Archaeological Investigations at the GF-104 (P. Gilmore) Site

By: Joseph B. Mountjoy

Joseph B. Mountjoy (1978) Archaeological Investigations at the GF-104 (P. Gilmore) Site. North Carolina Archaeological Council Publication, No. 7, pp. 1-61. North Carolina Dept. of Cultural Resources. Raleigh, N. Carolina.

Made available courtesy of North Carolina Department of Cultural Resources: http://www.ncdcr.gov/

Article:

Preface

This report is based on research conducted during the summer of 1973, supported by the Department of Anthropology and the Summer School of the University of North Carolina at Greensboro. It has been prepared because it is believed that the results of archaeological investigations conducted in the State should be documented and deposited in appropriate archives where the information can be preserved and consulted by professional colleagues. It is in that spirit that the manuscript has been prepared, and therefore it is primarily a description of the research conducted and the data collected. Analysis continues at present, and it is hoped that results can be presented more fully at some future date.

We are grateful to the University of North Carolina at Greensboro for supporting this research and teaching endeavor, and want to especially thank Prof. Herbert Wells (Director of the Summer School), Prof. Robert Miller (Dean of the College of Arts and Sciences), and Prof. Harriet Kupferer (Head of the Department of Anthropology). We also wish to acknowledge the helpful council of Prof. Joffre Coe (Director of the Research Laboratories of Anthropology at UNC-Chapel Hill) and thank Mr. and Mrs Paul Gilmore for allowing us to excavate on their land.

The students who took part in the summer work were: Gayle Hill, Janis Johnston, Rebecca Mears, Robert Padgett, Ruby Rufty, and Hal Wright. They conducted individual research projects respectively on soil chemistry, ceramics, flora, geology and stone tool technology, ethnography, and fauna. Much of the following report is due to their efforts.

INTRODUCTION

Our investigations during the summer of 1973 took place in a period of nine weeks, from May 14th through July 15th. However, prior to that time, in the spring, we took several trips to investigate sites which were called to our attention by students or local landowners. We took every occasion available to visit any site without regard to geographical proximity, in order to learn as much as possible about sites in North Carolina prior to the commencement of our summer work. During the summer, we continued to visit sites which were brought to our attention, and inspected certain areas in which we anticipated that sites might be located. This resulted in the location and study of eighteen sites, of which the GF-104 (P. Gilmore) site was one. All sites inspected were reported on State Survey forms and sent to the Research Laboratories of Anthropology in Chapel Hill. Relevant information included a sketch map of the site location and a summary of the artifacts found.. All artifacts recovered have been washed, labeled,catalogued, and classified, and are storedin the archaeology laboratory at UNC-Greensboro.

The reasons for selecting GF-104 for more intensive investigation through systematic surface sampling and excavation were various. Not the least of these was convenience, the site being 16.5 miles from the University.

This allowed us to live in Greensboro and make use of the laboratory facilities there while commuting out to the site daily. On the other hand, we were intrigued by the sample of artifacts which we had recovered in a'general surface collection from the site on April 14th, and the artifacts in the private collection of Mr. Paul Gilmore. Projectile points included Palmer Corner-Notched, Kirk Serrated, Morrow Mountain I Stemmed, Guilford. Lanceolate, Savannah River Stemmed, and. Randolph Stemmed (Table 2), whereas pottery sherds included Yadkin Fabric Marked, Pee Dee Complicated. Stamped, and. Caraway Simple Stamped (Table 2). Such a variety of cultural phases represented in the collections seemed to indicate 8,000 or more years of utilization of this site area by diverse cultural groups. This was especially interesting due to the rather unimpressive location of the site—near the headwaters of the Northern Prong Stinking Quarter Creek. Nothing about this location seemed to suggest why it should be an attraction for different groups of people over such a long period of time. This basic question, then, became the focus for our investigations at the GF-104 site.

A few words must be said here about the process of cataloging and classifying the artifacts recovered. At the outset of the work, we purchased several copies of The Formative Cultures of the Carolina Piedmont (Coe 1964) which we cut up and reassembled into two classification "key" books which could be used in the laboratory or taken into the field. Thus we used that basic reference for all of our classification. Likewise, we perused the Coe monograph to assemble a list of all the different sorts of artifacts which we were likely to find, and added a few items to the list to complete our catalog sheets. Both the catalog and classification are presented in following tables. Such utilization of a basic reference work has many potential pitfalls, but we hope we have not done to great an injustice to Coe's system.

DESCRIPTION OF THE GF-104 SITE

The GF-104 site is located near the town of Julian in the southeastern corner of Guilford County, just north of the Guilford County-Randolph County line, about 1,100 feet east of the juncture of routes 421 and 62 (Fig. 1). The habitation area is found primarily on a terrace and hillside within the 725' to 750' contour interval (Figs. 2-4), on the north side of the North Prong Stinking Quarter Creek, about 45' from the creek at the nearest point. The habitation area encompasses approximately four acres (16,125 square meters), situated within four cultivated fields. The southernmost of these fields is owned by the Gilmore Plant and Bulb Company and farmed by Paul D. Gilmore, and the other three are owned by Andrew L. Blackard. A fifth field, farmed by Noah Hester, was sampled but appears to fall outside the effective site area. The fields were numbered 1 through 5 (Fig. 3).

Field #2 was cleared from what was considered to be virgin timber, about 25 years ago, using a bulldozer. Field #1 was cleared by hand out of pine. When field #5 was cleared, Mr. Hester is supposed to have found pottery there, but neither Mr. Gilmore or Mr. Blackard have found sherds or projectile points there. Mr. Gilmore and his son have collected artifacts from this site for the last 15 years, and Mr. Blackard and his son have collected artifacts here for the past five years or so. The Gilmores have a collection of 689 projectile points from the site, mostly Randolph Stemmed and Savannah River Stemmed, but also including Guilford Lanceolate, Morrow Mountain II Stemmed, Hälifax Side- Notched, Yadkin Large Triangular, Caraway Triangular, Palmer CornerNotched, Kirk Stemmed, Kirk Corner-Notched, Morrow Mountain I Stemmed, Badin Crude Triangular, Pee Dee Pentagonal, and Stanley Stemmed. Other stonework includes quarry blades, drills, fragments of steatite bowls, a hafted broad end-scraper, a chipped stone axe, and a large flat steatite bead (?). Their collection of artifacts contains, in addition, 451 pottery sherds. Most of those classifiable are apparently Yadkin Fabric-Marked, with some Vincent Fabric-Marked or Cord- Marked, Badin Cord4larked or Fabric4.1arked, and Clements Cord-Marked. The Blackards have about 100 projectile points from the site, plus some sherds, fragments of lug-handled steatite vessels, and part of what seems to be a steatite pipe stem or tubular bead. They also have what is apparently a flat disk-shaped two-hole silver pendant. Both Mr. Gilmore and Mr. Blackard offered the observation that the larger projectile points tend to be found up toward the top of the hill in field #1, and the small points down close to the creek on the small knoll of field #3. The steatite is found, according to them, mostly in the southeastern part of field #2.

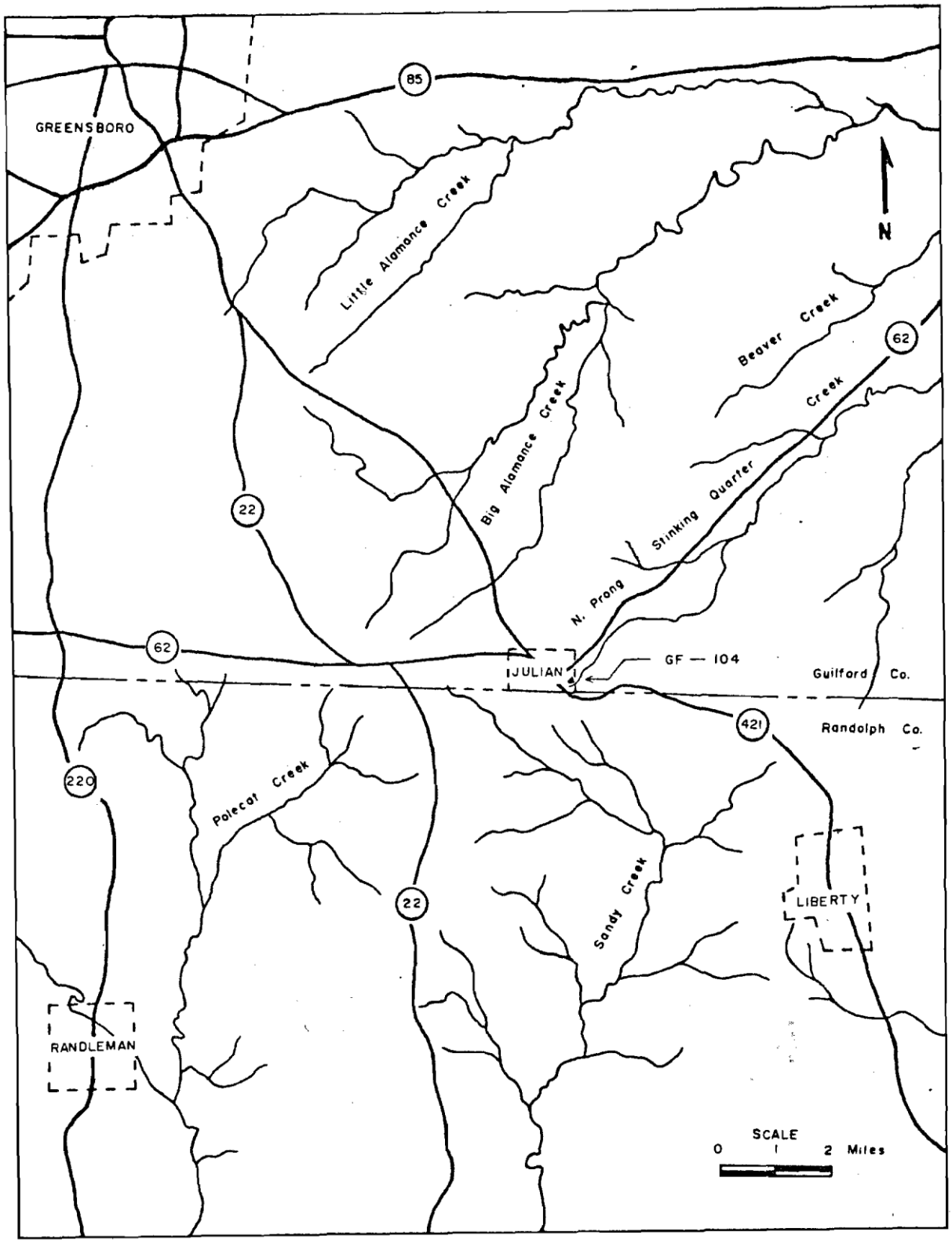


Fig. 1. Location of the GF-104 site.

Fig. 2. Panoramic view of the GF-104 site.

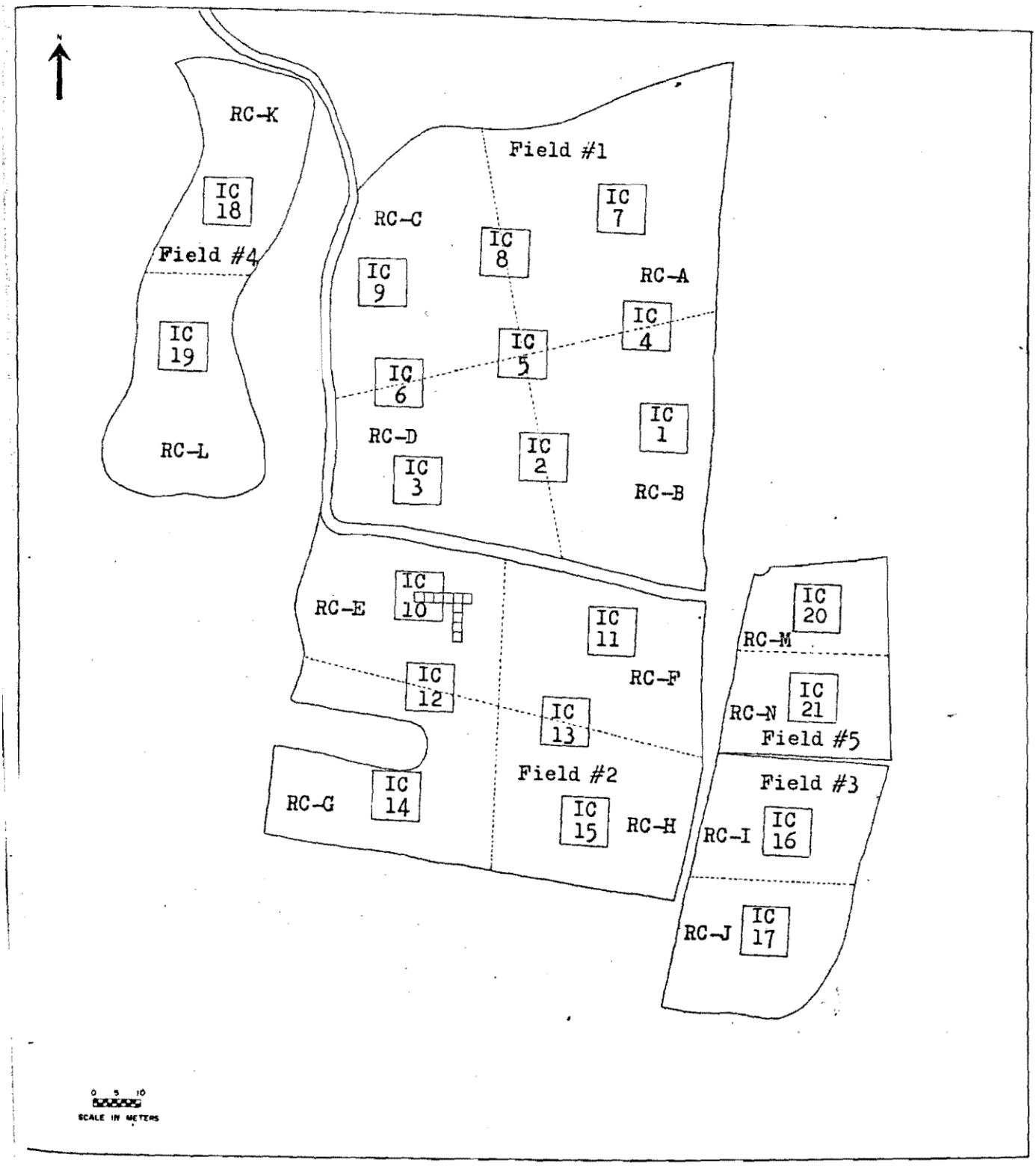


Fig. 3. Overlay of the GF-104 contour map, showing sampling units.

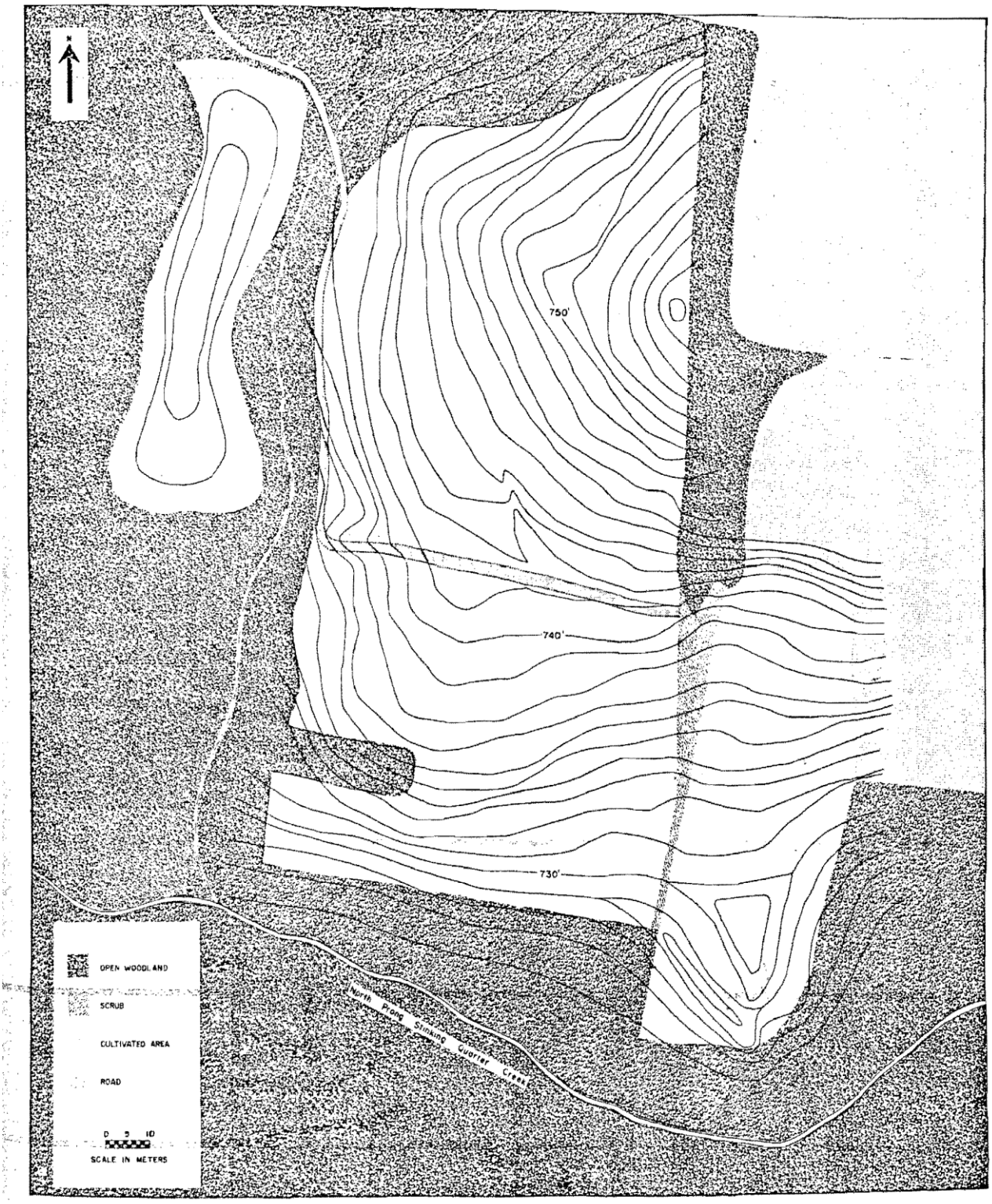


Fig. 4. Contour map of GF-104

In some places down near the creek, small washed out cuts show yellow subsoil. Upslope, the land is tan-whitish in color, with a distinct browning (to orangish) in the southwestern corner of field #2 and extending along the western and southern sides of field #1. The trees to the east of this field ' are sitting on earth about 10

cm. higher than the tilled field area to, the west, probably attesting to rather marked sheet erosion southward down the hillside.

When first visited, in April, field #2 had been plowed and rain-washed, and, the other fields were in corn stubble. Subsequently, fields #2. and #4 were planted in milo, and fields #1, #3, and #5 in corn. All these fields border on or are surrounded by wooded areas. Although the study of the vegetation will be presented in greater detail later, it can be noted here that within the three major topographical variants at the site—bottomlands, slopes, ridges--the main species of trees were Sweetgum, Tulip Poplar, and several species of Oak. For undercover trees, Hornbeam and Dogwood were the most prevalent, with some Hawthorne being found in the bottomlands. Short—leaf Pine was noted in places but showed signs of dying out in the normal process of development toward a climax forest vegetation.

Bedrock in the area of the site consists of sheared biotite granite that is light—pink to gray in color and is mostly coarse grained. This rock is cut by a large number of greenish schist dikes which have been meta-morphosed into slate in some cases. The soil is derived from this bedrock and is a reddish, acidic soil (averaging below a pH of 5.6), with considerable quartz content. The piedmont plateau soils of Guilford County tend to be low in organic matter because the region was originally forested and the type of farming used has not been conducive to the accumulation of organic matter. The soils generally lack free carbonates such as lime, due to the leaching which results from heavy rainfall and extensive drainage networks. The soil at GF104 can probably be classified as Cecil Sandy Loam, which in virgin areas is gray to a depth of one to two inches, then passes into brown which extends down to eight or ten inches depth. The subsoil is red, stiff, cohesive, smooth clay, which reaches a depth of three feet or more. In cultivated areas, like GF-1049 the surface soil often has a light, brown or reddish brown color which results from mixing some of the red subsoil with the surface material.

Climate of this area, according to the National Weather Servide Office in Greensboro, includes a mean annual temperature of 58.1 degrees Fahrenheit, with a mean of 76.1 degrees in the summer. Mean annual rainfall is 43.05 inches, heaviest in the summer, averaging 12.67 inches, and lightest,in the fall, with an average of 9.05 inches. The growing season is approximately 192 days.

SURFACE STUDIES AT OF-104

Vegetation

As has been noted previously, OF-104 is situated on the northern side of the North Prong stinking Quarter Creek, about 45' from the creek, and in the area between the 725' to 750' contour intervals. The site area studied was in cultivated fields which are surrounded by woods. The trees in the woods were studied according to three main areas: bottomlands, slopes, and tops of ridges. In general it was noted that all species varieties found were present in all three areas, but there did seem to be some variation as to the relative abundance of individual species by area.

Short-leaf Pine (Pinus echinata Miller) was found in three main places: on the ridge out to the south of field #4, to the east of field#1 and to the east of field #3 (Fig. 3). The pines associated with field #4 covered only the small high portion of the ridge there. Once the slope began, the number of pines declined, and in general these pines showed evidence of dying out. All around them, young trees of Shagbark Hickory (Carya ovata) were cropping up. Small White Oaks (Quercus) were also found growing in these spots., The pines located near field #1 also appeared to be dying out. These pines, however, were surrounded by Tulip Poplar (Liriodendron tulipfera L.) and Sweetgum (Liquidambar stryaciflua L.). No concentration of young trees was noticed, in this area, as was the case near field #4. On the other hand, the pines near field #3 did not seem to be dying out. It appears that the disappearance of pines is a good indicator of the area moving from once cleared land to more mature forest cover. Why the pines seemed so healthy near field #3 is not known.

The area across North Prong Stinking Quarter Creek to the south from field #2 was inspected carefully because it appeared to have older, perhaps virgin, vegetation. This area included the slope up from the creek and the top of the ridge overlooking the creek from the south. Some of the largest trees in the site environs were found here.

The dominant species were Tulip Poplar and, collectively, several species of Oak—Black, Red, and White. Next came Sweetgum. Several trees of White Ash (Fraxinus americana) and of Sourwood (Oxydendrum arboreum) were also seen, as well as a small seedling of Winged Elm (Ulmus alata) which was found in the lower portion of the slope and fairly close to the creek. Only one Pignut Hickory (Cary glabra) was recorded for the entire site zone. It was located in this area near the top of the rise, and was quite large and old.

A low wet area was inspected on the west side of field #2. Here, mainly Tulip Poplar and Sweetgum were found, along with a number of Beech (Fagus grandiflora) trees. The trees in this area were generally large.

Only two Red. Maple (Acer rubrum) trees were noted in the bottomlands. They were located, right next to the creek near the south side of field #2. In the same area a number of Beech trees were noted. Another Red Maple was seen up on the ridge by field #1, but the dominant trees in this area were Tulip Poplar and Sweetgum. Pine was also present, as mentioned before, along with Black and. White Oak species, Dogwood (Cornus florida L.), and Hornbeam (Carpinus caroliniana Walt.). At the southern edge of this wooded area, two Copal (Ailanthus altissima) trees were found. These are fast growing and short lived trees which are not native to the New World, and presumably were recently planted here.

The most different of all the areas investigated was that lying in between field #1 and field #4. One of the land drainage gullies which empties into the creek passes through this low wet area. There are E,o many different species within this small area that no one can really be called, dominant. The trees identified were: White Ash, White Oak, Copal, Beech, Dogwood, Shagbark Hickory, Willow Oak (Quercus phellos), Black Oak (Quercus velutina), and. Sweetgurn.

Three other species of trees were recorded for the site area in general: Swamp Chestnut Oak (Quercus michauxii Nuttall), Black Willow (Salix nigra Marsh), and Sourwood (Sassafras albidum Nuttall).

There was some attempt to systematically study the other ground cover around the site. Plants noted in the bottomlands include Jewelweed (Impatiens capensis), May Apple (Podophyllum peltatuon), and Green Briar (Similax). Green Briar was also found on the slopes and ridges, slong with Wild Ginger (Hexastyles virginica), Pipsissewa (Chimaphilia maculata), Rattlesnake Plaintain (Goodyera pubescens), Solomon's Seal (Polygonatum biflora), and False Solomon's Seal (Smilacina racemosa). Plants seen in an open, field—type, habitat include Passion Flower (Passiflora incarnata), Queen Anne's Lace (Daucus carota), Blackberry (Rubus argutus), Trumpet Creeper (Campsis radicans), Wolly Mullein (Verbascum thapsis), Horse Nettle (Solanium carolinecse), Morning Glory (Ipomoea purprea), Poke (Phytolacca americana), and English Plantain (Plantage lanceolata).

Local informants were asked to list edible plants which are found in this general area. The common names of these plants are: acorns, hickory nuts, wild sweet potatoes, wild cherries, wild strawberries, blackberries, 'dewberries, mulberries, blueberries, cattail roots, sassafras roots, sassafras twigs, moss, milkweed leaves, pokeweed leaves, dandelion leaves, stinging nettle leaves, persimmons, pawpaw pods, locust beans, muscadines, foxgrapes, catgrapes, ground cherries, and wild carrots. Some of these, of course, are duplicated in our systematic classification of the vegetation around the site area.

Several sources note that the climax forest for this area is composed of Hickory, Poplar, and Oak trees. Based on this, it would seem that the area around GF-104 is either in or achieving a climax forest state. According to Pinchot and Ashe (1897), this vegetation would be part of a lowland piedmont forest. There are two types of piedmont lowland: loamy alluvial lands (around small streams) which support Beech, Red Oak, White Oak, Maple, and Tulip Poplar trees; and silty lands with more SweetgumlBlackgum, Bitternut, Overcup Oak, and Swamp Chestnut. The area around GF-104 would seem to be somewhere in between the two. Beech and. Red Maple are few, and only located on the banks of the streams. There is some Swamp Chestnut and a lot of Sweetgumlbut the Tulip Poplar shows no sign of being pushed out.

Artifact Sampling

As was mentioned previously, when we first inspected the GF-104 site, in April, we obtained a general artifact sample, primarily from field #2. This collection and a few subsequent finds have been grouped as the general "range" collection (designated RC, see Tables 1 & 2) for the entire site. When we decided to spend a major portion of the summer research effort on the CF-104 site, we began to discuss various ways of sampling artifacts from the surface of the area. It was our intent to recover some information about the horizontal extent of the site, the density of artifacts in various parts of the site, and it inspect the possibility of there being functionally or temporally distinct portions of the site area. Toward these ends, we settled on a system of ten-meter squares (100 sq. m.) designated "intensive collections" ("IC"), evenly distributed over each of the fields (Fig. 3), from which all artifacts plus unworked stone and soil samples were collected. The number of sample squares per field was calculated to cover a minimum of 15/0 of the total field area. Once those collections had been obtained from a field area the field was divided into quadrants and a "range" collection obtained from each (Fig. 3). Although in theory we had intended, to collect only "key" or "marker" artifacts from the quadrants, we actually collected most of the artifacts which were observed. All of the sampling was done after the fields had been tilled and rain had washed the surface. Of course, after initial sampling, subsequent rains revealed some additional artifacts which were added to the appropriate quadrant range collection. The results of the surface sampling are presented in Tables 1-8, and some of the artifact counts are also shown on visual overlays of the site sampling squares (Figs. 5-11).

There are, of course, many reasons why one should be cautious when attempting to infer such things as cultural phase distribution and activity areas at a site such as GF-l04 based on surface sampling. Cultivated for many years and artifacts collected from the surface by various people during this time, much of the cultural debris originally there has been removed, and that which remains lies jumbled up in the plow zone. Also of concern is the matter of human error in sampling. Some individuals are more intent and thorough in collecting artifacts than others. However, the method we used seemed to provide the most potential for salvaging the maximum of information from the site.

Judging from the surface sampling data (Fig. 5), all of the fields sampled and most of their respective areas have evidence of aboriginal occupation, but the southeastern corner of field #1 and all of field #5 falling outside the effective site area. Also, the northern end of field #4 shows scant evidence of occupation. The greatest concentration of cultural material is located in the southwestern corner of the site (field #2)and on along the terrace area which extends east-west through the center of field #2. Part of the concentration extends into the southern and southwestern parts of field #1 on an extension of the terrace area. The density of artifacts drops off somewhat in the southeastern part of field #2, where the land is lower, and then increases on the higher ground of field #3. Figure 6 shows the distribution of all cultural phases (Palmer, Kirk, Lake Mojave, Stanley, Morrow Mountain Morrow Mountain II, Guilford, Halifax, Savannah River, Badin, Yadkin, Vincent, Caraway, Clarksville, Clements, and Randolph) represented at the site, based on the projectile points and pottery recovered in the surface sampling. In Figure 1, the presence of each phase is represented by a value of one. Although these could have been split or lumped further, the information sought was intended to give a general idea of cultural diversity in different areas - of the site. It should also be noted that many of the pottery sherds and some of the projectile points were not classifiable as to cultural phase. But given these limitations, cultural diversity, which might be taken as an indication of site focus, seesm to be highest on the terrace area in tin central and southwestern portions of field #2, and on the hummock of ground in the southern part of field #3. There is also fair diversity of the artifacts recovered in the southeastern quadrant of field #1. This probably reflects the distribution in field #2, since most of the artifacts from that quadrant came from the southwestern part.

GF-104 SURFACE SAMPLES	RC	IC 1	IC 2	IC 3	IC 4	IC 5	IC 6	IC 7	IC 8	IC 9
POTTERY										
Sherds	38		12	9	1					
Plainware	25		5	2	1					
Decorated	13		7	7						
Vessel Forms										
Jars (flare rim)										
Jars (straight rim)										
Jars (conical base)										
Jars (rounded base)										
Bowls (open)										
Bowls (constricted)										
Other forms										
Smoking Pipes										
Beads										
Other										
STONEWORK										
Projectile Points	9		1	1					1	
Quarry Blades	2									
Chipped Stone Hoes										
Chipped Stone Axes										
Chipped Stone Drills										
End Scrapers										
Side Scrapers										
Oval Scrapers	1								1	
Pointed Scrapers										
Other Scrapers										
Other Bifacial	1					1	1			
Thick Flakes Plain	6			1	5					
Thick Flakes Use Chipping	1									
Thin Flakes Plain	131		26	64		11	20	1	42	5
Thin Flakes Use Chipping	7		3	5		1	3	1		2
Hammerstones	1									
Mortars										
Pestles										
Manos				1						
Metates										
Steatite Vessels										
Smoking Pipes										
Pitted Stone										
Atlatl Weights										
Polished Stone Celts										
Polished Stone Axes										
Polished Stone Gorgets										
Rough Rock	17	69	39	9	9	2	16	4	16	20
Cracked Rock		12	5	2	1			1		
Other	4			1			1			
BONE										
Unworked										
Needles										
Awls										
Fish hooks										
Beamers										
Other										

TABLE 1B

GF-104 SURFACE SAMPLES

	RC	IC 1	IC 2	IC 3	IC 4	IC 5	IC 6	IC 7	IC 8	IC 9
SHELL										
Unworked Fragments										
Unworked Hinges										
Scrapers										
Beads										
Other										
METAL										
WOOD										
OTHER										
Tile										
China										
Glass										
Modern Pottery										
Brick										

TABLE 2

GF-104 SURFACE SAMPLES

	RC	IC 1	IC 2	IC 3	IC 4	IC 5	IC 6	IC 7	IC 8	IC 9
POTTERY										
Badin Cord-Marked										
Badin Fabric-Marked										
Badin Net Impressed										
Badin Plain										
Vincent Cord-Marked										
Vincent Fabric-Marked										
Yadkin Cord-Marked										
Yadkin Fabric-Marked	6		3	3						
Yadkin Linear Check Stamped										
Clements Cord-Marked			2							
Clements Fabric-Marked										
Uwharrie Net Impressed										
Uwharrie Brushed										
Dan River Net Impressed										
Pee Dee Simple Stamped										
Pee Dee Plain										
Pee Dee Complicated Stamped	1									
Caraway Plain										
Caraway Complicated Stamped										
Caraway Simple Stamped	2									
Caraway Brushed										
Caraway Corn-cob Impressed										
Caraway Net Impressed										
Gaston Simple Stamped										
Other										
PROJECTILE POINTS										
Hardaway Blades										
Hardaway Dalton										
Hardaway Side-Notched										
Palmer Corner-Notched	1									
Kirk Corner-Notched										
Kirk Stemmed										
Kirk Serrated	1									
Stanly Stemmed					1					
Morrow Mountain I Stemmed	1									
Morrow Mountain II Stemmed										
Guilford Lanceolate	2									
Halifax Side-Notched										
Savannah River Stemmed										
Badin Crude Triangular										
Vincent										
Yadkin Large Triangular										
Uwharrie										
Clements										
Roanoke Large Triangular										
Pee Dee Pentagonal										
Caraway Triangular										
Clarksville Small Triangular										
Randolph Stemmed	2			1						
Other										

TABLE 3A

GF-104 SURFACE SAMPLES

	IC 10	IC 11	IC 12	IC 13	IC 14	IC 15	IC 16	IC 17	IC 18	IC 19
POTTERY										
Sherds	67	4	31	13	3	3	5	3		3
Plainware	53	4	22	8	1	3	5	2		2
Decorated	14		9	5	2			1		1
Vessel Forms										
Jars (flare rim)										
Jars (straight rim)										
Jars (conical base)										
Jars (rounded base)										
Bowls (open)	2	1	2							
Bowls (constricted)										1
Other forms										
Smoking Pipes										
Beads										
Other										
STONEWORK										
Projectile Points	2		3	2			2	1		1
Quarry Blades					1					
Chipped Stone Hoes										
Chipped Stone Axes										
Chipped Stone Drills										
End Scrapers										
Side Scrapers										
Oval Scrapers										
Pointed Scrapers										
Other Scrapers										
Other Bifacial						2		2		
Thick Flakes Plain			1	1						
Thick Flakes Use Chipping				1				1		
Thin Flakes Plain	33	11	155	54	14	25	22	23	3	6
Thin Flakes Use Chipping	7		6		1	2	6	5	1	
Hammerstones										
Mortars										
Pestles										
Manos										
Metates										
Steatite Vessels			1							
Smoking Pipes										
Pitted Stone										
Atlatl Weights										
Polished Stone Celts										
Polished Stone Axes										
Polished Stone Gorgets										
Rough Rock	36	17	66	11	18	13	12	11	23	8
Cracked Rock	9	6	11	9	1	2		1		
Other	1		4					1		
BONE										
Unworked										
Needles										
Awls										
Fish hooks										
Beamers										
Other										

TABLE 3B

GF-104 SURFACE SAMPLES

	IC 10	IC 11	IC 12	IC 13	IC 14	IC 15	IC 16	IC 17	IC 18	IC 19
SHELL										
Unworked Fragments										
Unworked Hinges										
Scrapers										
Beads										
Other										
METAL										
WOOD										
OTHER										
Tile										
China										
Glass										
Modern Pottery										
Brick										

TABLE 4

GF-104 SURFACE SAMPLES

	IC 10	IC 11	IC 12	IC 13	IC 14	IC 15	IC 16	IC 17	IC 18	IC 19
POTTERY										
Badin Cord-Marked				1						
Badin Fabric-Marked										
Badin Net Impressed										
Badin Plain										
Vincent Cord-Marked										
Vincent Fabric-Marked	2									
Yadkin Cord-Marked										
Yadkin Fabric-Marked	9		3	4	2					
Yadkin Linear Check Stamped										
Clements Cord-Marked										
Clements Fabric-Marked										
Uwharrie Net Impressed										
Uwharrie Brushed										
Dan River Net Impressed										
Pee Dee Simple Stamped										
Pee Dee Plain										
Pee Dee Complicated Stamped										
Caraway Plain										
Caraway Complicated Stamped										
Caraway Simple Stamped										
Caraway Brushed										
Caraway Corn-cob Impressed										
Caraway Net Impressed										
Gaston Simple Stamped										
Other										
PROJECTILE POINTS										
Hardaway Blades										
Hardaway Dalton										
Hardaway Side-Notched										
Palmer Corner-Notched										
Kirk Corner-Notched										
Kirk Stemmed										
Kirk Serrated				1						
Stanly Stemmed										
Morrow Mountain I Stemmed										
Morrow Mountain II Stemmed										1
Guilford Lanceolate			1							
Halifax Side-Notched			1							
Savannah River Stemmed										
Badin Crude Triangular										
Vincent										
Yadkin Large Triangular										
Uwharrie										
Clements										
Roanoke Large Triangular										
Pee Dee Pentagonal										
Caraway Triangular										
Clarksville Small Triangular										
Randolph Stemmed										
Other										

TABLE 5A

GF-104 SURFACE SAMPLES

	IC 20	IC 21	RC A	RC B	RC C	RC D	RC E	RC F	RC G	RC H
POTTERY										
Sherds			1	43	1	1	38	15	21	6
Plainware				25			23	9	17	3
Decorated			1	18	1	1	15	6	4	3
Vessel Forms										
Jars (flare rim)										
Jars (straight rim)										
Jars (conical base)										
Jars (rounded base)										
Bowls (open)			1	7			3	1	1	
Bowls (constricted)								1		
Other forms										
Smoking Pipes										
Beads										
Other										
STONEWORK										
Projectile Points			1	5	2	2	16	5	7	3
Quarry Blades							2			
Chipped Stone Hoes										
Chipped Stone Axes										1
Chipped Stone Drills					1					
End Scrapers							2	1		
Side Scrapers								2	1	
Oval Scrapers				1						
Pointed Scrapers										
Other Scrapers										
Other Bifacial			3	6	1		5	2		1
Thick Flakes Plain							3	1		2
Thick Flakes Use Chipping				1		1	1	1		
Thin Flakes Plain			8	65	5	6	128	91	105	26
Thin Flakes Use Chipping	2		2	11	4		16	11	9	9
Hammerstones				1						
Mortars										
Pestles										
Manos								1		
Metates										
Steatite Vessels							1			
Smoking Pipes										
Pitted Stone										
Atlatl Weights										
Polished Stone Celts										
Polished Stone Axes										
Polished Stone Gorgets										
Rough Rock	16	7	1	47	6	4	26	14	35	2
Cracked Rock	1	1		15					1	1
Other			1		1					2
BONE										
Unworked							4			
Needles										
Awls										
Fish hooks										
Beamers										
Other										

TABLE 5B

GF-104 SURFACE SAMPLES

	IC 20	IC 21	RC A	RC B	RC C	RC D	RC E	RC F	RC G	RC H
SHELL										
Unworked Fragments										
Unworked Hinges										
Scrapers										
Beads										
Other										
METAL										
WOOD										
OTHER										
Tile										
China										
Glass							2			
Modern Pottery								1		
Brick										

GF-104 SURFACE SAMPLES	IC 20	IC 21	RC A	RC B	RC C	RC D	RC E	RC F	RC G	RC H
POTTERY										
Badin Cord-Marked								2		
Badin Fabric-Marked							2	2		
Badin Net Impressed										
Badin Plain										
Vincent Cord-Marked				1						
Vincent Fabric-Marked				1						1
Yadkin Cord-Marked									1	
Yadkin Fabric-Marked				11	1		9	2	6	2
Yadkin Linear Check Stamped										
Clements Cord-Marked										
Clements Fabric-Marked										
Uwharrie Net Impressed										
Uwharrie Brushed										
Dan River Net Impressed										
Pee Dee Simple Stamped										
Pee Dee Plain										
Pee Dee Complicated Stamped										
Caraway Plain										
Caraway Complicated Stamped										
Caraway Simple Stamped							1			
Caraway Brushed										
Caraway Corn-cob Impressed										
Caraway Net Impressed										
Gaston Simple Stamped										
Other										
PROJECTILE POINTS										
Hardaway Blades										
Hardaway Dalton										
Hardaway Side-Notched										
Palmer Corner-Notched							1			
Kirk Corner-Notched							1			
Kirk Stemmed										
Kirk Serrated			1							
Stanly Stemmed										
Morrow Mountain I Stemmed								1		
Morrow Mountain II Stemmed				2						
Guilford Lanceolate									3	
Halifax Side-Notched							2	1	1	
Savannah River Stemmed			2	1		1	1		1	
Badin Crude Triangular										
Vincent							3		1	
Yadkin Large Triangular										
Uwharrie										
Clements										
Roanoke Large Triangular										
Pee Dee Pentagonal										
Caraway Triangular								1		
Clarksville Small Triangular										
Randolph Stemmed				2					1	1
Other								1		

TABLE 1A

GF-104 SURFACE SAMPLES	RC I	RC J	RC K	RC L	RC M	RC N			TOTAL
POTTERY									
Sherds	13	10	1	12		1			355
Plainware	10	8	1	5		1			235
Decorated	3	2		7					120
Vessel Forms									
Jars (flare rim)									
Jars (straight rim)									
Jars (conical base)									
Jars (rounded base)									
Bowls (open)				1					19
Bowls (constricted)									2
Other forms									
Smoking Pipes									
Beads									
Other									
STONEWORK									
Projectile Points		10		1					75
Quarry Blades									5
Chipped Stone Hoes									
Chipped Stone Axes		1							2
Chipped Stone Drills	1								2
End Scrapers									
Side Scrapers	1	1							5
Oval Scrapers		2							5
Pointed Scrapers									
Other Scrapers									
Other Bifacial									25
Thick Flakes Plain									20
Thick Flakes Use Chipping									7
Thin Flakes Plain	42	59	1	34	2	1			1219
Thin Flakes Use Chipping	5	11		8					138
Hammerstones		1							2
Mortars									
Pestles									
Manos									2
Metates									
Steatite Vessels									2
Smoking Pipes									
Pitted Stone									
Atlatl Weights									
Polished Stone Celts									
Polished Stone Axes									
Polished Stone Gorgets									
Rough Rock	67	100	1						742
Cracked Rock	5	6							80
Other	1	3			1				31
BONE									
Unworked									4
Needles									
Awls									
Fish hooks									
Beamers									
Other									

TABLE 7B

GF-104 SURFACE SAMPLES

	RC I	RC J	RC K	RC L	RC M	RC N			TOTAL	
SHELL										
Unworked Fragments										
Unworked Hinges										
Scrapers										
Beads										
Other										
METAL										
WOOD										
OTHER										
Tile			2	1					3	
China				15					15	
Glass				10					12	
Modern Pottery									1	
Brick	1								1	

GF-104 SURFACE SAMPLES	RC I	RC J	RC K	RC L	RC M	RC N			TOTAL
POTTERY									
Badin Cord-Marked	1								4
Badin Fabric-Marked	1			1					6
Badin Net Impressed									
Badin Plain									
Vincent Cord-Marked		1							2
Vincent Fabric-Marked				3					6
Yadkin Cord-Marked									1
Yadkin Fabric-Marked	2	1							64
Yadkin Linear Check Stamped				1					
Clements Cord-Marked									2
Clements Fabric-Marked									
Uwharrie Net Impressed									
Uwharrie Brushed									
Dan River Net Impressed									
Pee Dee Simple Stamped									
Pee Dee Plain									
Pee Dee Complicated Stamped									1
Caraway Plain									
Caraway Complicated Stamped									
Caraway Simple Stamped									3
Caraway Brushed									
Caraway Corn-cob Impressed									
Caraway Net Impressed									
Gaston Simple Stamped									
Other									
PROJECTILE POINTS									
Hardaway Blades									
Hardaway Dalton									
Hardaway Side-Notched									
Palmer Corner-Notched									2
Kirk Corner-Notched									1
Kirk Stemmed									
Kirk Serrated									3
Stanly Stemmed									1
Morrow Mountain I Stemmed									2
Morrow Mountain II Stemmed									3
Guilford Lanceolate		1							7
Halifax Side-Notched									5
Savannah River Stemmed									6
Badin Crude Triangular									
Vincent		2							6
Yadkin Large Triangular									1
Uwharrie									
Clements									
Roanoke Large Triangular									
Pee Dee Pentagonal									
Caraway Triangular									1
Clarksville Small Triangular		2							2
Randolph Stemmed		1		1					9
Other		1							2

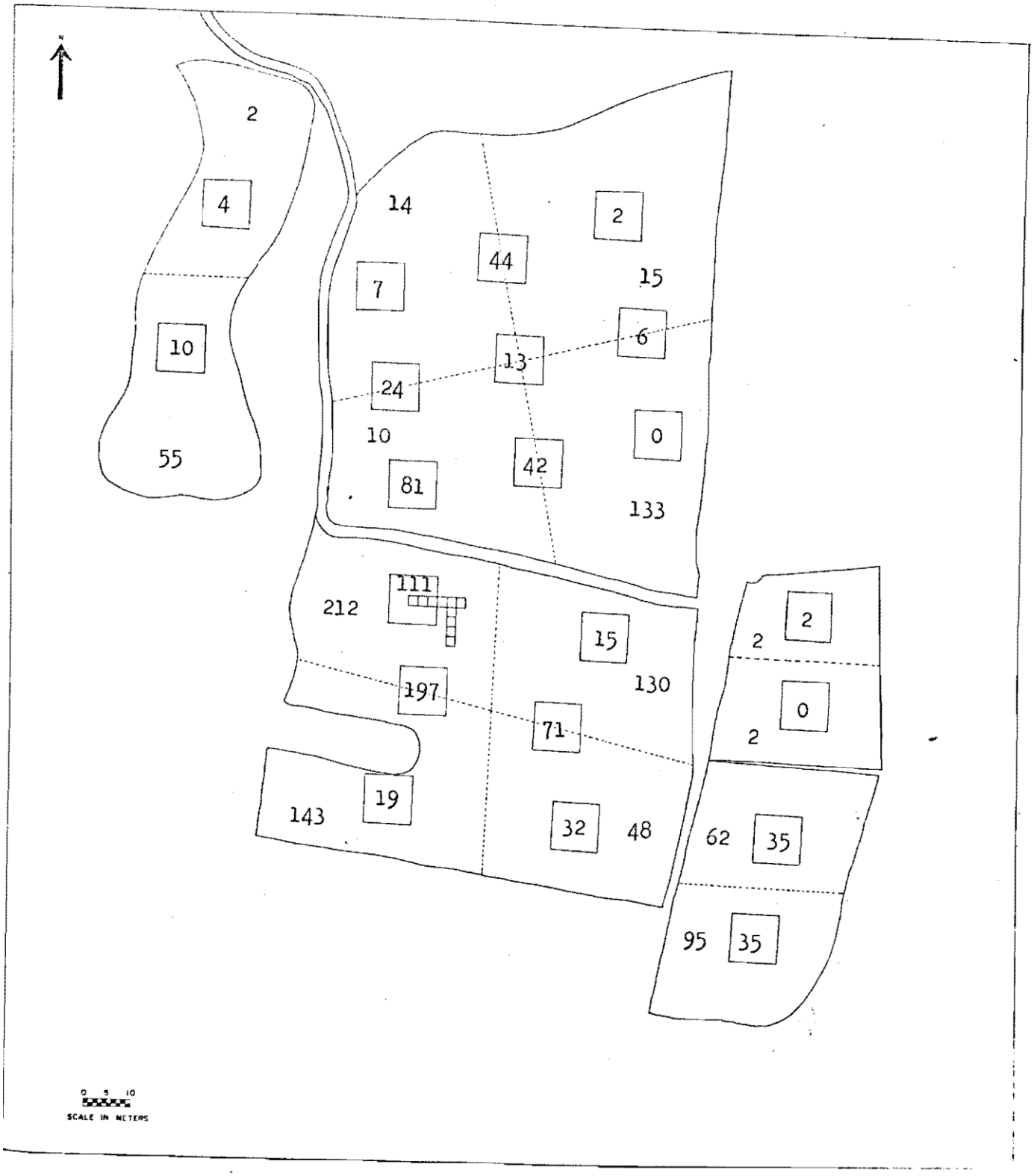


Fig. 5. Distribution of the total artifacts collected from the surface of the GF-104 site.

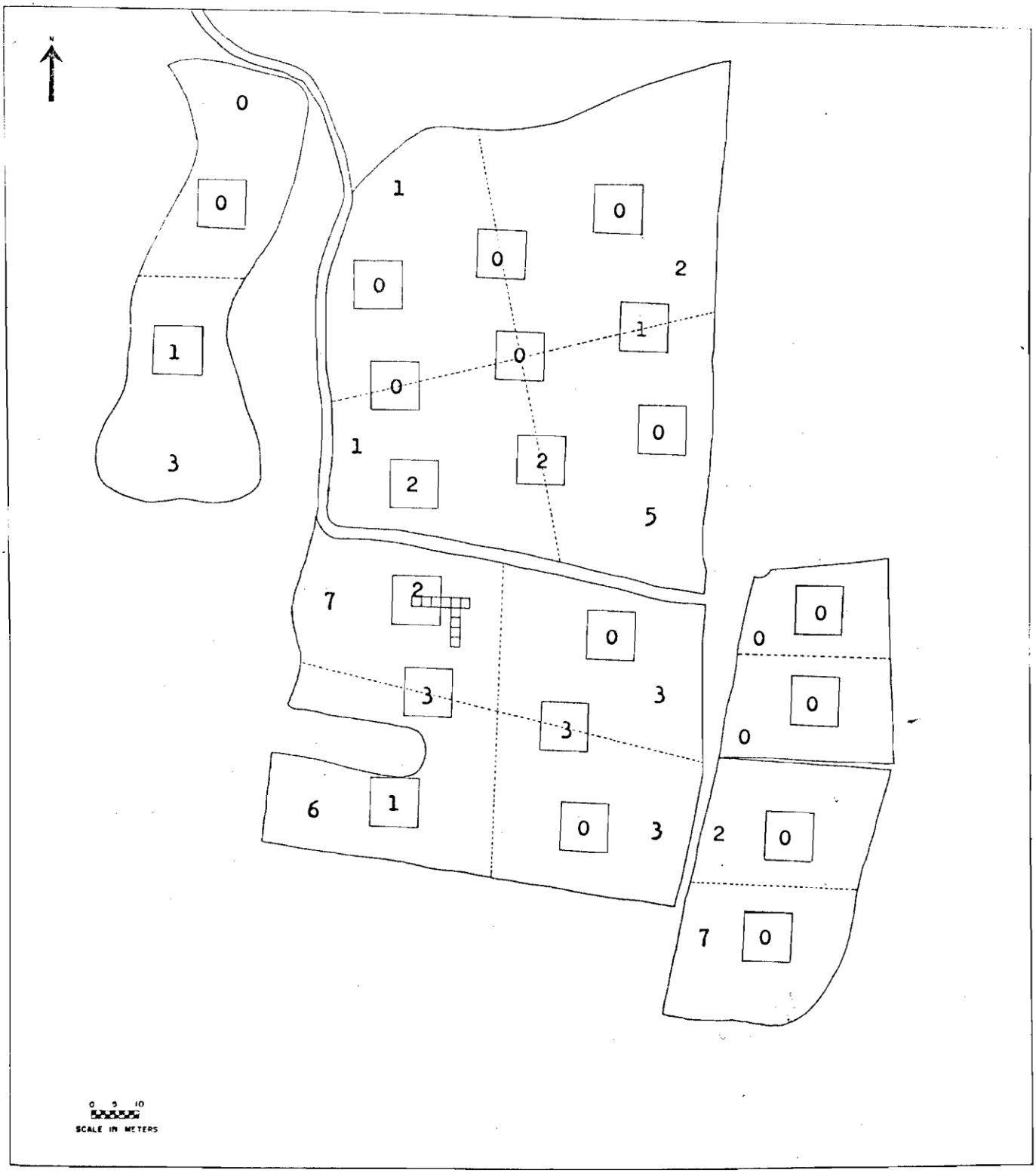


Fig. 6. Distribution of the number of cultural phases represented in the artifacts of each surface sample unit of the GF-104 site.

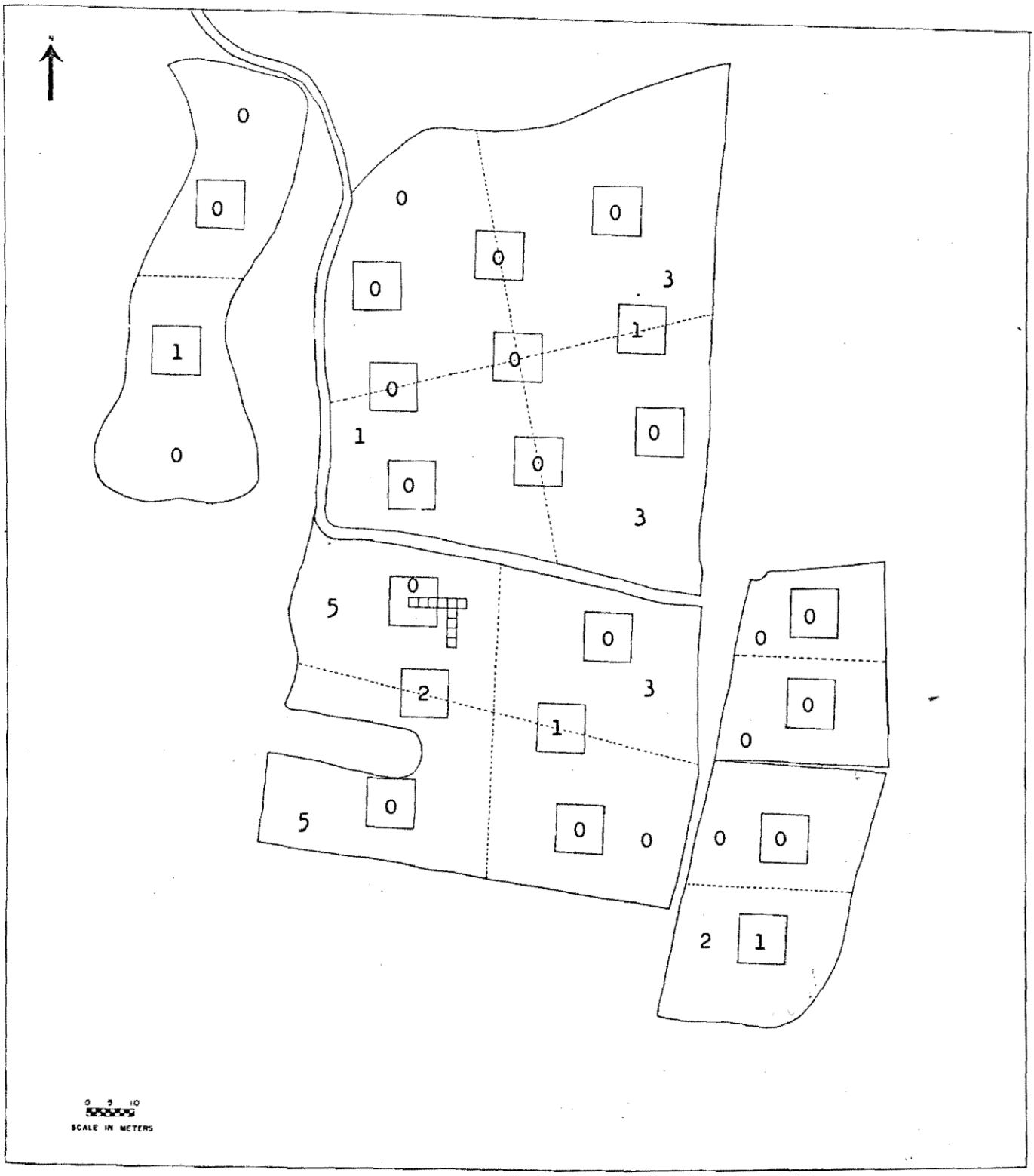


Fig. 7. Distribution of Archaic points collected from the surface of the GF-104 site.

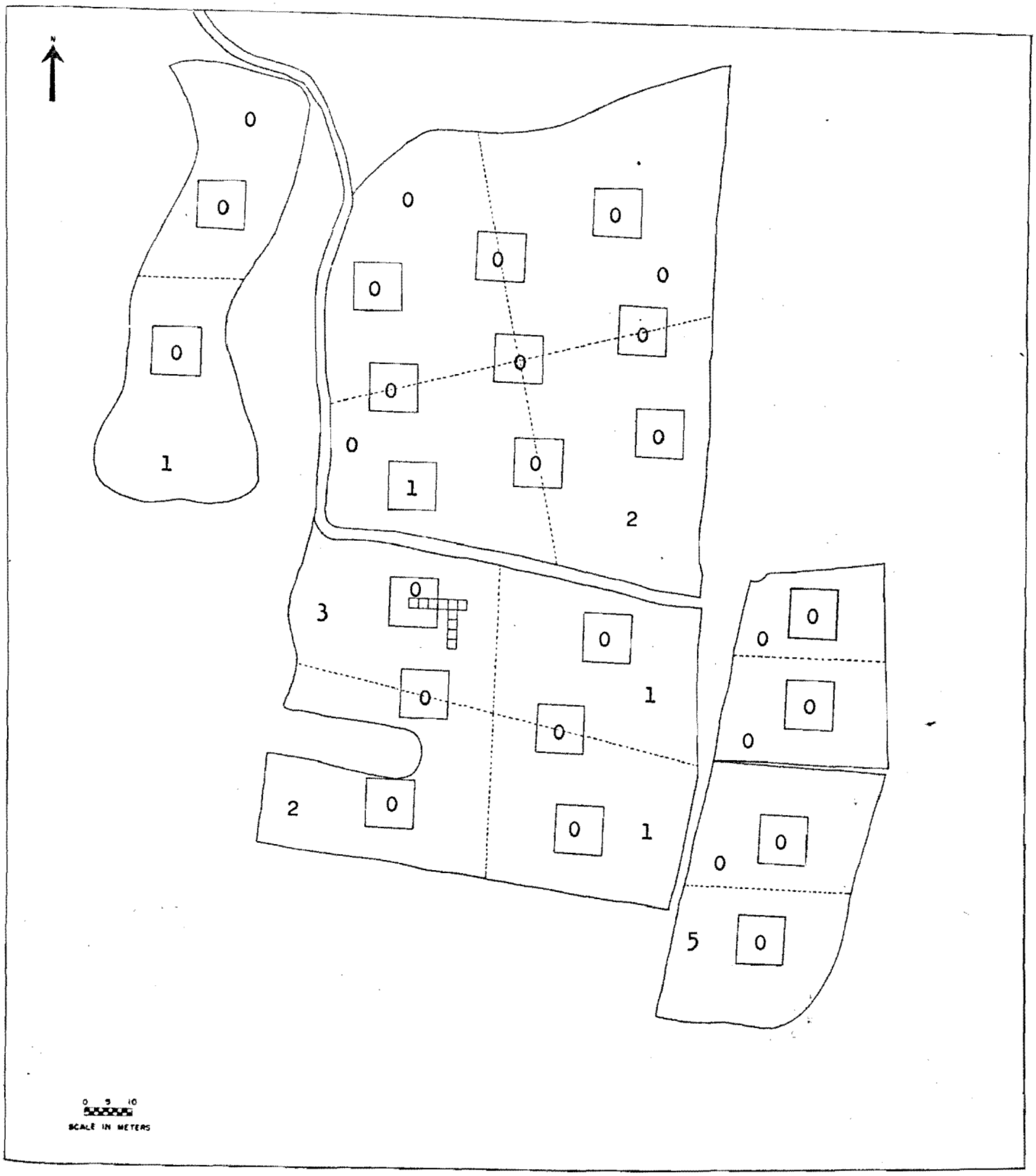


Fig. 8. Distribution of Woodland points collected from the surface of the GF-104 site.

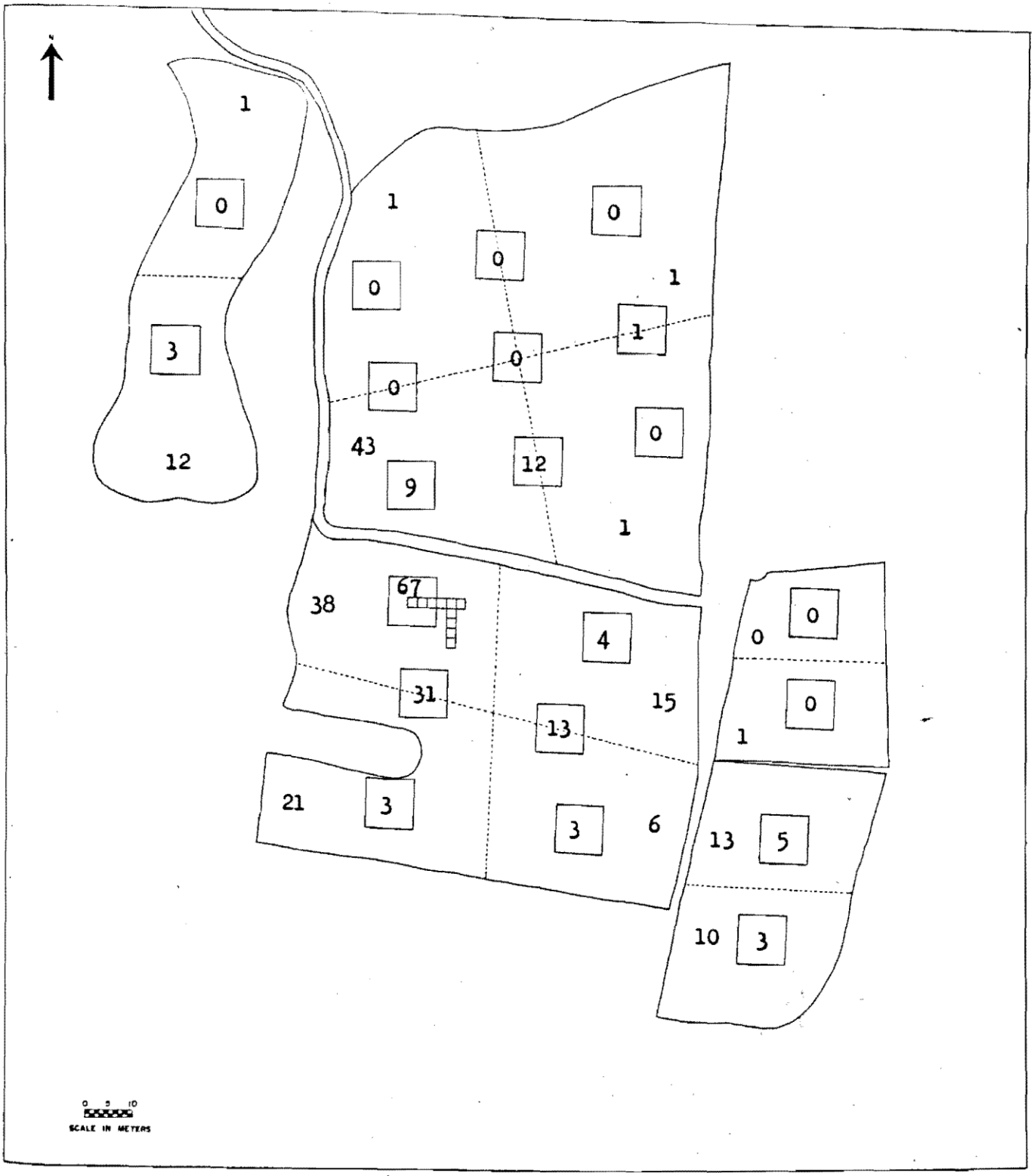


Fig. 9. Distribution of pottery sherds collected from the surface of the GF-104 site.

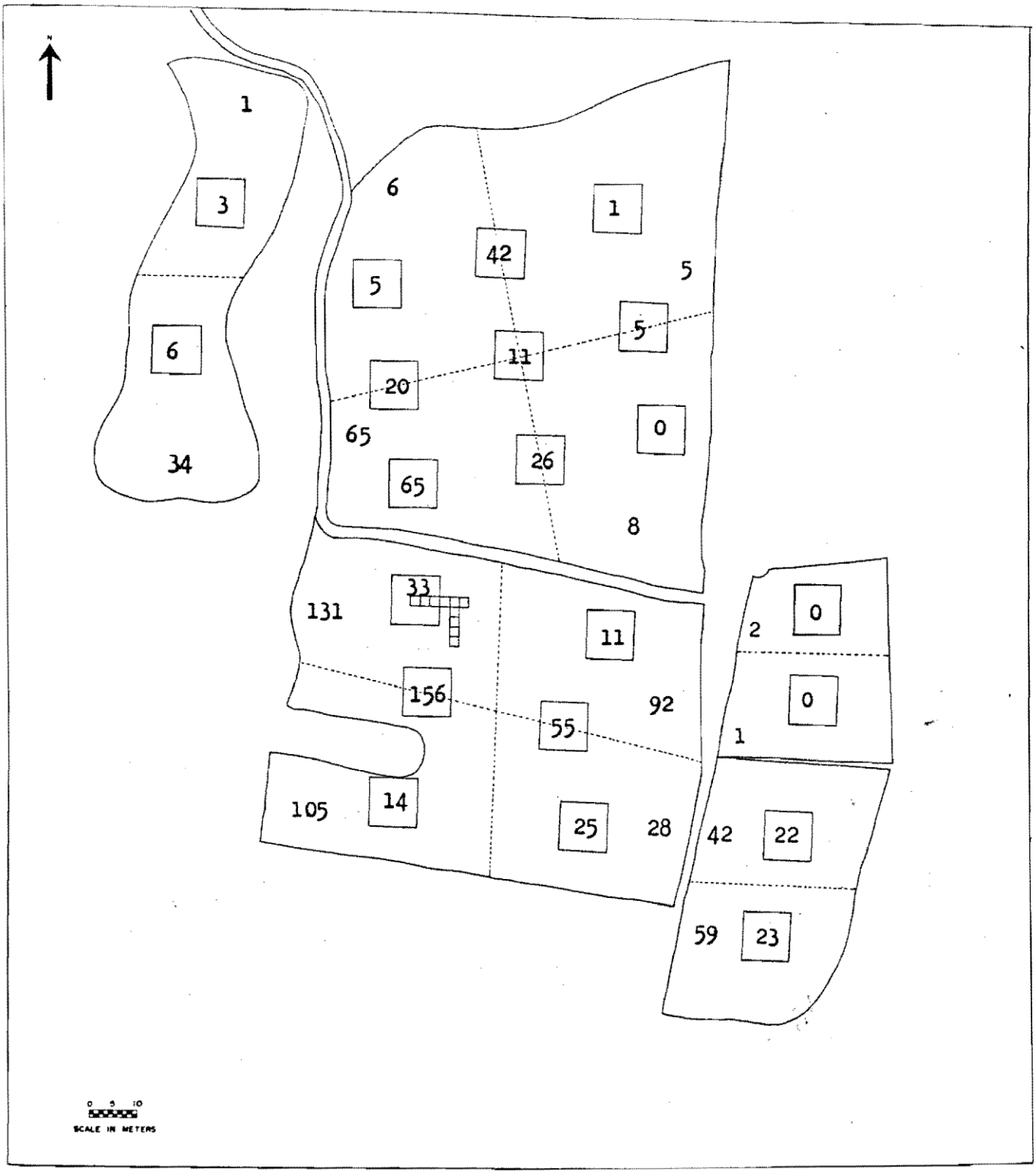


Fig. 10. Distribution of unworked stone flakes collected from the surface of the GF-104 site.

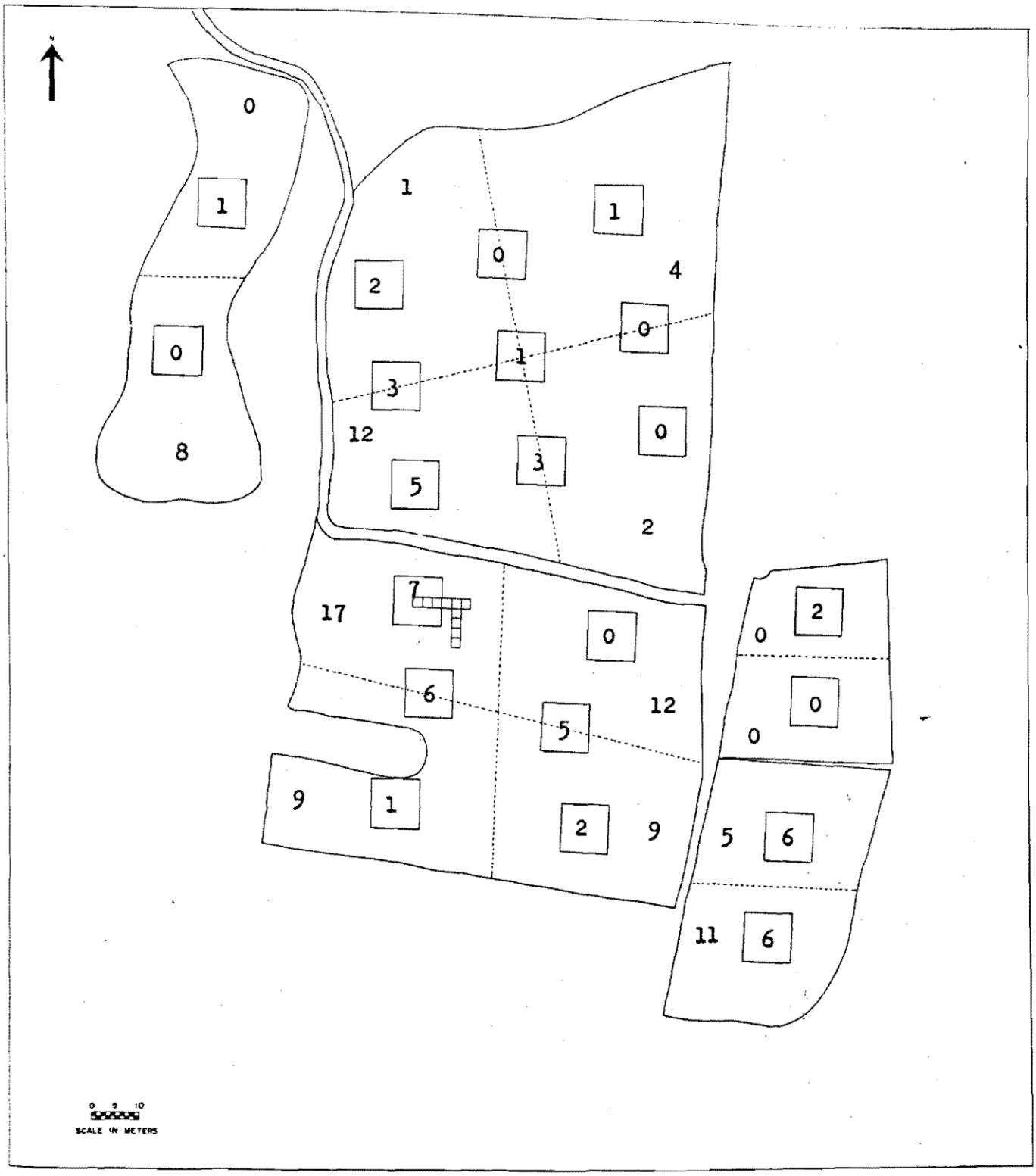


Fig. 11. Distribution of use-chipped stone flakes collected from the surface of the GF-104 site.

By comparing the distribution of Archaic versus Woodland points (Figs. 7, 8), it appears that there is a rather close overlap of the two, except for the northeastern part of field #1, which is the highest area of the field, where the Archaic is represented and the Woodland is not. The frequency of Woodland pottery in that area (Fig. 9) is almost negligable. In terms of percentage, 14% of Archaic points were found in HO-A and IC-4, whereas only

.0% of pottery (Woodland) was found there. Pottery as a whole (Fig. 9), reflects the general concentration of cultural debris in the areas of high ground down close to the creek.

It was believed that the opposition between unworked stone flakes and use-chipped stone flakes (those with chipping along the edge from utilization) (Figs. 10, 11) might reveal a distinction between tool manufacturing areas and scraping or cutting activities. In general, chipping of tools seems to have been done over all of the site area. It may be noteworthy that the distribution of both unworked and worked stone flakes is more extensive than Woodland pottery and projectile points. This is particularly true of the northern part of field #1, and may correlate with the possibility that the higher portions of the site area were more important during Archaic times, with the Archaic occupation more diffuse over the site and the Woodland more concentrated. An alternative hypothesis could be that many of the unworked and worked stone flakes in the northern part of the site pertain to the Woodland period and indicate some sort of different activity by the Woodland inhabitants in the higher and more northerly portion of the site. Analysis of patina on stone flakes, both utilized and non-utilized, might yield some valuable information along these lines, but has not yet been done.

EXCAVATION AT GF-104

Once the surface sampling had been completed, all the collections were washed, labeled, cataloged, and preliminarily classified as to cultural phase. Then, certain data were plotted on overlay maps of the site area in the hope that this might generate some potentially fruitful lines of investigation which could be pursued through excavation. We settled on the selection of the area with the greatest concentration of artifacts and diversity of cultural phases--the northwestern portion of field #2, and began the first two-meter square of the excavation in the center of IC-10 (Fig. 3).

We had hoped that there might be some undisturbed cultural deposit down below the cultivation zone, but excavation at the first square (N1-E1) ended at a depth of 15 cm., on top of sterile red clay subsoil with no discernable cultural features (Fig. 12). We proceeded to extend the trench to the east four more squares, looking for subsoil features such as post molds, trash pits, or burials. When this strategy proved unproductive, we decided to extend the trench from square N1-E5 four squares south to square S4-E5 (Fig. 13). Re had noticed in excavating the east-west trench that the artifact count seemed to increase as the trench was extended eastward (Tables 9, 10). But when we excavated the trench southward, the artifact density decreased (Tables 9, 10). Therefore, the last square excavated at GF-104 was an extension of the east- west trench out farther to the east (N1-E6) to see if the artifact density would continue to increase in that direction. It did not (Tables 9, 10).

In all the area excavated (Fig. 14), the depth of the cultural deposit was consistently close to 15 cm., occasionally reaching a depth of 20 cm. where soil had been piled up somewhat during tilling, notably on the southern end of the north-south trench. The artifact tabulations are given in Figure 15 according to excavated square, and the amount of artifact bearing soil assumed to be approximately the same in each. As can be seen in Figure 15, the general field observations about changing artifact density from square to square in the trench were rather accurate. It is noteworthy that this seems generally true of artifact density but deviates somewhat when one considers pottery sherds, projectile points, or stone flakes individually (Tables 9, 10).

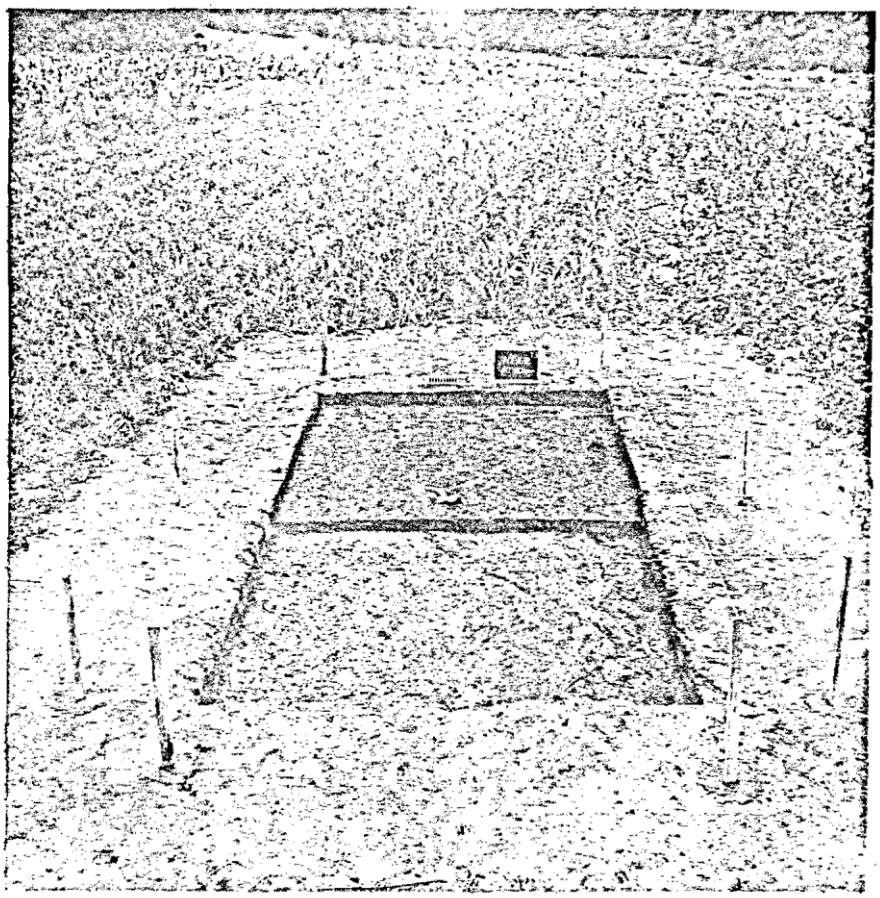


Fig. 12. The east-west trench at GF-104, with N1-E2 at 10 cm. depth.

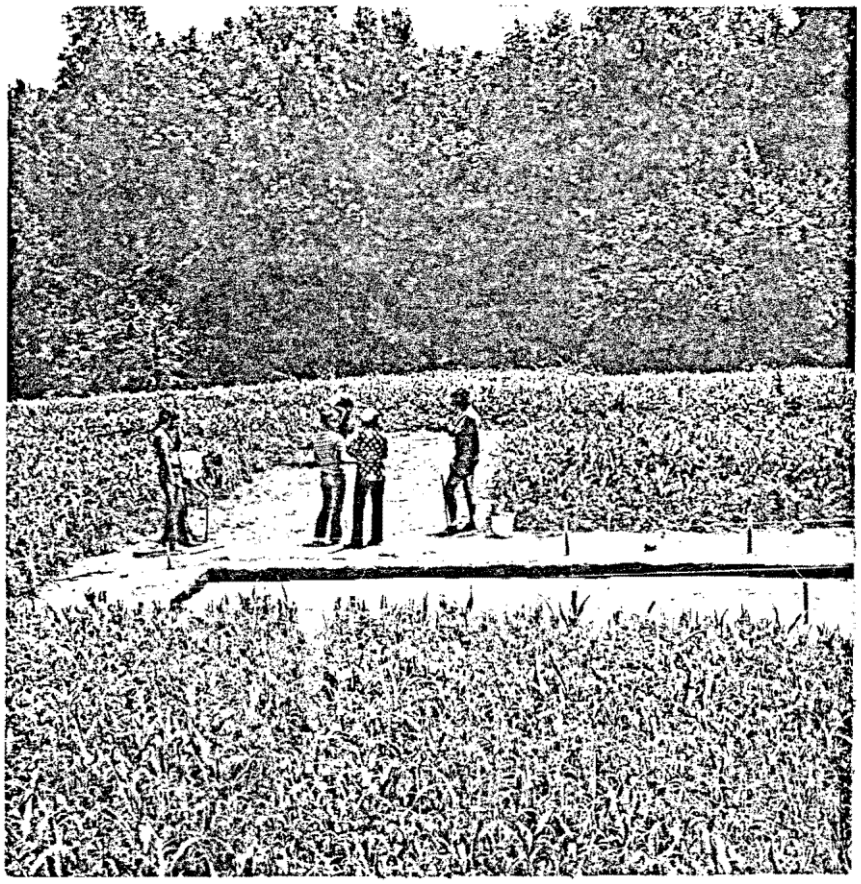


Fig. 13. Laying out the southern extension of the trench at GF-104.

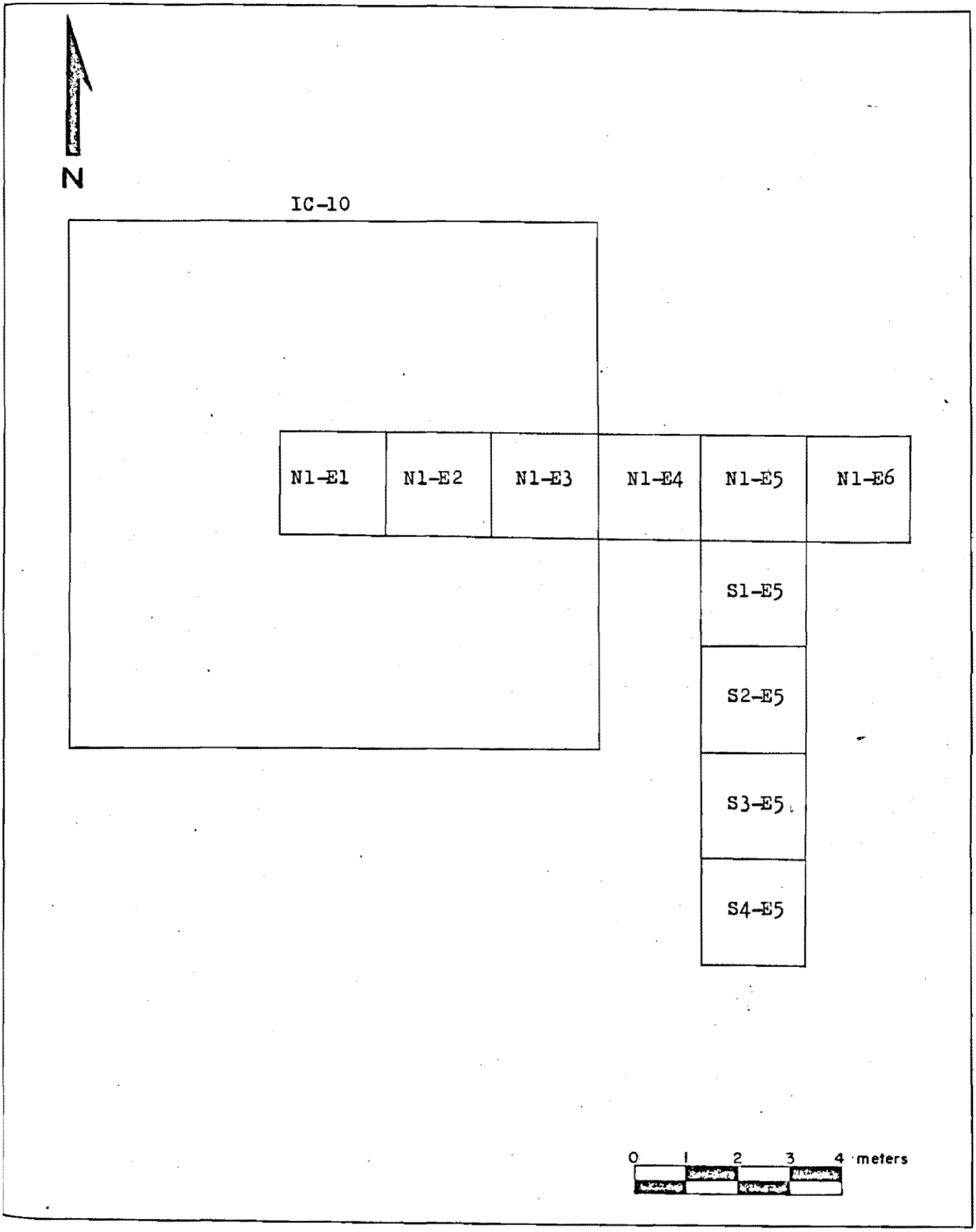


Fig. 14. Excavated squares at the GF-104 site.

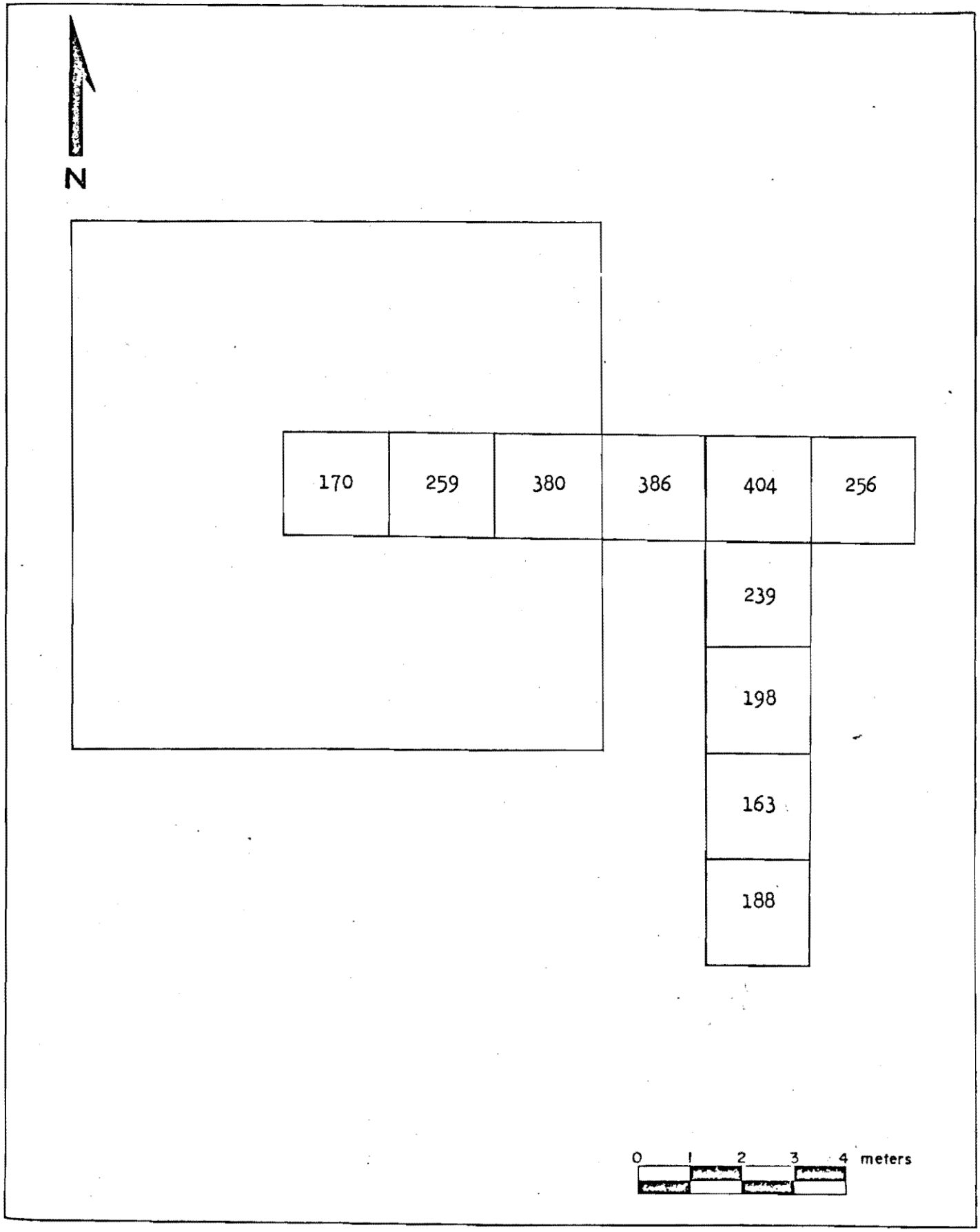


Fig. 15. Artifact density according to excavated square.

GF-104 EXCAVATED SAMPLES	N1 E1	N1 E2	N1 E3	N1 E4	N1 E5	N1 E6	S1 E5	S2 E5	S3 E5	S4 E5
POTTERY										
Sherds	66	98	168	132	124	100	70	50	65	61
Plainware	26	58	91	84	52	75	35	27	30	34
Decorated	40	40	77	48	72	25	35	23	35	27
Vessel Forms										
Jars (flare rim)										
Jars (straight rim)										
Jars (conical base)										
Jars (rounded base)										
Bowls (open)	4	1		3	2	3	2	3	1	3
Bowls (constricted)						1	1			
Other forms										1
Smoking Pipes	1	1								
Beads										
Other			1							
STONEWARE										
Projectile Points	1		1	5	4	4	3	8		
Quarry Blades	1						1			
Chipped Stone Hoes										
Chipped Stone Axes										
Chipped Stone Drills										
End Scrapers										
Side Scrapers										
Oval Scrapers										
Pointed Scrapers										
Other Scrapers										
Other Bifacial						1	1	5	1	
Thick Flakes Plain			2	5	1			1		1
Thick Flakes Use Chipping		3	1		1	1				
Thin Flakes Plain	88	146	200	226	263	142	153	123	92	120
Thin Flakes Use Chipping	13	11	16	18	11	8	11	10	5	6
Hammerstones										
Mortars										
Pestles										
Manos										
Metates										
Steatite Vessels			1					1		
Smoking Pipes										
Pitted Stone										
Atlatl Weights										
Polished Stone Celts										
Polished Stone Axes										
Polished Stone Gorgets										
Rough Rock	76	71	76	104	50	54	62	59	67	99
cracked Rock	8	11	10	15	26	16	18	5	21	18
Other				4	2	1		1		
BONE										
Unworked										
Needles										
Awls										
Fish hooks										
Beamers										
Other										

TABLE 9B

CF-104 EXCAVATED SAMPLES

	N1 E1	N1 E2	N1 E3	N1 E4	N1 E5	N1 E6	S1 E5	S2 E5	S3 E5	S4 E5
SHELL										
Unworked Fragments										
Unworked Hinges										
Scrapers										
Beads										
Other										
METAL										
WOOD										
OTHER										
Tile										
China										
Glass										
Modern Pottery										
Brick										

GF-104 EXCAVATED SAMPLES	N1 E1	N1 E2	N1 E3	N1 E4	N1 E5	N1 E6	S1 E5	S2 E5	S3 E5	S4 E5
POTTERY										
Badin Cord-Marked		1	1							
Badin Fabric-Marked		6	6	6	1	1	1	3	1	2
Badin Net Impressed										
Badin Plain										
Vincent Cord-Marked	3	1	1			2		2	1	1
Vincent Fabric-Marked	1		8	4	8		5	2	2	4
Yadkin Cord-Marked	2									
Yadkin Fabric-Marked	27	29	37	39	61	31	29	15	28	16
Yadkin Linear Check Stamped										
Clements Cord-Marked						1				
Clements Fabric-Marked						3			1	4
Uwharrie Net Impressed										
Uwharrie Brushed										
Dan River Net Impressed										
Pee Dee Simple Stamped										
Pee Dee Plain										
Pee Dee Complicated Stamped										
Caraway Plain										
Caraway Complicated Stamped										
Caraway Simple Stamped										
Caraway Brushed										
Caraway Corn-cob Impressed										
Caraway Net Impressed										
Gaston Simple Stamped										
Other	7	3	24		1	41		1	2	
PROJECTILE POINTS										
Hardaway Blades										
Hardaway Dalton										
Hardaway Side-Notched										
Palmer Corner-Notched										
Kirk Corner-Notched										
Kirk Stemmed										
Kirk Serrated										
Stanly Stemmed										
Morrow Mountain I Stemmed								1		
Morrow Mountain II Stemmed										
Guilford Lanceolate						1				
Halifax Side-Notched										
Savannah River Stemmed								1		
Badin Crude Triangular										
Vincent										
Yadkin Large Triangular										
Uwharrie										
Clements										
Roanoke Large Triangular										
Pee Dee Pentagonal										
Caraway Triangular	1									
Clarksville Small Triangular										
Randolph Stemmed		1		1		2	1	3		
Other						1	2	3		

Soil Analysis

Soil samples were collected from various parts of the 0E-104 site and gar- ' rounding vicinity, including the center of each surface sample Intensive Collection square, four of the excavated trench squarest and places in the woods surrounding the site (Figs. 16-20). The soil at each of these locations was described as to color, texture, and mechanical composition. It was also subjected to chemical analysis for pH, nitrogen, phosphorous, and potassium, using a LaMotte (model STH-5) soil testing kit.

Microscopic examination of the particles of soil in the samples from the 21 Intensive Collection squares revealed that the mineral composition of the soil is predominantly white quartz, often as much as 80% of the sample. Yellow, purple, pink, and clear quartz were consistently present in lesser quantities. The quartz particles are worn and glossy, caused by abrasion with other grains.

The soil acidity readings are recorded for the surface samples and the excavated area in Figures 16 and 20. Three samples from the bottom to the top of the slope on the southern side of the creek which are not illustrated in the Figures were respectively 4.8, 5.0, and 5.0. All of the soil tested within the GF-104 site can be classified as acidic, varying from moderately acid through strongly acid to very acid. Such acidity normally can be traced to the fact that alkaline materials, chiefly calcium and, magnesium, are lost from soil through cultivation and leaching. The pH influences the preservation of phosphates in the soil, especially calcium phosphate--the primary material in bone. Also, phosphorus (Figs. 17, 20), which is often a good indicator of human occupation because it results from the concentration of animal matter, is leached, out and drained away when soil acidity is stronger than a pH of 5.6. The soils at GF-104 average below the crucial 5.6 pH value and therefore conditions for the preservation of aboriginal bone are quite poor and phosphorous would not be reliable for locating remnants of burials. It may be significant that lower acidity seems to generally correspond with the area of site concentration, although there are some highly acidic readings from that area, such as IC-10 (Fig. 1). It is notable that the least acid sample from the site came from Feature #1 in square 53-E5 (Fig. 20). This small shallow kidney-shaped feature (Fig. 20) contained only two minute stone flakes. Perhaps it was once a trash pit which contained mussel shells. The low phosphorus reading of a sample taken from the feature makes it unlikely that the pit represents a burial.

In contrast to phosphates, nitrogenous materials break down less easilf in acidic conditions. Nitrogen tests which show local concentrations of nitrogenous matter which is not merely due to humus, can sometimes afford evidence of the former presence of a burial. However, nitrogen is often introduced through modern agricultural practices. The areas of high nitrate nitrogen concentration at GF-104 are fields #2, #3, and #5, and IC squares 1, 2, 4, 5P and 7 (Figs. 18, 20). But this could well be due to modern fertilization of the fields. The same is probably true of the differences in the potassium readings (Figs. 19, 20).

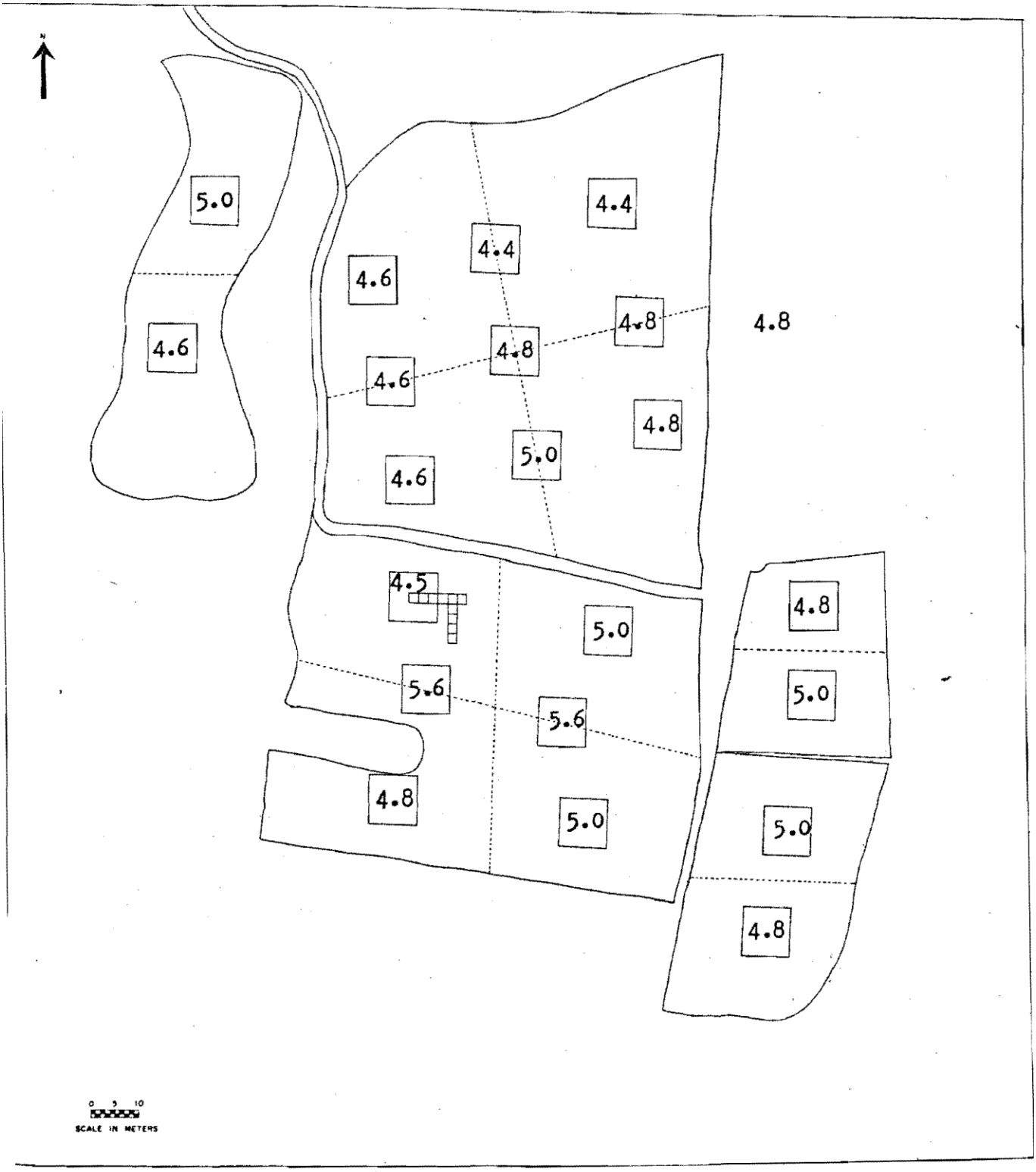


Fig. 16. Soil acidity readings from the surface sampling squares at the GF-104 site. Values range from moderately acid (5.6) to very acid (4.4).

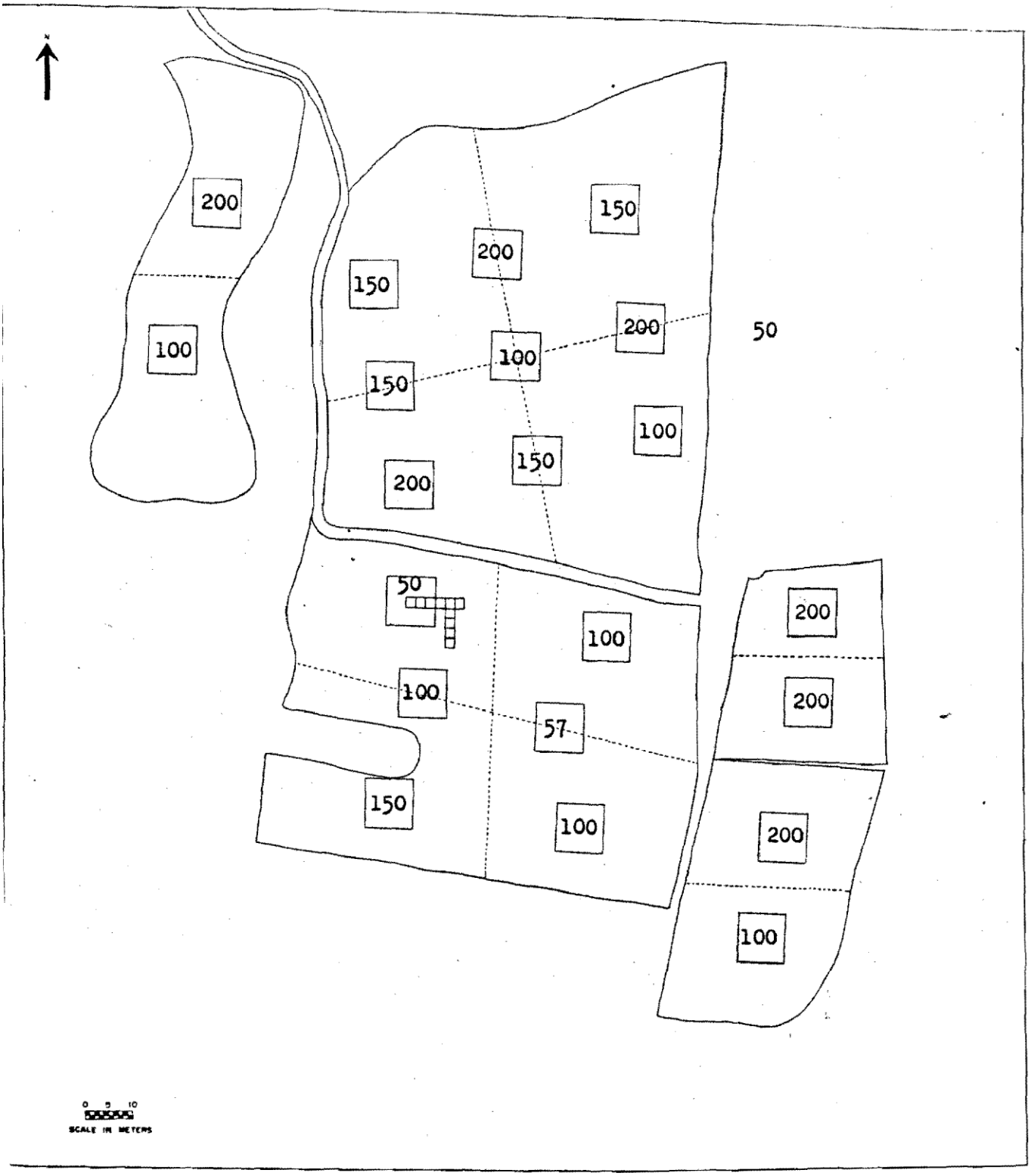


Fig. 17. Phosphorus readings from the surface sampling squares at the GF-104 site. Values indicate pounds per acre, ranging from medium low (50 lbs.) to very high (200 lbs.).

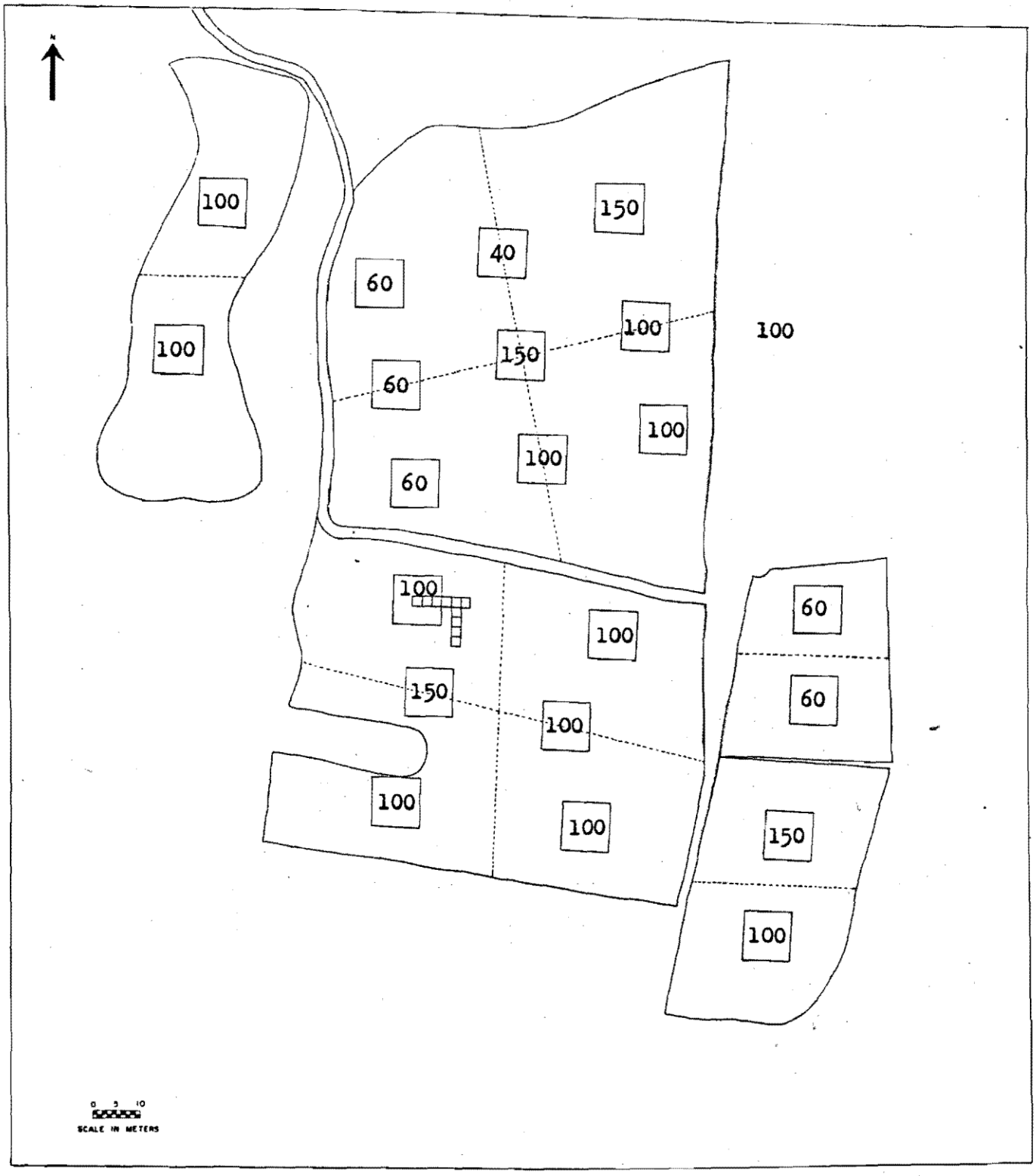


Fig. 18. Nitrate nitrogen readings from the surface sampling squares at the GF-104 site. Values indicate pounds per acre, ranging from medium (60 lbs.) to high (150 lbs.).

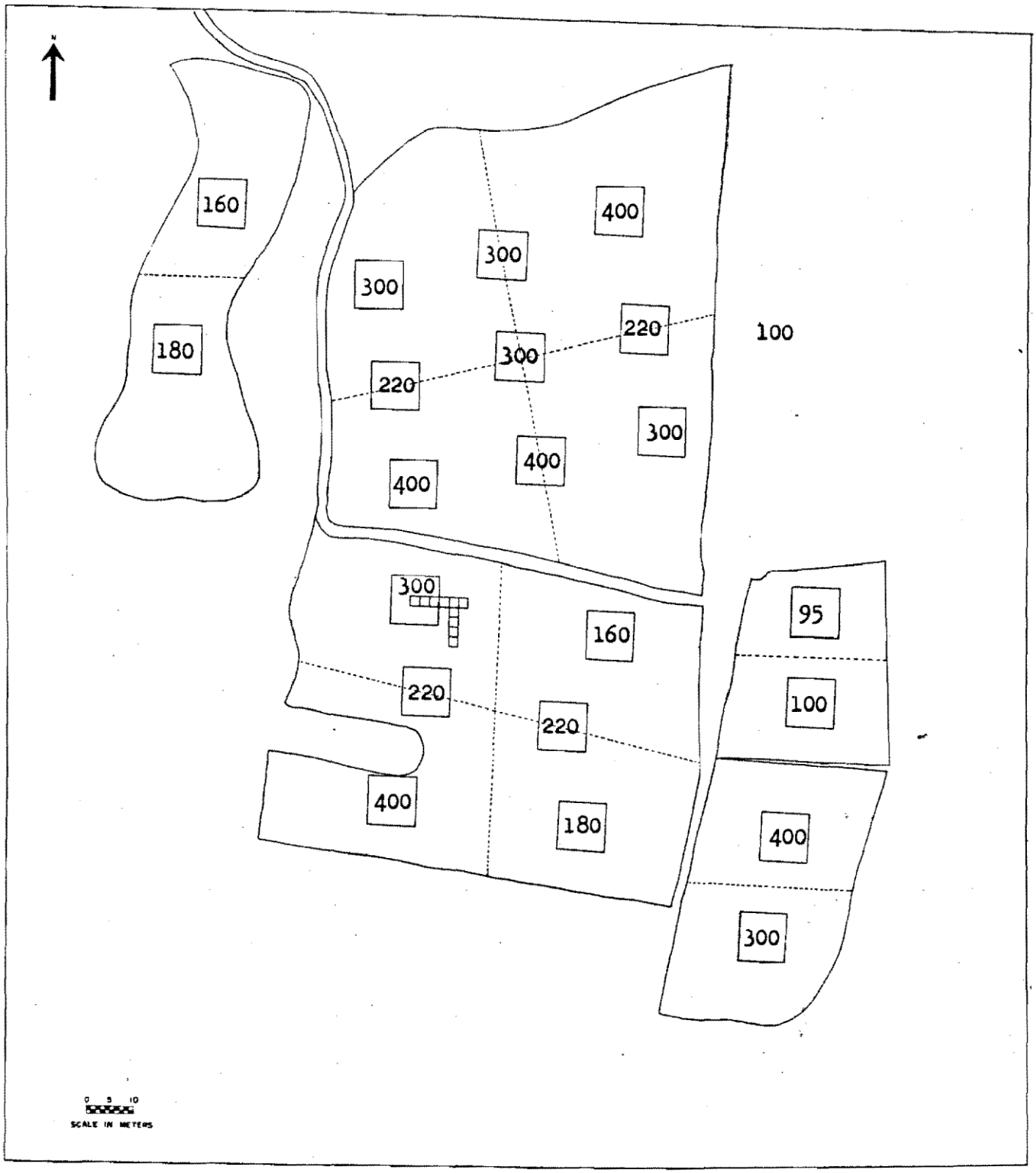
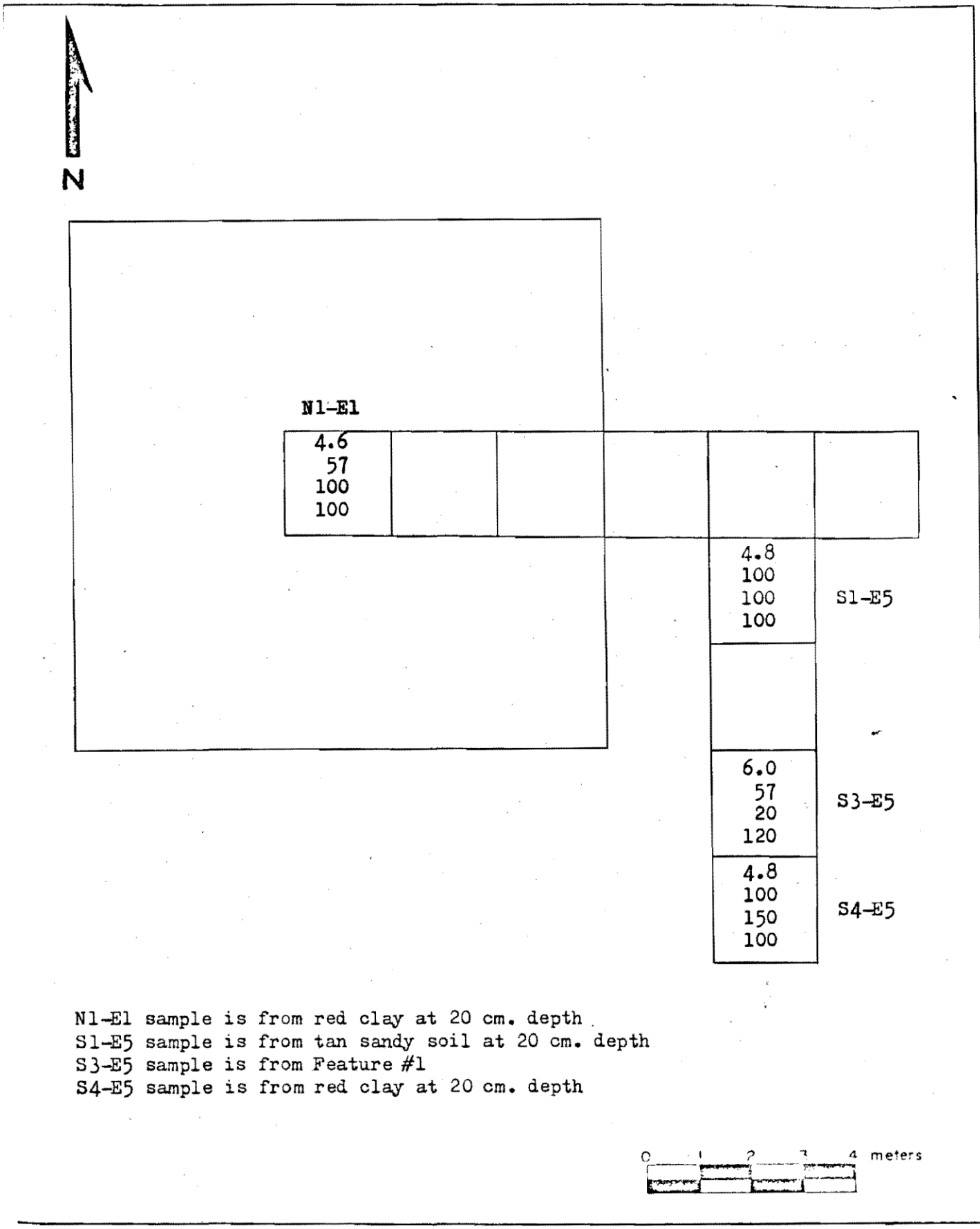


Fig. 19. Potassium readings from the surface sampling squares at the GF-104 site. Values indicate pounds per acre, ranging from low (95 lbs.) to high (400 lbs.).



N1-E1 sample is from red clay at 20 cm. depth
S1-E5 sample is from tan sandy soil at 20 cm. depth
S3-E5 sample is from Feature #1
S4-E5 sample is from red clay at 20 cm. depth

Fig. 20. Soil chemistry readings from the GF-104 excavations. Values from top to bottom are acidity, phosphorus, nitrate nitrogen, and potassium.

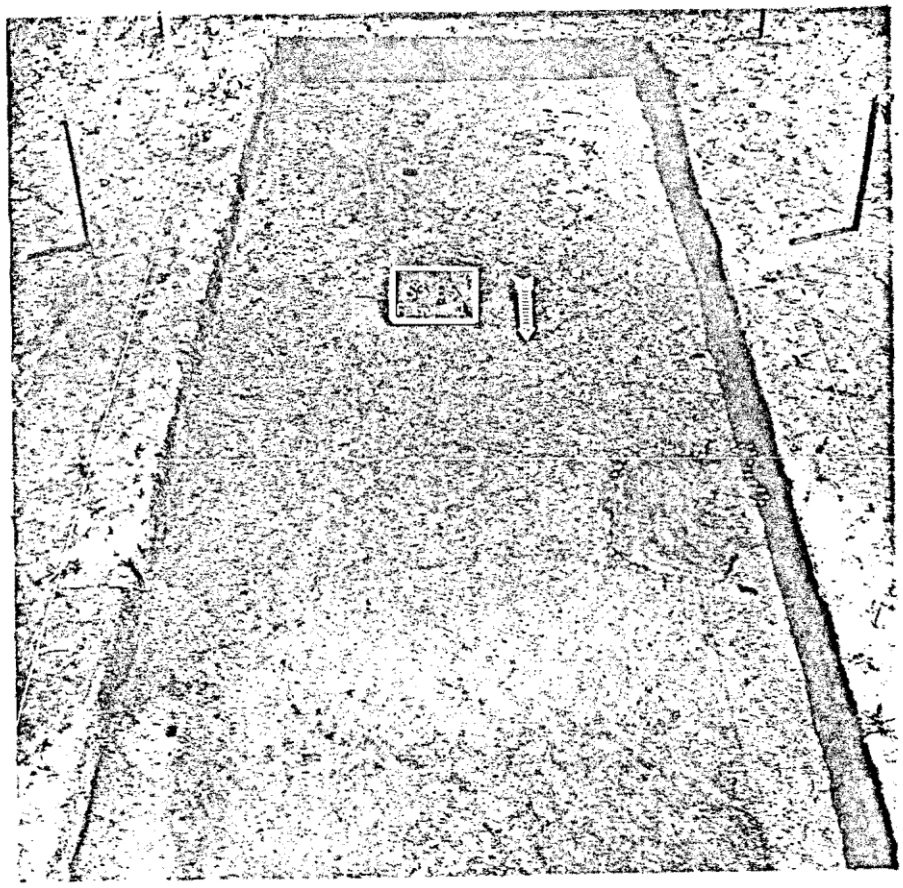


Fig. 21. Feature #1, in square S3-E5 at GF-104.

Geology and Stone Tool Analysis

Several techniques were attempted in the analysis of the stone artifacts from the GF-104 site, including classification of artifacts by type of rock, geologic sampling of the site environs, examination of artifacts for wear characteristics, and measurement of projectile points (Fig. 22). Virtually all of the artifacts could be categorized into a limited number of rock types easily distinguishable without the aid of petrologic processing. The categories of slate, flint, basalt, steatite, quartz, quartz crystal, granite, and hornblende were used for sorting the artifacts. Analysis was aided by Professor Carl Dinga, geologist at UNC-Greensboro.

Slates of the Carolina Slate Belt occur about one mile north of Stinking Quarter Creek, and parallel the creek. Many of the slates in this deposit are highly silicified, grayish-white to blue-gray in color, with fine grain and great density. They are derived from volcanic ash, and closely resemble chert. The physical properties of the slates, including conchoidal fracture, make them an excellent raw material for the manufacture of chipped stone artifacts. Many of the GF-104 artifacts were made from this slate. Other artifacts were made from quartz, which occurs in the area as an accessory mineral to the slate-and granite deposits. There are also some artifacts of true flint which probably occurs in the form of stream cobbles. Several quartz crystals were found at the site and were recorded in the "other stonework" category.

Some stone bowl fragments of steatite were found at GF-104. Steatite occurs locally in small quantities, although it is not known if the local supply is of the quality or quantity necessary for stone bowl manufacture. Sizeable deposits of steatite occur in talc beds near Deep River, and these deposits may have been the source for the GF-104 steatite vessels.

Many thin stone flakes were recovered in the surface samplin.f7 zInd at the GF-104 site. In fact, the flakes constitute approximately 50% of the total artifacts recovered. These flakes can be divided into two main groups; large flakes, usually of highly patinated flint or Carolina Slate, and small black flint chips, many of which are percussion flakes. The small flint flakes are particularly interesting in that so many of them exist at the site, while projectile points or other chipped tools of the same material are rare. Almost all examples of projectile points produced from the dark flint are Randolph Stemmed. In the category of used thin flakes, it should be noted that most of these flakes display acute edge angles, and were possibly used as cutting blades in butchering or related activities. Very few utilized thick flakes are present. They have less acute edge angles, which may be associated with the processing of vegetable material or represent woodworking (Wilmsen 1970; Binford 1968).

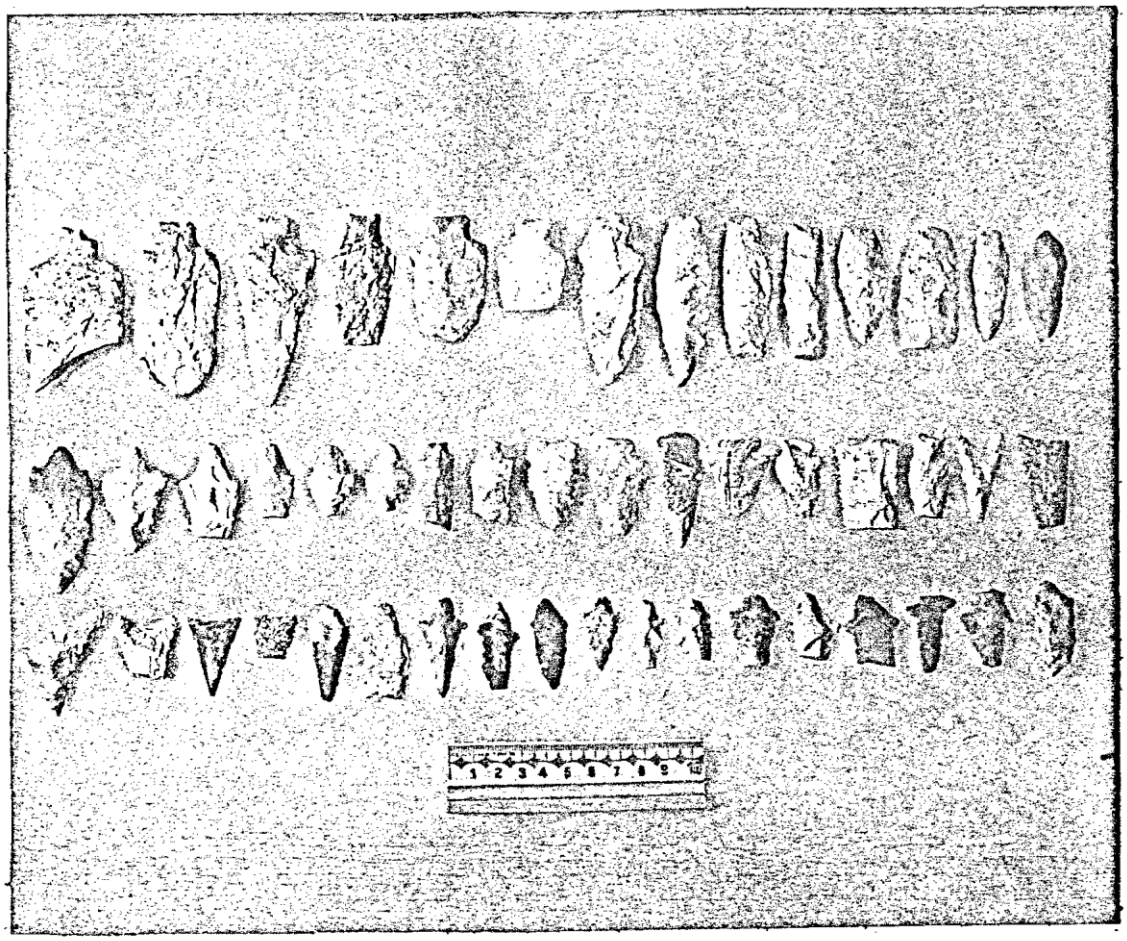


Fig. 22. Selected projectile points from GF-104

Pottery Analysis

Study of the pottery sherds from GF-104 (Fig. 23) included their classification, thin section analysis, refiring sherds, and firing briquettes made from clay obtained in the area of the GF-104 site. The classification of the sherds is presented in Tables 2, 4, 6, 8, and 10. Not much progress was made with the thin section analysis because we lacked a petrographic microscope. However, some observations may be of value. There were many large igneous inclusions in the paste of the Yadkin and Vincent sherds, especially amphibole. This might be tempering material which was obtained by crushing old decayed granitic rock which is found in small quantities around the site area.

Results from the refiring of the sherds were somewhat disappointing, but this apparently resulted as much from the sort of kiln used as anything else. It was a top—loading kiln without a window or a peep hole to observe the sherds during refiring. It was necessary to open the lid periodically to inspect the sherds, thus creating severe difficulties with temperature control. There were nine sample sherds used for refiring. They were fired to a temperature of 900° centigrade, and some color change was noted in six of them. These were all light tan to medium gray before refiring, and turned pale orange. These six included one Badin Fabric Marked, one Vincent Fabric Marked, two Yadkin Fabric Marked, and two undecorated sherds, one of which was gray and the other brown. Two of the three sherds which did not change color were undecorated but were well made and had smooth surfaces, so were possibly farily late in the cultural sequence. The third was reddish in color and impressed with a relatively fine fabric. It also may have been quite late temporally.

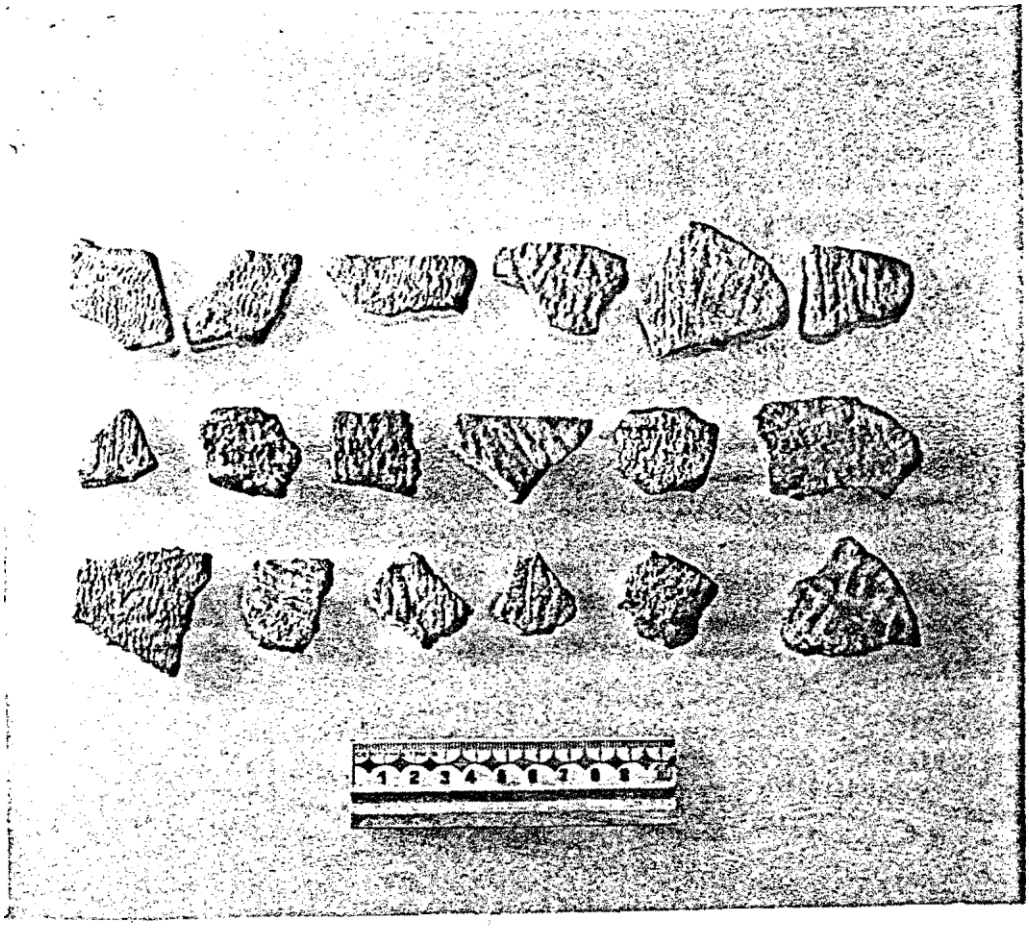


Fig. 23. Selected pottery sherds from GF-104.

Firing of the clay briquettes produced some notable color changes (Table 11). It is interesting to note that the clay from field #3 and from the creek both fired to an orangey tan color, whereas the two clay 'samples from field #2 fired brown. It is also worthy of note that tempering the samples with sand did not visibly alter the firing results. Both the creek clay and the yellow clay from field #3 are similar to that used in the early sherds which turned pale orange by 900° centigrade.

Faunal Analysis

From the surface sampling at GF-104, a total of seven bones were recovered. They were soaked with a preservative solution and then taken to Professor H. T. Hendrickson of the UNC-Greensboro Biology

Department for identification. He noted that two of them were from some large mammal, probably a cow or a horse.

We also questioned local informants about fauna of the arearand compiled a list of these animals, as well as a list of those animals mentioned by Lawson in his History of North Carolina (1860), and, by other authors writing about North Carolina fauna (Barber, Hamnett, and Raver 1959; Hamnett and. Thornton 1953; Hamilton 1943). Certainly there would have been a wide variety of game available for the Indian inhabitants of Gio-104, including opooaums, rabbits, racoons, deer, quail, turkeys, ducks, turtles, frogs, and crayfish. jne mussel shell was found in stinking Quarter Creek near the site, and was identified by Dr. Hendrickson as sp. Unio which is common in North Carolina streams. There may have been more mussels here in the past, but the stream is now rather polluted. However, the channel is quite narrow and the water shallow—not an ideal place to find mussel shell beds or significant populations of sizeable fish.

TABLE 11
COLOR OF FIRED BRIQUETTES AT
100° INTERVALS

Source	0°C	300°C	400°C	500°C	600°C	700°C
N1-E1	Red	medium orange-brown	medium orange-brown	dark brown	brown	brown
N1-E1 - Sand	Red	medium orange-brown	medium orange-brown	dark brown	brown	brown
S4-E5	Red	light-medium orangey brown	medium orangey brown	reddy brown	brown	brown
S4-E5 + Sand	Red	light-medium orangey brown	medium orangey brown	reddy brown	brown	brown
Field #3	Yellow	orangey grey	light orangey grey	orangey tan	orangey tan	orangey tan
Field #3 + Sand	Yellow	orangey grey	orangey grey	orangey tan	orangey tan	orangey tan
Creek	Grey	dark grey	dark brown-grey	grey-brown	orangey tan	orangey tan
Creek - Sand	Grey	dark grey	dark brown-grey	grey-brown	orangey tan	orangey tan

CONCLUSIONS

We remain unsure of the reason why through some 8,000 years Indians of the Archaic, then Woodland, and finally Historic period, selected the area of GF-104 to inhabit. Not only does this creek, as creeks go, seem rather unattractive from the point of view of any specially available resources, but based on our local site survey, this spot seems the only place along North Prong Stinking Quarter Creek for quite some distance showing a sizeable utilization through time.

We were surprised to find only one small feature in the subsoil of the site which might have resulted from Indian activities on the site. There were no post molds, no trash pits (other than perhaps feature #1), no burials, etc. Perhaps this is due to the area of the site sampled through excavation, conditions of the subsoil, or cultural practices of the aboriginal inhabitants. However, it might lend some support to the idea that the site was used as a temporary camping ground, perhaps by wandering groups not even engaged in a stable seasonal round. This

area would have provided them with spring-fed creek water, vegetable and animal foodstuffs, and close access to part of the Carolina Slate Belt. Also of potential importance is the location of the site right along the historically known Trading Path extending northeast to southwest across the North Carolina piedmont from the Roanoke River to the Catawba country southwest of present-day Charlotte, North Carolina. This might help explain the latest occupations on the site, but not the earlier ones, unless the Trading Path has considerable antiquity (see Rights 1971: Plate 29 and pp. 101-102). Whatever the reason, the site, like many others in the piedmont of North Carolina, shows an interesting cultural continuity of traditional utilization from Archaic times through Woodland and into Historic times.

We began our investigations at GF-104 with the hope of recovering certain sorts of information about the Indian inhabitants of the area, but finding all of the cultural debris jumbled up in the cultivated soil zone forced us to change somewhat our orientation. This has led us to the question of how one deals systematically with such disturbed sites—sites which are usually passed over by archaeologists in the search for undisturbed deposits. This problem would seem particularly important in an areas such as the North Carolina piedmont where so many sites appear to be of this sort. Realizing that all archaeological deposits represent imperfect preservation of data regarding the totality of a past cultural system anyway, this seems best viewed as just an extreme case in the continuum.

So now we are becoming interested in how to best recover the information from such sites through systematic surface sampling and test excavation, as well as looking into how our samples compare to the sampling represented in other collections, such as the collections of the farmers who cultivate the land. Much remains to be done along these lines, and it is in such a direction that work regarding the GF-104 site continues.

BIBLIOGRAPHY

Barber, Lunette, W. Hamnett, and D. Raver
1959 Our Wildlife Neighbors. North Carolina Wildlife Resources Commission. Raleigh.

Binford, Sally
1968 Variability and. Change in the Near Eastern Mousterian of Levallois Facies. In New Perspectives in Archaeology (ed. L. Binford and. S. Binford), pp. 49-60. Aldine Co. Chicago.

Coe, Joffre L.
1964 The Formative Cultures of the Carolina Piedmont. Transactions of the American Philosophical Society, No. 54 (part 5). Philadelphia.

Hamilton, William J. Jr.
1943 The Mammals of Eastern United. States. Comstock Co. Ithaca, New York.

Bennett, William L. and. D.C. Thornton
1953 Tar Heel Wildlife. North Carolina Wildlife Resources Commission. Raleigh.

Lawson, John
1860 The History of Carolina. Strother and. Marcom. Raleigh. original publication date 1714)

Pinchot, Gifford and. *W.W.* Ashe
1897 Timber Trees and Forests of North Carolina. North Carolina Geological Survey Bulletin, No. 6.

Rights, Douglas L.
1971 The American Indian in North Carolina. John F. Blair, publisher. Winston Salem, North Carolina. 2nd edition.

Wilmsen, Edwin N.
1970 Lithic Analysis and Cultural Inference: A Paleo-Indian Case. Anthropological Papers of the University of Arizona, No. 16. Tucson.