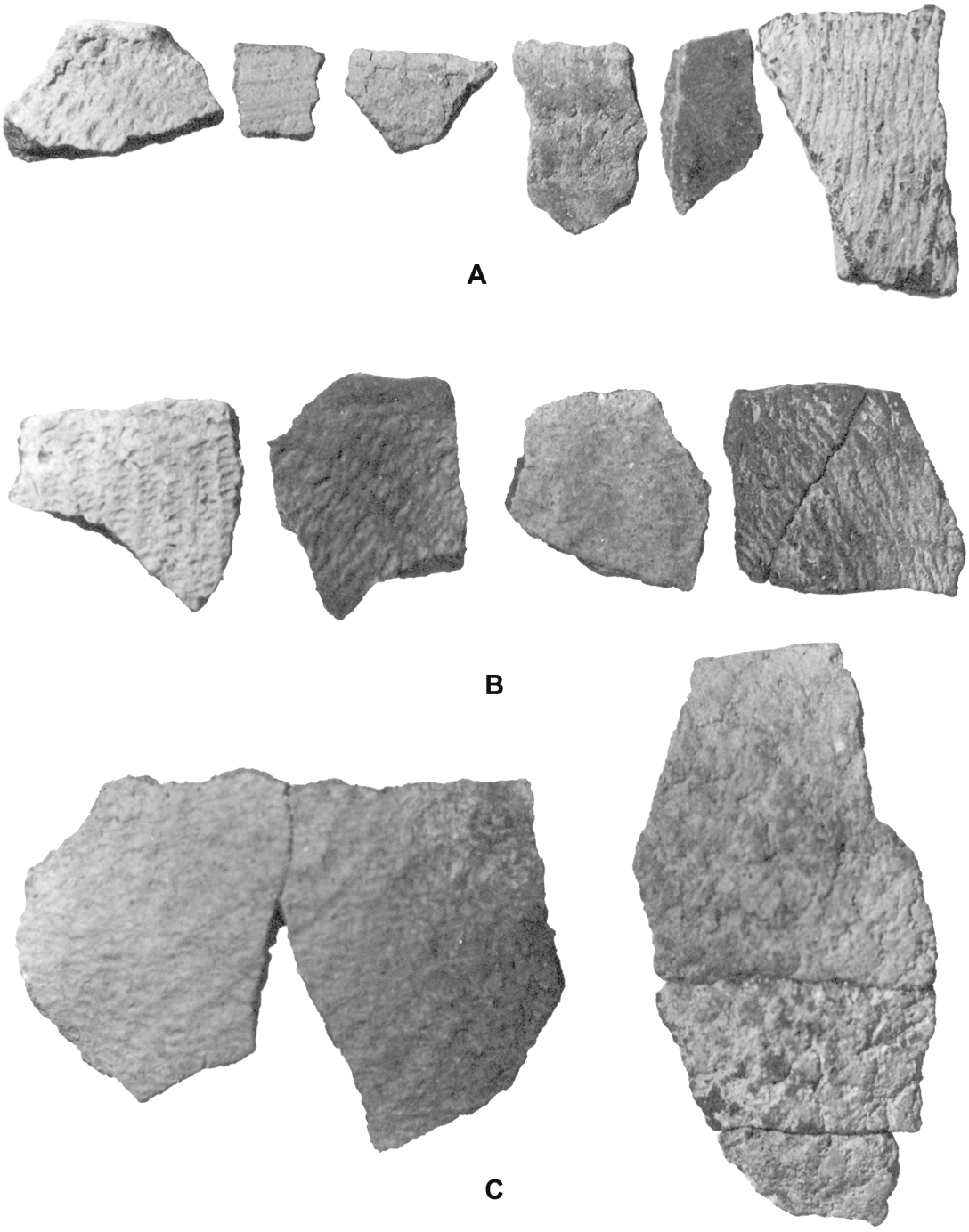


PLATE II. Hillsborough and Badin Pottery
Row A – Hillsborough. – Rims, Corncob Impressed, Plain, and Cord Marked
Row B – Hillsborough. – Fabric Impressed, Plain, Cord Marked
Row C – Badin. - Fabric Marked, Net Impressed Rim

Badin pottery, the oldest pottery of the Carolina Piedmont, was first defined by Coe in 1964. The paste was hard and compact with very fine sand comprising the temper. Color of the exterior surface of the vessels ranged from tan to a dark brown, with the interior of the approximate same color. Surface treatment consisted of marking the surface with a cord-wrapped paddle, a wicker-type fabric, or a net. Cord and fabric-marked surfaces were more common than the net. The interior surfaces were carefully smoothed. Characteristic vessels possessed straight and vertical rims with a globular bowl or jar-shaped body which ended in a semi-conical base.

Uwharrie Series (Plate III). Uwharrie pottery was widespread over the Carolina Piedmont during the Late Developmental times. It is the ceramic type out of which the later historic ceramics of the region developed (Coe, 1952:307). One thousand and 63 sherds or 41% of the pottery collection could be typed as Uwharrie (see Table 1). Uwharrie pottery is a highly friable ware because of the high percentage of crushed quartz which was used as temper in the paste. The basic vessel shape was either of a hemispherical bowl or a jar with a conoidal base and a slightly constricted neck and a short vertical rim. Interior surfaces were scraped with a serrated tool. Exterior surfaces were cord-marked, fabric-marked and net-impressed. Incising the rim with parallel lines was also common.

By far the largest portion of the identifiable Uwharrie sherds recovered were net-impressed. Three hundred and thirty nine or 32% of the Uwharrie type sherds were net-impressed. A good portion of these

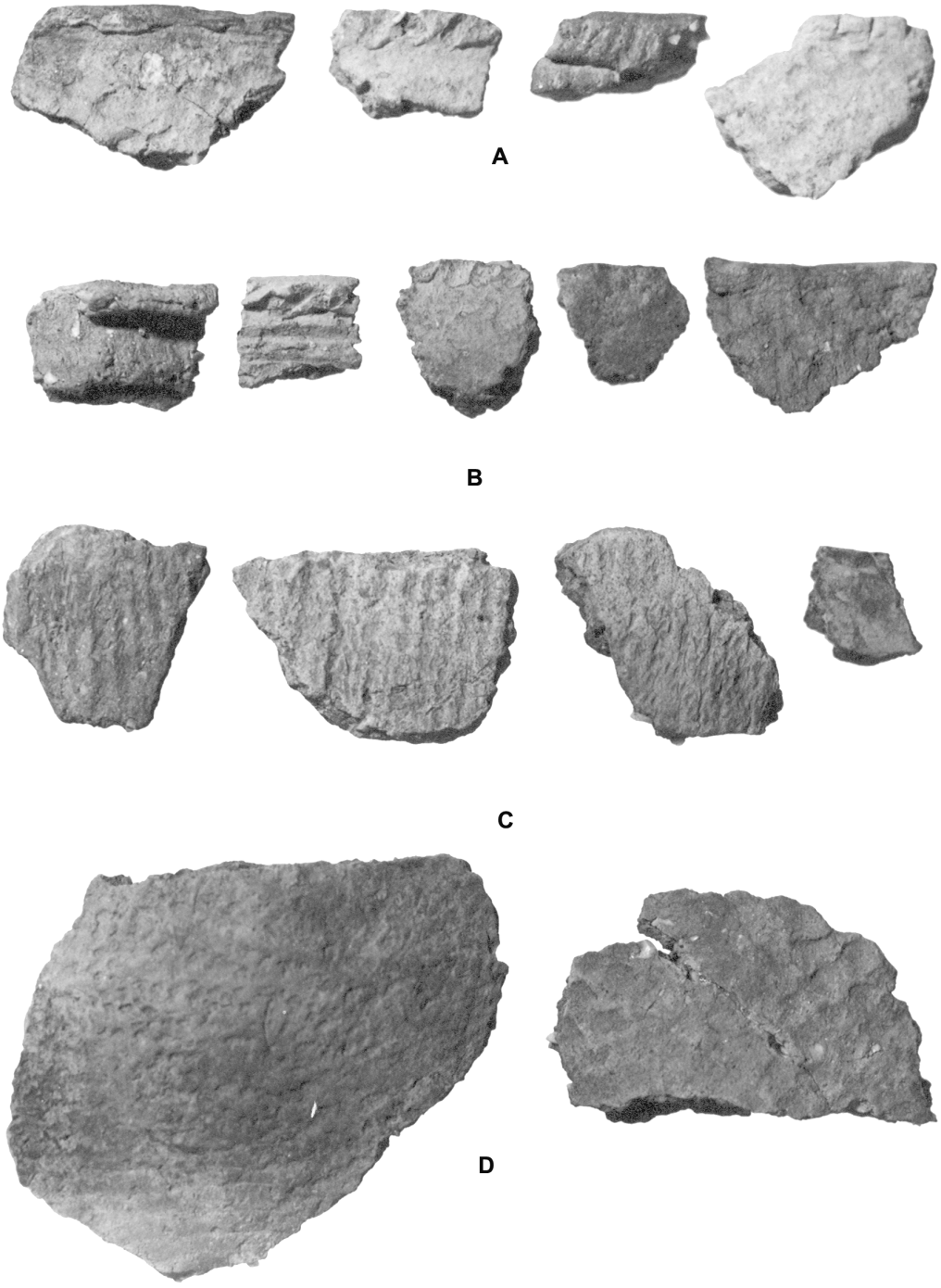


PLATE III, Uwharrie Pottery, Ch^{v}29

Row A – Rims
Row B – Rims (Incised Sherd Second from Left)
Row C – Cord Marked, Plain Sherd at Right End of Row
Row D – Net Impressed

net-impressed sherds had been stamped with a crumpled piece of netting (Plate III, Row 4). Fabric and cord-marked sherds numbered only 40 (4%), and 34 (3%) respectively. This reflects the same trend that McCormick noted from the 1969 excavations (1970:88-89), i.e. that the major portion of the Uwharrie sherds recovered were net-impressed. Two hundred and eleven sherds were typed as plain, with the awareness that some of these sherds were probably from undecorated portions of impressed or marked vessels. It goes without saying that a goodly portion of the plain sherds could just as well have been placed in the unidentified category. The unidentified numbered 433 sherds, or 41% of the Uwharrie type sherds.

According to the ceramic evidence, the Uwharrie occupation at $Ch^{v}29$ was probably towards the end of Late Developmental times. The evidence of a very small quantity, 3, of what are tentatively described as simple stamped sherds, should be noted. McCormick found a single Uwharrie check-stamped sherd (1960:81). The presence of these two surface designs, and the rather large number of plain sherds would argue for a late Late Developmental occupation at $Ch^{v}29$.

New Hope Series (Plate XV). New Hope pottery was first defined by Gerald Smith in his 1964 survey of the New Hope Reservoir (1965:108-118). Finely crushed feldspar with a mixture of fine sand comprised the temper of the ware. The colors of both the interiors and exteriors range from a light grey-brown through dull orange to a red-orange. The basic shape was the concoidal based jar. Rims were slightly everted and sometimes had a narrow fold. Surface treatment included cord and fabric-marking of the exteriors, as well as net-impressing. The majority of the sherds, however, were plain.

New Hope sherds accounted for 1,281 or 50% of the potsherds used in analysis. Of these 1,281, 1,096 (86%) were typed as plain. Eight of the sherds showed evidence of having been brushed, 56 (4%) showed evidence of cord-marking, 26 (2%) evidenced fabric-marking, and 26 (2%) were net-impressed. One sherd was tentatively typed as corncob-impressed. Only 68 or 5% of the New Hope sherds could not be identified as to their surface decoration.

There is a general feeling, expressed by both Smith (1964:109) and McCormick (1970:80, 84-85), that New Hope Pottery represents a Middle Developmental ceramic group. This is based primarily upon the supposed gradual replacement of the use of sand temper of Early Developmental pottery by crushed feldspar which in turn was replaced by crushed quartz. Similarities with Clements and Roanoke pottery from the northern Piedmont area have been noted but not explained. It would seem that assigning New Hope Series pottery to the Middle Developmental period may have been a bit hasty.

The placement of New Hope pottery at the end of the Late Developmental period appears to be a viable alternative to the one previously set forth. Stylistic reasons provide one piece of evidence to support this. McCormick noted the presence of a single New Hope simple stamped sherd (1970:80). Simple stamping did not appear in the Piedmont until very late. The large preponderance of plain ware within the New Hope Series is unusual if it is a Middle Developmental ceramic. Plain wares were not widespread in Developmental times, and only became popular at the end of the Late Developmental, the Climatic, and Historic periods. It should also be noted that the crushed

Level	NEW HOPE						TOTAL
	NET	FABRIC	CORD	BRUSH	PLAIN	UNID.	
Plowzone	24	9	9	5	913	52	1012
Level 2A	2	3	4		66	3	78
Level 2B		7	19	2	33	4	65
Level 3		1	3	1	5		10
Test Pit 1 Plowzone					6	1	7
Test Pit 1 1.65'-2.45'		1	5		1	3	10
Test Pit 2 Plowzone					5		5
Test Pit 2 1.70'-2.10'			2		3		5
Test Pit 3 Plowzone		1				1	2
Test Pit 3 Level 2					1		1
Test Pit 4 Plowzone						1	1
Test Pit 7 Plowzone		3			47		50
Test Pit 7 Level 2					3		3
120R90 1.17'-1.57'		1	5				6
120R90 1.57'-2.37'			2		3	1	6
TOTAL	26	26	49	8	1086	66	1261

Table 2. Distribution of New Hope Pottery, Excavated Areas, $Ch^{V}29$

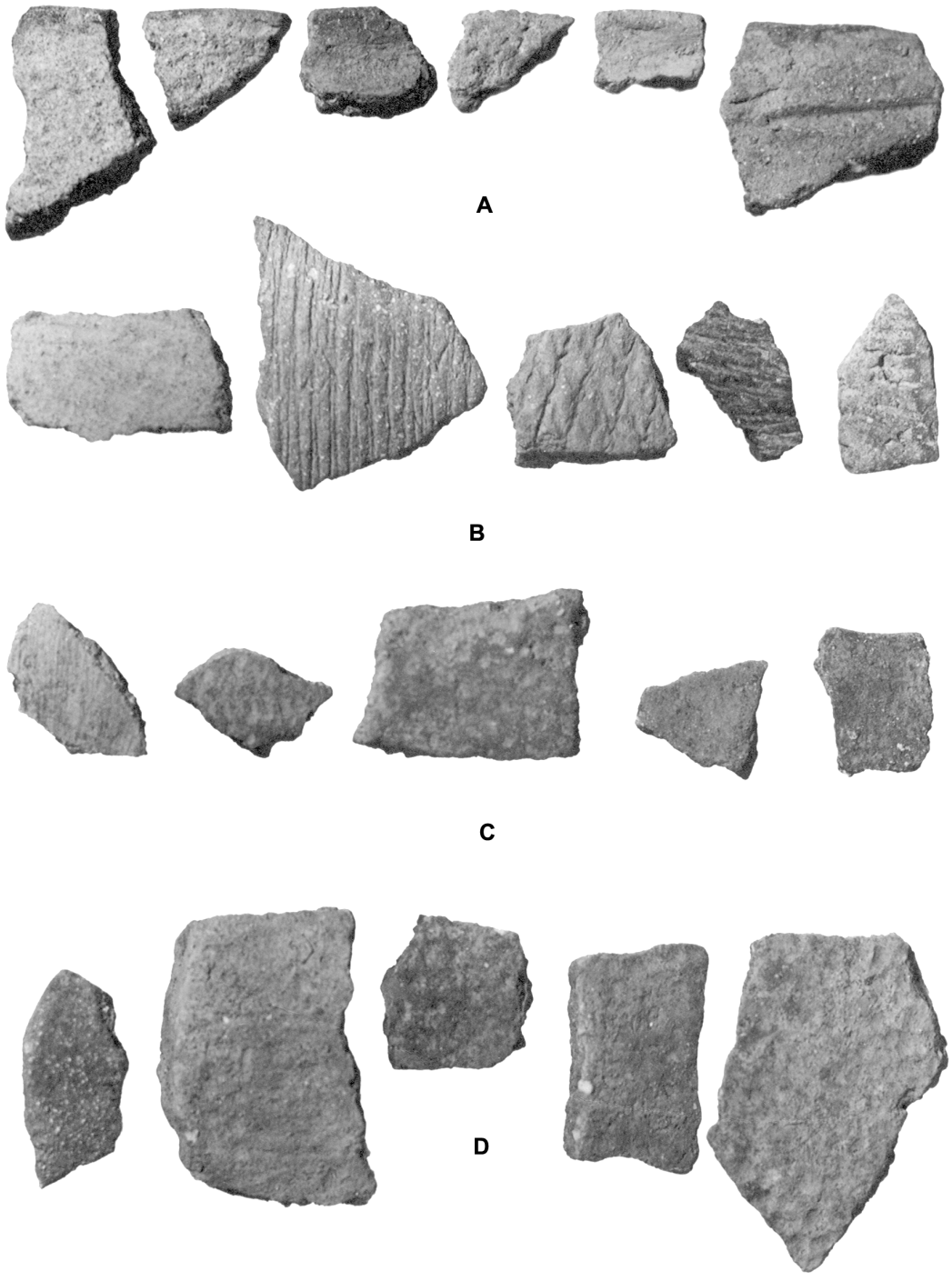


PLATE IV. New Hope Pottery, Ch^{v}29

Row A – Rims
Row B – Cord Marked, Corncob Impressed Sherd at Right End of Row
Row C – Plain, Brushed Sherd at Left End of Row
Row D – Net Impressed

feldspar temper of New Hope pottery gives it a sugary appearance in some of the sherds. A sugary appearance is also a characteristic of Pee Dee pottery (Coe, 1964:33). One last bit of evidence, albeit negative, is the lack of any Middle Developmental cultural debris which can be associated with the New Hope pottery. This is especially noticeable when Middle Developmental projectile points are looked for. None were recovered, in either the 1969 or 1974 excavations at $Ch^{v}29$.

It is admitted that the evidence for assigning the New Hope pottery to the terminal Late Developmental is not absolute either. The stylistic similarity of the majority of the plain ware in both the New Hope and other Historic ceramics, such as Hillsborough, is noticeable. The single occurrence of a New Hope Simple Stamped sherd is a second piece of evidence. It should also be noted that one sherd does not make a pot. The temper used in New Hope pottery, crushed feldspar, is of particular interest. In a change from crushed quartz to fine sand temper, crushed feldspar could represent a transitional form. The crushed feldspar would be acceptable to a people used to crushing their temper. The end product would be much thinner than previous pottery, and more closely resemble the historic ceramics. For all this, it has to be admitted that the question of the temporal placement of New Hope pottery cannot be solved until the pottery is found in a stratigraphic context. This would require the finding of New Hope pottery in stratigraphic association with either Middle Developmental or Late Developmental/Historic materials.

Hillsborough Series (Plate II). Hillsborough pottery is the historic ceramic associated with the Siouan Occaneechi Indians of 1700 (Coe, 1952:311). Fine sand was used as temper in their pottery. Exterior surface treatment consisted of rolling with corncobs, simple and check stamping, and occasionally the traditional cord-marking and net-impressing. The rims were folded and the lips notched as the conoidal jar was being replaced by a cazuela bowl. Incised and punctate decorations were prominent. Plain ware came to comprise a larger portion of the surface treatment.

As noted, plain sherds predominate in the 225 Hillsborough potsherds recovered or nine percent of the total sample used in analysis. One hundred and twenty four of the 225 sherds (55%) were typed as plain. Small amounts only of net, brush, and simple stamped sherds were found. One corncob-impressed sherd was found in the plowzone.

Ceramically speaking, the Historic component at $Ch^{Y}29$ is not very extensive. It is possible that the items of Hillsborough manufacturer represent trade items. This cannot be actually demonstrated to be the case, but it is within the realm of possibilities.

Projectile Points

Over 6,000 lithic specimens were recovered from the 1974 excavation. Of this total, approximately 5,800 pieces consisted of flakes and raw material. Diagnostic lithic artifacts comprised over 200 specimens and consisted of projectile points, bifaces, used flakes, hoes, and hammerstones.

Level	HILLSBOROUGH							
	NET	FABRIC	CORD	BRUSH	CORNCOB	PLAIN	UNID.	TOTAL
Plowzone	17	13	8	11	2	112	39	202
Level 2A	1					6	1	8
Level 2B		3	2		5			10
Level 3							1	1
Test Pit 1 Plowzone						1		1
Test Pit 7 Plowzone						2		2
Test Pit 7 Level 2						1		1
TOTAL	18	16	10	11	7	122	41	225

Table 3. Hillsborough Pottery Distribution, Excavated Areas, $Ch^{V}29$

Pottery		FEATURE 16	FEATURE 19	FEATURE 20	FEATURE 21	FEATURE 23	FEATURE 24	FEATURE 28	FEATURE 29	TOTAL
UWHARRIE	Net	23				2	1	2		28
	Cord	4					1		1	6
	Plain	3							1	4
	Unid.	2				3				5
	Total	32				5	2	2	2	43
NEW HOPE	Cord		1		5	1				7
	Plain	2		3	1	1	2			9
	Unid.	2		1		1				4
	Total	4	1	4	6	3	2			20
HILLSBORO	Fabric					8				8
	Cord							2		2
	Plain					2				
	Total					10		2		12
	TOTAL	36	1	4	6	18	4	4	2	75

Table 4. Pottery Distribution, Features Ch^{V}29

The projectile point collection at $Ch^{v}29$ is represented by 92 points. Table 3 shows the distribution of the points by excavated provenience. The majority of the projectile points, 62 or 67%, were from the plowzone. This figure is in keeping with the tendency for most of the material to be contained within the plowzone.

The projectile points from the 1974 excavation evidenced the occupation of $Ch^{v}29$ and the surrounding area since late Paleo-Indian times. The majority of the projectile points clustered, however, at Early Archaic, Late Archaic, Early Developmental, Late Developmental, and Historic times.

Hardaway-Dalton (Plate V). The Paleo-Indian tradition was represented by a single Hardaway point. This point falls within the range of variation of the Hardaway-Dalton variety as defined by Coe (1964:64-66). The Hardaway-Dalton possessed a broad, thin blade with deeply concave bases and shallow side notches. The bases and side notches were ground. The method of manufacture of the point consisted of the removal, by direct percussion, of broad, shallow flakes that extended to the center of the blade. The edges were finely retouched, and the grinding of the bases and side notches was thorough.

This single Hardaway-Dalton was found in Level 2B of square 120R90. It is probable that the point was re-deposited at this location during the Late Developmental or Historic occupation of the site. The specimen, which has the tip broken, measures 38 mm. in length, with an estimated length of 48 mm. The width of the point is 26 mm. and the notches are 10 mm. The measurements on the point place is just outside those given

Level or Feature	HARDAWAY	KIRK	SAVANNAH RIVER	BADIN	UWHARRIE	HILLSBOROUGH	RANDOLPH	UNIDENT.	TOTAL
Plowzone		1		3	31	13	1	13	62
Level 2A			1		1	1			3
Level 2B	1			1	2	1	1		6
Level 3								3	3
120R90 1.97'-2.42'			2						2
120R90 2.64'-4.99'		6						2	8
Test Pit 1 2.05'-2.85'				2			1		3
Test Pit 2 1.90'-2.10'				1					1
Feature 16					1				1
Feature 19					1				1
Feature 24								1	1
TOTAL	1	7	3	7	36	15	3	19	91

Table 5. Projectile Point Distribution, $Ch^{v}29$

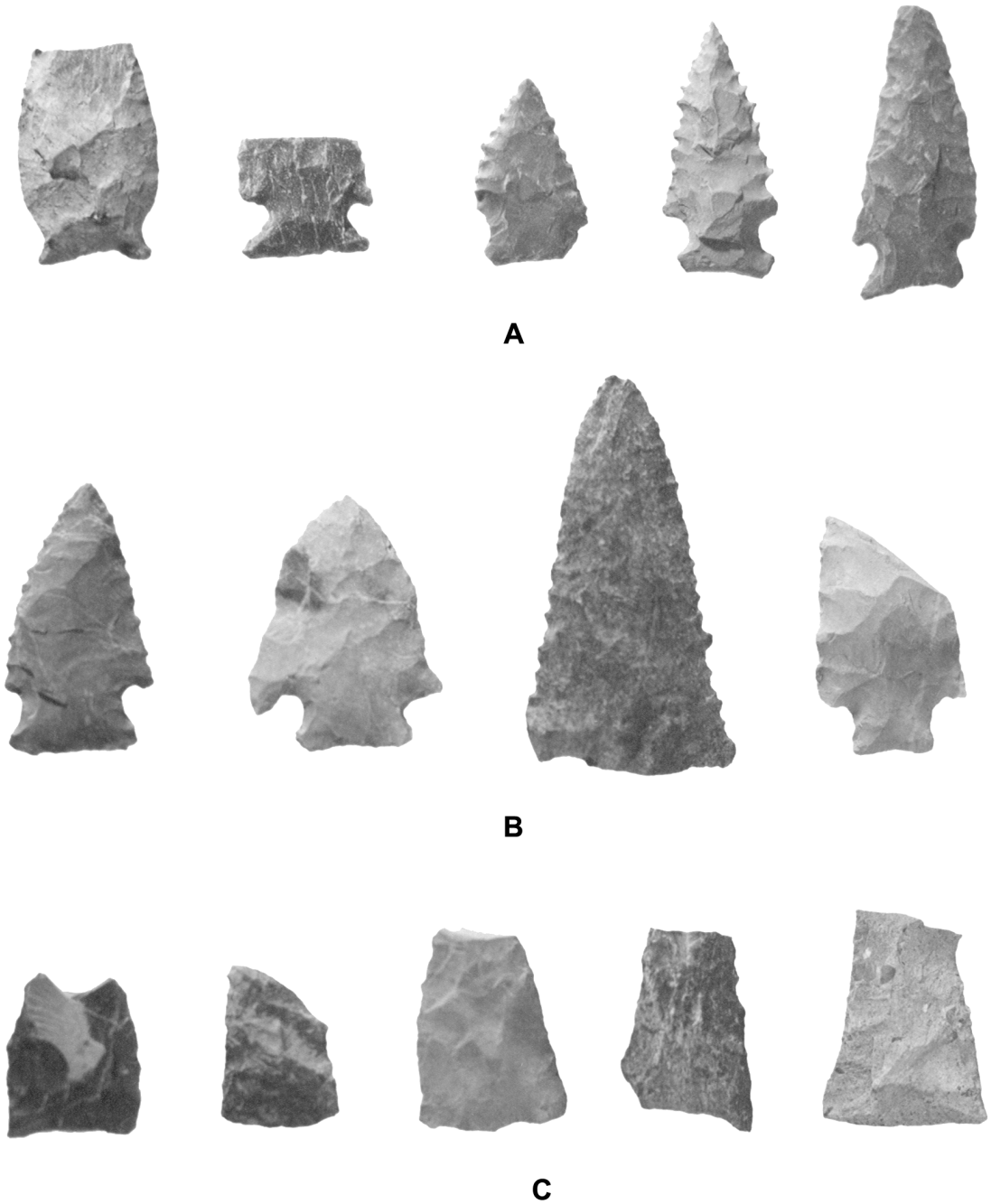


PLATE V. Paleo-Indian, Archaic and Early Developmental Chipped Stone Projectile Points, Ch^{v}29
Row A – Hardaway (Left End of Row); Kirk
Row B – Kirk; Savannah River (Right End of Row)
Row C - Badin

for the Hardaway-Dalton by Coe. It is felt, however, that the technique of manufacture used to turn out the point, the flaking, notching, and ground surfaces justifies the specimen's inclusion within the type Hardaway-Dalton.

Kirk Corner-Notched (Plate V). Kirk points represent the next cultural assemblage to make use of the sand levee at $Ch^{v}29$. Seven points of this type were found, one from the plowzone of Test Pit 7, and six from the stratified excavations in 120R90 where they were found at a depth of 2.64' to 4.99' below the surface. Coe defined three varieties of Kirk projectile points (1964:69-70). Six of the seven specimens appear to belong to the variety Kirk Corner-Notched. The seventh (end of Row A, Plate V) could possibly be a Kirk Stemmed point, but because its base is broken, positive identification as to variety is tenuous at best.

The Kirk projectile point basically has a large triangular blade with a straight base, corner notches and serrated edges. The base was usually not ground. The blade was produced by removal of broad, shallow percussion flakes. This was followed by the shaping of the edges by pressure flaking and the final addition of the serrations. Measurements ranged from 35 mm. to 74 mm. for the length, between 20 mm. and 38 mm. for the width, and from 4 mm. to 8 mm. for the thickness.

Savannah River (Plate V). The 1974 excavations recovered three Savannah River points. One of these points was from Level 2A and the other two from the deep test in 120R90 at a depth of 1.97' to 2.42'. All the specimens were broken with only the bases remaining.

The basic Savannah River point has a large, heavy, relatively thin triangular blade and a broad stem (ibid.:44-45). The sides are somewhat rounded, although they are frequently parallel for one third to one half the length of the blade. The points were made almost entirely by percussion flaking.

Badin Crude Triangular (Plate VI). Seven projectile points possessed attributes which allowed them to be classified as Badin points. No previous evidence of an Early Developmental use of $Ch^{v}29$ had been discovered by either Smith or McCormick. Three points came from the Plowzone, one from Level 2B, two from Test Pit 1 at a depth of 2.05' to 2.85', and one came from Test Pit 2 at a depth of 1.90' to 2.10'. The point from Test Pit 2 was associated with four Badin potsherds. Three of the Badin points illustrated in Plate VI are from Test Pits 1 and 2. Coe described the Badin point as a large, crudely made triangular point (1964:45). Direct percussion flaking was used to produce the point, and they were not retouched or finished by any secondary chipping. Large, broad and shallow flake scars are characteristic. The five specimens illustrated all had their tips broken. Length estimates on these Badin points range from 40 mm. to 50 mm. The width varies between 25 mm. and 30 mm. with the thickness lying between 6 mm. and 9 mm.

Uwharrie Triangular (Plate VI). Thirty-six Uwharrie points or 39% of the total number of projectile points recovered are representative of the Late Developmental cultural assemblage at $Ch^{v}29$. Thirty one of these Uwharrie points came from the Plowzone, one from Level 2A, two from Level 2B, and one each from Features 16 and 19.

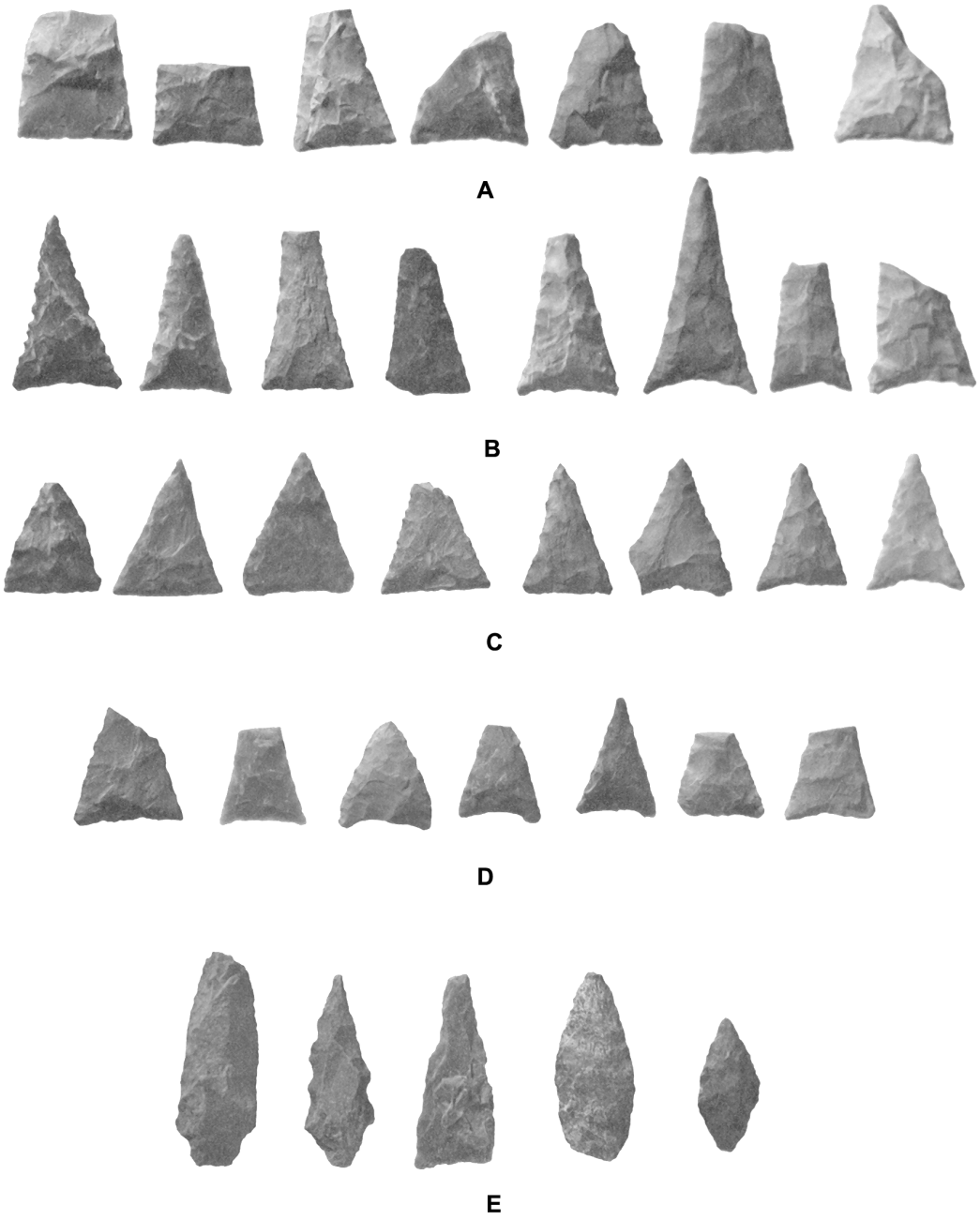


PLATE VI. Developmental and Historic Projectile Points, Ch^{v}29
Row A - Uwharrie
Row B - Uwharrie
Row C - Hillsborough
Row D - Hillsborough
Row E - Randolph

Uwharrie points are in the form of a long, narrow isosceles triangle with straight to slightly concave sides (Coe, 1952:308; Smith, 1964: 102-104). The point is bi-convex in cross section and the base is straight to slightly concave. The length of the point varies between 33 and 65 mm., the width between 20 and 28 mm., and the thickness between 4 and 7 mm. Pressure flaking was the only flaking technique used in their manufacture.

Hillsborough Triangular (Plate VI). Fifteen projectile points, which could be typed as historic Hillsborough points, were excavated. Thirteen of these came from the Plowzone, and there was one each from Levels 2A and 2B. Hillsborough points are small equilateral triangular points which are seldom over 15 mm. in length (Coe, 1952:311).

Randolph Stemmed (Plate VI). A total of five Randolph projectile points were found at $Ch^{v}29$. Two came from the Plowzone, and one each came from the Level 2B, Test Pit 1 at a depth between 2.15' and 2.25', and from Feature 19. Randolph points are indicative of the general degeneration of the aboriginal cultures in the middle and late 1700's because of continued contact with the white man (Coe, 1964:50). The points are narrow and thick with a roughly tapered stem. Chipping was exceedingly rough and crude with the flakes being irregular and poorly controlled.

Other Miscellaneous Artifacts

Bifaces. The biface category encompasses a wide range of lithic materials produced by the Indians. Quarry blades, preforms, core remnants, and bifacially chipped flakes are but some of the specimen

types within the category. Fifty four bifaces were recovered during the course of the excavations. Table 6 shows the distribution of the bifaces and all of the other miscellaneous artifacts.

Of these 54 bifaces, 16 were classed as quarry blades. These are the preforms out of which the finished scrapers and projectile points were made. Quarry blades, as such, exhibit only the crudest of flaking, as they were rapidly produced at a site foreign to $Ch^{v}29$. The quarry blade represents the reduction of a large piece of rock to a size easy to carry and work with. Eight of the 16 quarry blades came from 120R90 deep test below Level 3.

On a different plane, indicative of a little more sedentary occupation of the levee, are core remnants. Core remnants are the debitage associated with spent cores, and amounted to 11 in number. Associated with these were 20 flakes, which were apparently bifacially chipped, at least superficially. There were seven specimens which neither comfortably fit as core specimens or flakes and as a consequence, were termed miscellaneous bifacially flaked lithic specimens.

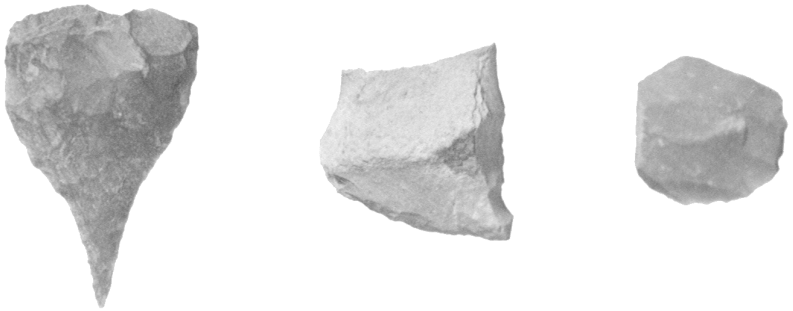
Used Flakes, Scrapers, Drills. Upon examination of the over 5,800 flakes from the excavated materials, 13 were judged to show evidence of having been retouched along one or several edges. Four of these 13 used flakes came from 120R90, at a depth of 2.97' to 4.99'.

Two scrapers (Plate VII) were recovered; one from the plowzone, and the other from 120R90 at a depth of 4.80'. One is a broken side scraper. The other, from 120R90 deep test, is a "thumbnail scraper". This type scraper is nothing more than a small flake, chipped carefully around three sides, which can comfortably be held by the thumb and forefinger for work.

Level or Feature	BIFACES	USED FLAKES	SCRAPERS	HAMMERSTONES	HOES	CLAY PIPE FRAGS.	KAOLIN PIPE FRAGS.	STONE PIPE FRAGS.	GUNFLINTS	GLASS BEADS
Plowzone	29	7	1	4	3	4	5		6	
Level 2A	1									2
Level 2B	2			1		1				
Level 3	5									
120R90 2.97'-4.99'	12	4	1	2						
Test Pit 1 1.85'-5.25'	3	1								
Test Pit 2 1.70'-1.90'	1									
Feature 16		1								
Feature 17	1		1*							
Feature 19										2
Feature 20										1
Feature 21										1
Feature 23										2
Feature 29					1			1		
80R110 P.H. #4						2				
TOTAL	54	13	3*	6	4	7	5	1	6	8

Table 6. Miscellaneous Artifact Distribution, Ch^{v}29

A



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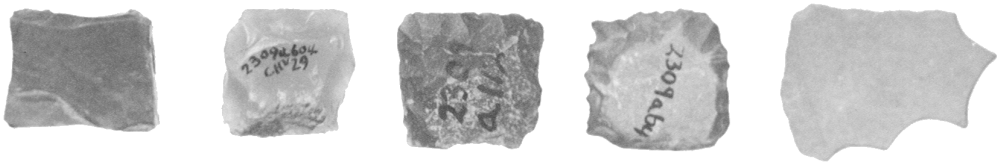

C

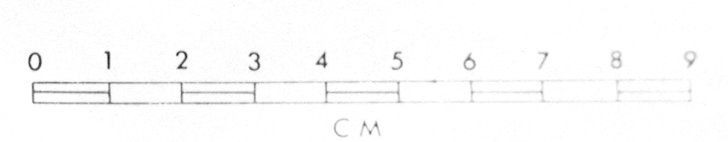

PLATE VII. Miscellaneous Worked Stone Artifacts, Ch^{v}29

Row A – Uwharrie Stone Pipe Fragment
Row B – Drill and Two Scrapers
Row C – Gun Flints; Worked Slate (Right End of Row)

Only a single specimen of a chipped stone drill (Plate VII) was found. It comes from the slump over Feature 17, a burnt tree stump, in Level 2B. The drill is roughly tear drop shaped, tapering sharply from a bloated body into the point.

Hammerstones. Six hammerstones were located within the 1974 excavations. Four were from the plowzone and two were from 120R90 deep test. Two general types were recovered. One is a more or less circular cobble pitted over its entire surface. One each of this type was found from the plowzone and 120R90. The others belong to the group of elongated or oblong cobbles or rocks which show patterns of pitting along interfaces of the rock or cobble. In such specimens, various portions of the cortex remain undisturbed as they provide no edge for striking. The remaining four hammerstones were of this type.

Hoes. Hoes from $Ch^{v}29$ were represented by four specimens (Plate VIII). Three were from the plowzone and one was associated with Feature 29 (bottom row, Plate VIII). These hoes are roughly triangular shaped, with the slightly rounded bit ends showing evidence of soil polishing. These hoes measure around 70 mm. in width and 120 mm. to 200 mm. in length. All four specimens were bifacially flaked from large chunks of slate. It was impossible to associate the stone hoes with any cultural assemblage due to the disturbed nature of their context.

Pipe Fragments. Seven clay and five European kaolin trade pipe fragments were recovered in the course of the excavations. The collection was fragmentary, and did not permit the description of the form of the pipes.

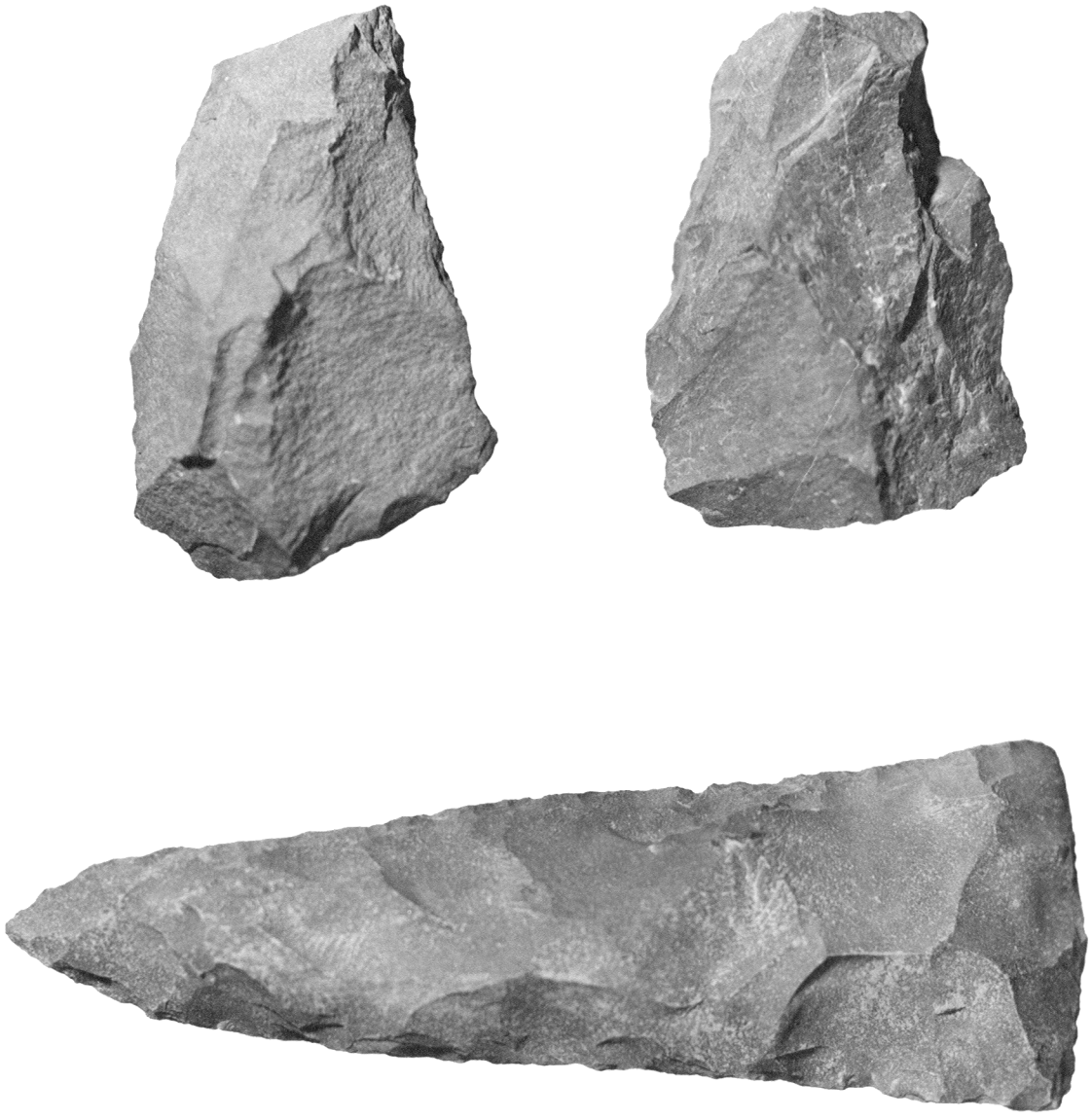

PLATE VIII. Stone Hoes, Ch^{v}29

Of more interest, was the discovery of a single stone pipe fragment associated with Feature 29 (Plate VII). The fragment was a broken portion of the platform of a Uwharrie winged-platform pipe. Such pipes usually possessed a bowl at the end of the stem, inclined at an angle of between 30 and 40 degrees (Coe, 1952:308). This particular pipe fragment had a series of V-shaped indentions carved on the top of the platform, either parallel or perpendicular to the edge of the pipe. The underside of the pipe fragment showed a series of cross-hatched triangles arrayed parallel to the edge of the pipe. Miscellaneous markings were also present on the mouth piece portion and along the opposite edge of the pipe.

Gunflints. The presence of gunflints at $Ch^{v}29$ is not surprising as the site possesses a Historic occupation which could date as late as 1800. This latter date is based on the presence of the Randolph projectile point. Plate VII shows four of the six gunflints recovered. The one on the extreme left is thought to be an unaltered primary gunflint flake. This flake would be of local manufacture by an Indian or white knapper who made use of a domestic chert, imported from outside North Carolina. The second gunflint pictured appears to be French made, if its honey color is to be used as the basic criterion of analysis (Woodward, 1960:35). T. M. Hamilton reports that French type gunflints were most common on Indian, French, and English sites up until 1750 (1960:74). Apparently, French flints were used by the English instead of their own flints until the above mentioned date. Thus, the most common gunflint available for trade would probably be of French manufacture. The last two gunflints in Plate VII, Row A, do not present this sort of "origin" problem as they

were locally made. The distinctive feature of these Indian gunflints is the preparation of all four sides of the piece for possible use. These gunflints were made of local materials.

Glass Trade Beads. Trade beads are usually found in large quantities on Historic Indian sites, because they constituted a large portion of the trade between Indians and whites. A total of only nine trade beads were found during the 1974 excavations. Seven of these nine, including three from Level 2A, are the so called small white "seed beads". These seed beads are seldom over 1 or 2 mm. in diameter and 1 mm. in width. One of the two remaining beads from Feature 21 was a red bead with a diameter of 7 mm. and a width of 5 mm. The other bead, associated with Feature 23, is a smaller version of the first red bead. The second's measurements are about half those of the first's with the second's diameter being 3 mm. and its width 2 mm.

Summary, Ch^{v}29

The intermittent use or occupation of the sand levee at Ch^{v}29 since Early Archaic times has been demonstrated. Five cultural assemblages have been defined which have existed at Ch^{v}29 since approximately 6000 B.C. It is not known why gaps occur in the record of the occupation for the levee except that such evidence could exist on unexcavated portion of the levee.

In addition to the five known cultural assemblages, there exists tantalizing tid-bits of evidence of cultural complexes earlier than the Early Archaic. In Test Pit 1, flakes and other debitage was found to the bottom of the pit, a depth of 5.7' below the surface. The deep test in 120R90 produced flakes and other material below the Early Archaic artifacts recovered. The one Hardaway-Dalton point found in Level 2B confirms that Paleo-Indians were at least in the vicinity of Ch^{v}29. It may be that cultural assemblages earlier than Kirk may be present, but outside the limited area excavated.

A more perplexing problem is the concern over the temporal placement and cultural associations of the New Hope Pottery Series. It was initially hoped that additional light could be shed on this basic question, because previously held ideas can no longer be accepted without question. The gap in the cultural sequence at Ch^{v}29 between Early Developmental and Late Developmental times is most noticeable. The assigning of the New Hope pottery to this gap would be taxonomically convenient, but at this point, unwarranted because solid evidence does not exist upon which to base such a judgment. The alternative proposed in this report concerning the possible Late Developmental-Historic

associations of New Hope pottery is also largely based on style. The only conclusion which can be drawn is that more work needs to be done on the question of New Hope pottery and its associations before any definitive statement can be made.

Kirk Occupation

The Early Archaic Kirk occupation would appear to have been rather heavy. Six Kirk Corner-Notched projectile points came from 120R90 deep test at a depth of 2.64' to 4.97' below the surface. No features were associated with the Kirk or any of the Archaic occupations. Kirk has been accurately dated to around 7000 B.C. Since the Kirk Corner-Notched points are the earliest forms of Kirk projectile points, it would seem that the Kirk occupation would date to sometime before 7000 B.C.

Savannah River Occupation

No evidence for use of the levee is found following the Early Archaic until the Late Archaic Savannah River period. This cultural assemblage was represented by two projectile points recovered from the 120R90 deep test at a depth of 1.97' to 2.42'. A large amount of chipping debris was associated with these points. This could indicate that the Savannah River use of $Ch^{v}29$ was probably more substantial than the mere presence of only two points implies. The exact duration of the Savannah River occupation at $Ch^{v}29$ is not known, however, Savannah River materials elsewhere in the Carolina Piedmont date from approximately 3000 B.C. to 500 B.C.

Badin Occupation

The discovery of Badin materials was surprising and rewarding. The small amount of Early Developmental material found was scattered over a large portion of the levee. No features or structural remains were found so the Badin occupation at $Ch^{v}29$ remains poorly defined. In the Carolina Piedmont, Badin dates from 0 A.D. to A.D. 500.

Uwharrie Occupation

The heaviest concentration of cultural remains at $Ch^{v}29$ is associated with the Uwharrie complex which is the first definable cultural assemblage following the Badin occupation. Extensive use of the levee by Uwharrie peoples is indicated by the amount of potsherds, projectile points, and miscellaneous cultural items, such as the broken stone pipe, and stone hoes. These people were agriculturalists who still made extensive use of the natural environment. The many features and postholes which exist at the site attests to the increased sedentary way of life. No house structures could be defined, but elsewhere they are described as small circular houses with small central fireplaces (Coe, 1952:307). Uwharrie dates from A.D. 1200 to 1500.

Hillsborough Occupation

The Hillsborough occupation at $Ch^{v}29$ is poorly represented. Trade beads, Hillsborough pottery and projectile points are associated with this historic use of the levee. It is possible that these items represent trade between the historic Occaneechi Indians of Hillsborough and an unidentified group of Indians living on the Haw.

The aboriginal use of Ch^{v}29 does not cease with the end of the Hillsborough presence. Late historic period Randolph projectile points dating to the late 1700's were found on the site. This represents the last gasp of aboriginal culture in Piedmont North Carolina before its final extermination by 1800.

III. EXCAVATIONS, Ch^{v}33a

The 1969 excavations at Ch^{v}33a consisted of a single 51 square test pit. Early and Middle Archaic materials were found in a buried context. The diagnostics consisted of a Guilford point located at a depth between 1.20' and 1.40' below the surface, and a Kirk point and drill below 2.00' (McCormick, 1970:47-49). Follow-up excavations were conducted to observe the stratigraphic relationships of the cultural materials and the extent of the occupation at the site.

Five 5' square test pits were dug in excavations subsequent to McCormick's. The original test pit dug in 1969 was extended into an L-shaped trench. This trench was formed by taking out two test pits (Test Pits 2 and 3) adjacent to and south of the original and a single test pit (Test Pit 4) going towards the east at the end. Two additional test pits were dug to give the total of five, with one (Test Pit 5) 50 feet south and five feet east of McCormick's original pit. The last square, Test Pit 6, was located 50 feet north and five feet east of the 1969 test.

The basic stratigraphy found by McCormick of plowzone overlying a light brown sandy clay zone, which topped in turn an orange-tan-red clay, was confirmed in Test Pits 2, 3, and 4. Test Pits 5 and 6 were found to possess only plowzone over the orange-tan-red clay zone. Plowzone averaged between 0.60 and 0.75 feet in depth. The light-brown sandy clay zone ranged between 0.30 and 0.70 feet in depth. The water table seems to have risen since 1969. McCormick encountered the water table 3.20 feet below the surface (ibid:49). In Test Pits 2, 3, and 4

the water table was encountered between 2.00' and 2.50'. This rise in water table can be attributed to the completed state of the New Hope Dam and to recent heavy rains in the New Hope area.

Material recovered from the five pits consisted of 81 flakes, 13 pieces of raw material, three bifaces, one hammerstone, one expended core, and one Yadkin projectile point. The three bifaces, one core, Yadkin point, and about half of the flakes were associated with the light-brown-sandy clay zone. The top 0.4' of the orange-tan-red clay zone produced flakes and the one hammerstone. No hearths were encountered in the excavations nor were any other aboriginal disturbances found which could be indicative of extended site occupation.

The stratigraphy of the site and the associations of the recovered material at $Ch^{v}33a$ can be interpreted in the following manner. The original use of the site is marked by the presence of flakes (and the Kirk point and drill found in 1969) associated with the top of the orange-tan-red clay. This use was seemingly not intensive or for very long. Erosion from the ridge, at whose base the site lay, accounted for most of the soil and materials associated with the subsequent light-brown-sandy clay zone.

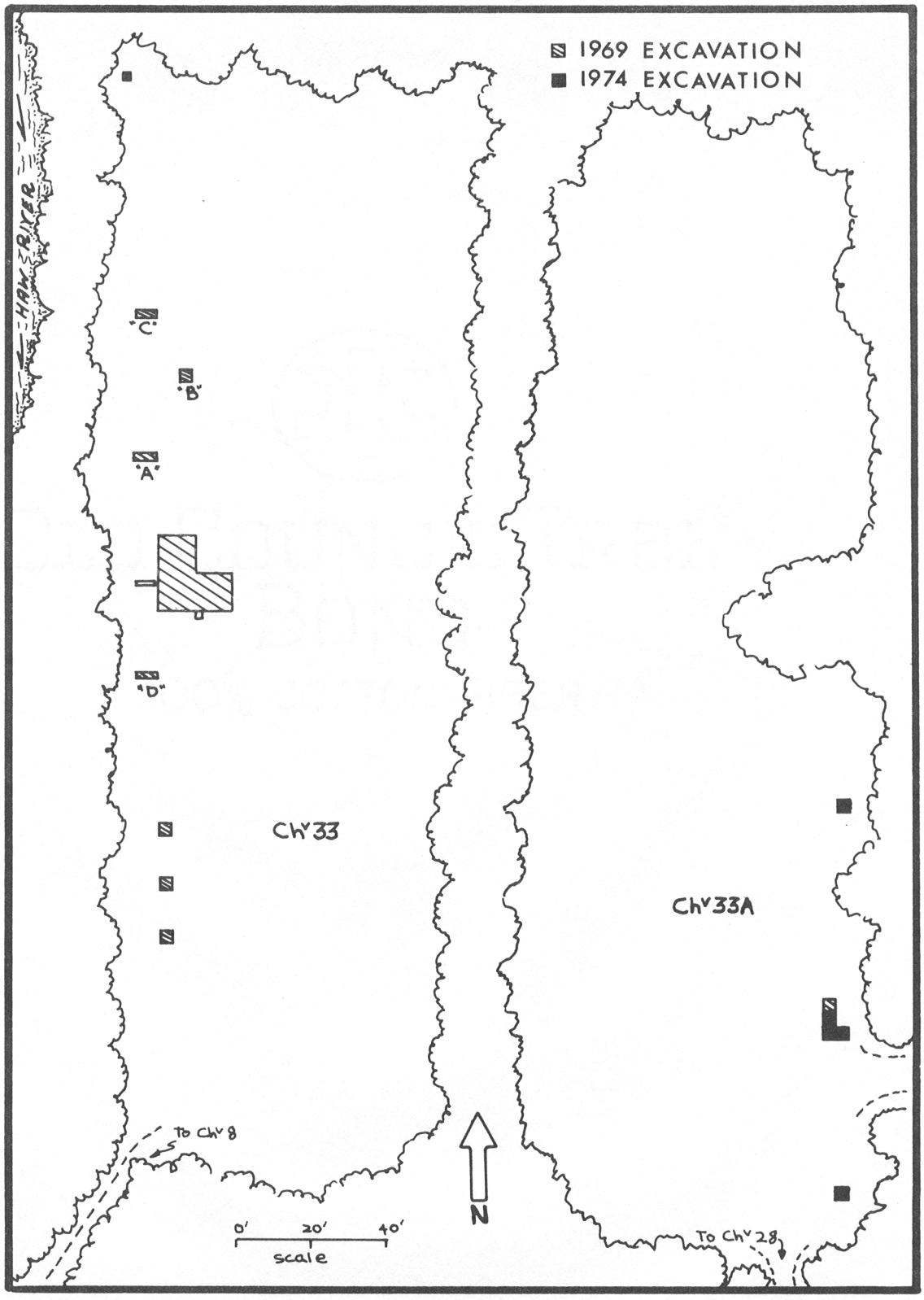

Figure 5. 1974 Excavations at Ch^{v}33a

IV. EXCAVATIONS AT Chv159

The original surface survey identified materials of the Paleo-Indian through Middle Archaic periods at Ch^{v}159 (McCormick, 1970:37-39). However, the one test pit dug there in 1969 yielded no diagnostic materials (ibid:39). Further excavations were undertaken at the site to determine if any buried midden or undisturbed portions of the original site remained. Excavation here would also hopefully lead to the recovery of diagnostics which could be identified with the Paleo-Indian component of the site.

Three test pits, in addition to McCormick's original one, were placed over the site. Test Pit 2 was placed in the approximate center of the site, with Test Pit 3 put in 120 feet to the south. The last test pit, Test Pit 4, was located 50 feet south and 50 feet east of Test Pit 3. Test Pits 3 and 4 were placed in what was supposedly the area of highest concentration of Paleo-Indian artifacts recovered in the surface collection by McCormick.

Stratigraphy consisted of a red-brown mottled clay plowzone, and red clay subsoil. Plowzone averaged 0.60' in depth in Test Pit 2, 0.30' in Test Pit 3, and 0.40' in Test Pit 4.

Materials recovered consisted of 69 flakes, 13 pieces of raw material, three used flakes, one biface, one hammerstone, and one Kirk Corner-Notched projectile point, all from the plowzone. One flake and one piece of raw material were found pressed into the top of the red clay subsoil in Test Pit 3.

The material found at Ch^{v}159 lies entirely within a disturbed matrix, the plowzone. There does not appear to be any buried components at the site. The delimited area of the site, overgrown in McCormick's time, has since grown up in pine. It was only with the greatest of difficulty that access to the site was obtained with the aid of a four-wheel drive vehicle. In the 100 square-foot area excavated to date, only one diagnostic artifact, the Kirk Corner-Notched projectile point, has been located. It is felt that additional stripping the plowzone from the site would require excessive time, labor, and money.

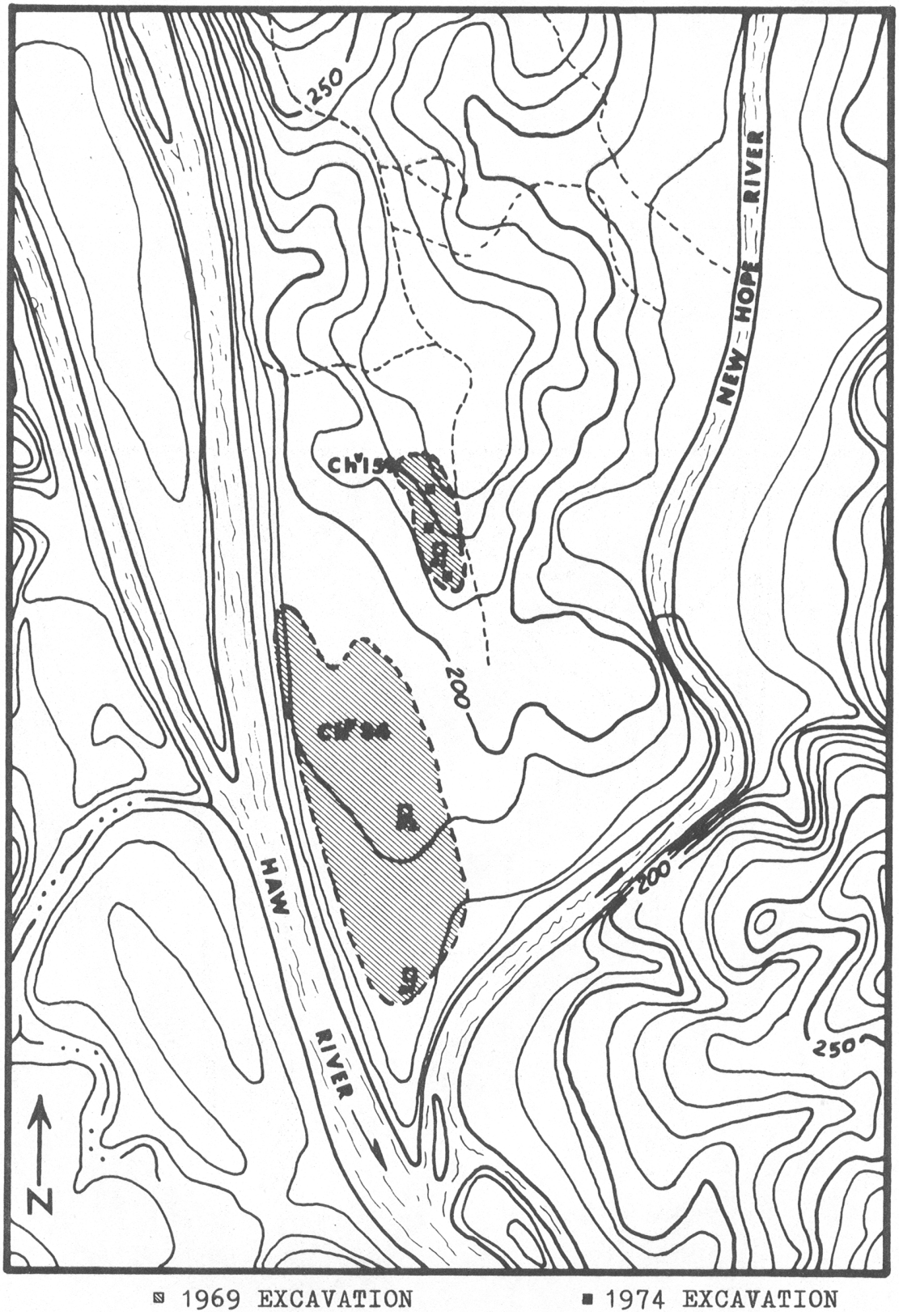

Figure 6. Excavations at Ch^{v}159, 1974

V. EXCAVATIONS AT Ch^{v}231

The 1969 excavations at Ch^{v}231 consisted of two 51 square test pits. In addition to these two, three new 51 pits were dug when excavations were renewed at the site. Test 3 was an extension to the west of McCormick's Test 1. Test 4 was located 30' east of McCormick's Test Pit 2, and Test Pit 5 was 30' south of Test Pit 2.

The site lies along a sandy rise on a meander loop of the New Hope River. The basic stratigraphy consists of a dark black humus layer approximately 0.4' thick overlying an old plowzone. The old plowzone consists of mottled tan-white sand and measures 0.3' in depth. Tan sand underlies the old plowzone and is 0.6' deep. Mottled tan-sand-and-orange clay, measuring 0.4', is covered by the tan-sand zone. Orange clay forms the basal portion of the stratigraphic column. This basic stratigraphy holds true for Test Pits 1 and 2 (McCormick's test pits), and for Test Pits 3 and 5. Test Pit 4 showed what appeared to be the edge of the sandy portion of the rise. Here the tan-sand zone fades into the mottled tan-sand-orange-clay zone.

Seventy four flakes, four bifaces, one used flake, and one broken Morrow Mountain II point were recovered from the excavations. These materials were restricted to the plowzone and upper 0.2' of the tan sand. The majority of the artifacts, including the projectile point, came from the tan sand. No large rocks, or hearth areas were discovered in the course of digging.

Ch^{v}231 is a single component site, evidencing short term usage. Neither midden nor humus buildup occurred. This lack of buildup could be because of the light use of the site by the Middle Archaic peoples and/or constant flooding by the New Hope River.

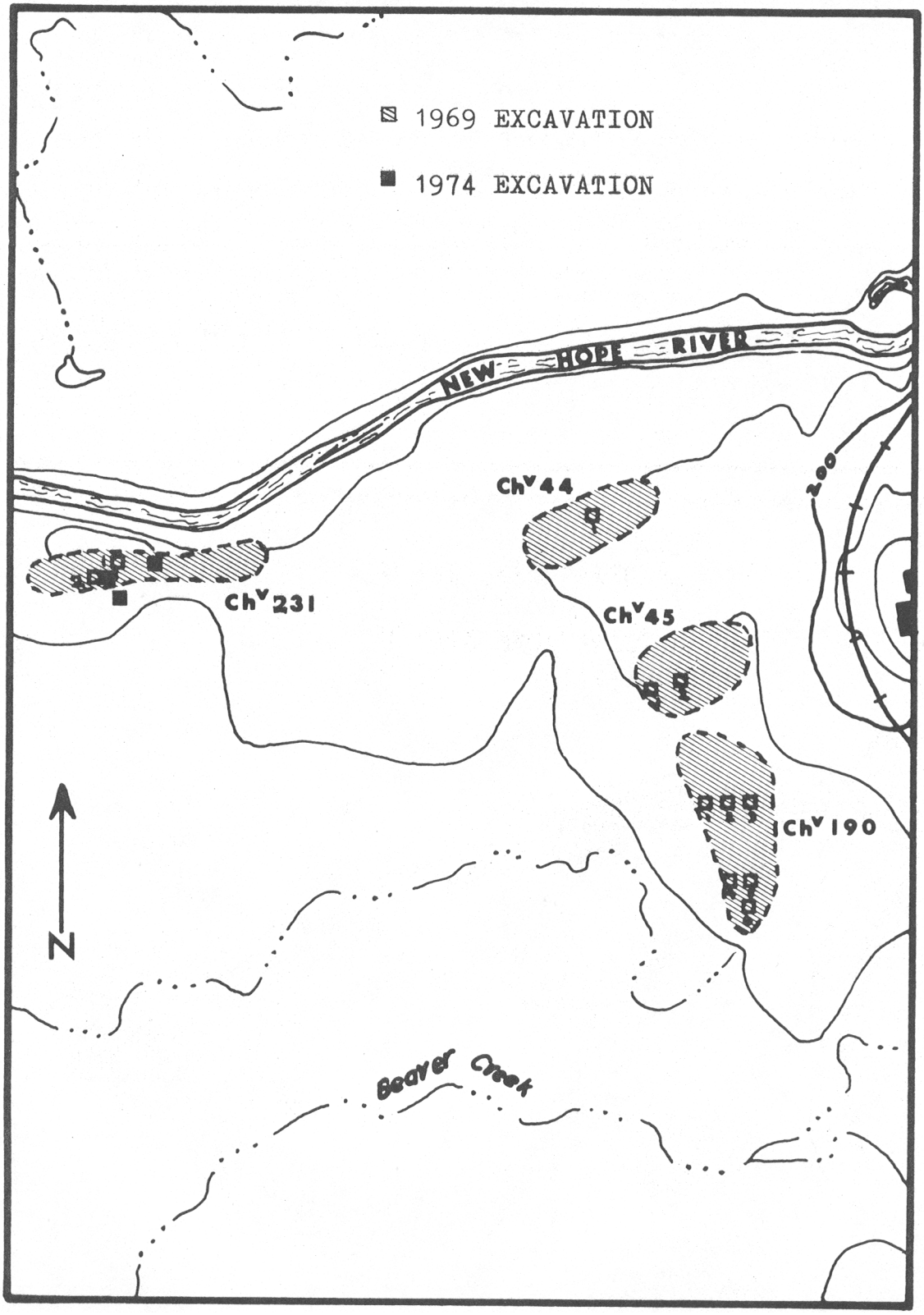

Figure 7. Ch^{v}231, 1974 Excavations

VI. SUMMARY AND CONCLUSIONS

The New Hope Reservoir contained evidence of aboriginal occupation and usage dating from Paleo-Indian up to Historic times. $Ch^{v}159$, which contained the only evidence of Paleo-Indian Hardaway occupation, is located near slate outcroppings. This slate served as raw material for the manufacture of tools by Paleo-Indian through Middle Archaic peoples. Located on high ground at the confluence of the New Hope and Haw Rivers, $Ch^{v}159$ afforded an excellent camp site for people moving along the rivers in search of game. Attesting to the continuous movement involved in hunting and gathering societies, the sandy levee's at $Ch^{v}29$ and $Ch^{v}231$, and the ridge-base camp at $Ch^{v}33a$, all produced evidence of Archaic occupation. Early and Late Archaic peoples chose $Ch^{v}29$ as a camping place. $Ch^{v}33a$ was used in Early and Middle Archaic times. Evidence of a Middle Archaic occupation was found at $Ch^{v}231$. It is true that almost any area which could be considered a good camp spot for hunting and gathering was used by peoples of the Archaic Period.

Developmental times saw a drop in the usage of the New Hope Reservoir area by aboriginal populations. A small trace of Early Developmental materials was found at the sand levee of $Ch^{v}29$. It would seem that the area was largely abandoned during Middle Developmental times. Not until the appearance of the Late Developmental Uwharrie culture is there any evidence of the aboriginals considering the area palatable once again for living. Proof of agriculture is lacking with only the presence of Uwharrie-type stone hoes at $Ch^{v}29$ suggesting the possibility. Ethnobotanical analysis showed no evidence

for agriculture. It could be said that the New Hope Reservoir area, lacking in broad floodplains and abundant in swampy, flood-prone areas or hilly sections, could not be exploited profitably by aboriginal agriculturalists. $Ch^{v}29$ lies on a relatively large sandy levee, which could have been cultivated by peoples with a Late Developmental culture, but only on a limited scale. Otherwise, no other area within the reservoir would have supported Developmental cultures. The levee at $Ch^{v}29$ apparently saw only limited use, as evidenced by the sparse nature of archaeological remains recovered. The New Hope Reservoir area was culturally, marginal to other areas of the Carolina Piedmont in terms of usage by Developmental and Historic peoples.

APPENDIX A

Ethnobotanical Analysis of Selected Remains from Two Features at Ch^{v}291

The charred remains from two features were submitted for ethnobotanical analysis. The two features selected were numbers 23 and 24. Feature 23 showed a mixture of pottery, with Uwharrie, New Hope, and Hillsborough sherds being represented. Animal bone, including a portion of a deer mandible, was recovered, along with a large amount of daub. Feature 24 contained New Hope and Uwharrie ceramics, a box-turtle shell which had had its inside scraped and pieces of animal bone. Both features were dug out in the same manner. Half the feature was excavated in arbitrary units, the other half dug by natural levels. The remains used in this analysis come only from the half of the feature dug in natural levels.

The analysis followed methods and guidelines developed by Dr. Richard A. Yarnell. Wire mesh screens of varying sizes was used to separate the sample into parts, greatly facilitating the quantification of each sample. The fraction of the sample obtained above the 2 mm. graded screen was entirely sorted through. The remainder of the sample below the 2 mm. screen was checked for carbonized seeds and other botanical remains. The following four tables show the results obtained during this analysis.

Table 1 shows the composition of the fraction obtained from the screens above the 2 mm. screen and the relative percent of each component of the fraction.

[1]A very large thanks is due Don H. Keith, a Graduate Student in Archaeology at UNC, who performed the actual analysis of the remains from Feature 24, and Dr. Richard A. Yarnell, Ethnobotanist at the Research Laboratories of Anthropology at UNC, who kindly assisted in the identification of the remains. Feature 23 materials were analyzed by the author.

The "Unidentified" category listed in the first three tables consists of charred materials which could not be specifically identified. Table 2 gives the composition by weight of the total sample, assuming that the relative proportion of the components found in the sample above the 2 mm. screen is uniform throughout the entire sample. Table 3 shows the amounts of plant remains found by weight and percent. Table 4 considers just the plant food remains by weight and relative percent.

As Table 3 states, the recognizable plant remains consisted only of wood charcoal, hickory nut, and acorn. Pine was easily identified as being one constituent of the charcoal remains from both features. The other woods found in the charcoal component were not identified. Hickory nuts and acorn were the plant foods identified from the two features with hickory nuts forming by far the largest portion of the plant foods recovered. In addition, although not listed in the table, one carbonized maypops (Passiflora incarnata) seed was recovered from Feature 24.

Of more immediate interest is the nature of the plant food remains. Ch^{v}29 has been identified as having been located within the boundaries of an oak-hickory-pine forest. Analysis showed that the products of all three trees were being exploited by the aboriginal inhabitants. Surprisingly, however, no botanical evidence for agriculture was recovered. The late date for the habitation of the site, as evidenced by the presence of historic Hillsborough potsherds, would seem to imply that agriculture was also present. The practice of agriculture might also be inferred by the recovery of stone hoes in the excavation at Ch^{v}29. Unfortunately, no botanical evidence of agriculture was recovered from the samples taken from these two features or elsewhere on the site.

Category	Feature 23		Feature 24	
	Weight[1]	Percent	Weight	Percent
Stone	9.59	14.24	6.44	21.36
Flakes	4.21	6.25	2.11	7.00
Burnt Clay	45.85	68.09	12.90	42.79
Bone	1.25	1.86	.66	2.19
Charcoal	4.67	6.93	7.58	25.14
Hickory Nut	0.94	1.40	0.41	1.36
Acorn	0.03	0.04	0.01	0.03
Unidentified	0.80	1.19	0.04	0.13
TOTAL	67.34	100.00	30.15	100.00

Table 1. Material from Screens Larger than 2 mm. in Grade

Category	Feature 23	Feature 24
Stone	13.16	14.53
Flakes	5.78	4.76
Burnt Clay	62.93	29.10
Bone	1.72	1.49
Charcoal	6.40	17.10
Hickory Nut	1.29	0.93
Acorn	0.04	0.02
Unidentified	1.10	0.09
TOTAL	92.42	68.02

Table 2. Components of Total Sample by weight

[1]All weights in Tables 1-4 are in grams.

Category	Feature 23		Feature 24	
	Weight	Percent	Weight	Percent
Charcoal	4.67	72.51	7.58	94.28
Hickory Nut	.94	14.60	0.41	5.10
Acorn	0.03	0.47	0.01	0.12
Unidentified	0.80	12.42	0.04	0.50
TOTAL	6.44	100.00	8.04	100.00

Table 3. Charred Plant Remains
by Weight and Percent

Category	Feature 23		Feature 24	
	Weight	Percent	Weight	Percent
Hickory Nut	0.94	96.91	0.41	97.62
Acorn	0.03	3.09	0.01	2.38
TOTAL	0.97	100.00	0.42	100.00

Table 4. Charred Plant Food Remains
by Weight and Percent

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