This document has been checked for information on Native American burials. No images considered to be culturally insensitive, including images and drawings of burials, Ancestors, funerary objects, and other NAGPRA material were found.

UNIVERSITY OF GEORGIA
Franklin College of Arts and Sciences
Department of Anthropology
Laboratory of Archaeology

UNIVERSITY OF GEORGIA
LABORATORY OF ARCHAEOLOGY SERIES
REPORT NUMBER 82

ARCHAEOLOGICAL EXCAVATION AT FAIRCHILDS LANDING AND HARES LANDING, SEMINOLE COUNTY, GEORGIA

JOSEPH R. CALDWELL

Athens

Archaeological Excavations at Fairchilds Landing and Hares Landing, Seminole County, Georgia

By
Joseph R. Caldwell

Edited by
Mark Williams, Karen Y. Smith,
Shawn Johns, and **Kelly Brown**

Forewords by
Mark Williams and **Karen Y. Smith**

University of Georgia Laboratory of Archaeology
Laboratory of Archaeology Series
Report Number 82
2014

Foreword 2014

Mark Williams

Both Karen Smith and I have talked about producing this report for almost 20 years. The history of its creation is quite involved, but we believe the story is worth recording for posterity. Archaeologist Joe Caldwell worked on the draft for this report for many years, mostly in the mid to late 1950s, but continued working with it a bit into the early 1970s. He had intended to have it published by the Smithsonian Institution who had funded the excavations, but for many unknown reasons it was never completed. We believe that one likely reason was that Joe knew the site and its data proved that the chronological sequence for the famous Kolomoki site excavated in the late 1940s and early 1950s by William Sears was wrong. Social politics being what they were, Caldwell, however, wanted to publish a thorough and air-tight report that showed Sears' error. In aiming to create such a report, he probably attempted a more ambitious project than he had time to complete. At the time of his death in December of 1973, he had not worked on the report in several years, although he was still very fond of the dataset.

Caldwell had been on the faculty of the UGA Anthropology Department from 1968 until his death. He talked about publishing his own manuscript in the UGA Laboratory of Archaeology series, but this never happened (until now). His partially typed and hand-written manuscript for Fairchilds and Hares was located and integrated within the UGA Laboratory of Archaeology Manuscript files soon after his death as Manuscript 68. In the late 1970s Caldwell's student Betty Smith created a version of the report that was heavily edited and somewhat abbreviated. Her version also was not published in any real form and essentially stayed as a manuscript in its own right. A few archaeologists have acquitted Xerox copies of her version over the past 40 years. Another limitation of Smith's version of Caldwell's report was that many of the computer tools available today were not available to Smith when she was attempting to create version of Caldwell's manuscript. Our version does not replace hers, but is a new version that we believe is closer to Caldwell's original. After struggling with Caldwell's incomplete manuscript ourselves, we have gained more respect for the version that Smith created in 1975.

To produce the current version, we proceeded as follows. We discovered quickly that the Caldwell manuscript, although mostly typed, had so many hand corrections that it was not possible to use optical character read software on a scanned copy of the text. UGA archaeology student Shawn Johns began the process of laboriously typing the manuscript in Microsoft Word. Eventually archaeology student Kelly Brown was also brought into the project to continue the typing of the text and to create Microsoft Excel tables from all the hand-written tables in the draft report. Williams spent much time helping to read or interpret other hand-written sections, and decipher abbreviations that were too frequently placed into the text.

While our goal was the creation of a lightly edited version, some editing was deemed appropriate. These included modern conventions of capitalization, reference style, and the standardization of spelling. Fairchilds Landing and Hares Landing, for example, are here standardized with no apostrophes before the final letter. Many of the feature descriptions were presented in incomplete sentences, and we have chosen to complete these for ease of readability.

As stated earlier, the most significant part of this report is the stratigraphic view it presents on the ceramic types of southwestern Georgia during the Woodland period. Caldwell paid close attention to ceramic variations of many sorts in his tables and report. Vital to this was the recognition by him of over 150 separate designs or motifs in the complicated stamped pottery

of the site (variously called Swift Creek, Fairchilds, and Hares). He cataloged these initially using Roman numerals (and a few Greek letters). Eventually he converted all these to normal Arabic numerals, but we only recently determined the relationships—they were not simple I=1, II=2, V=5 for example. We are including this chart as Appendix 4 here for any future researchers who wish to study the raw data further at the UGA laboratory of Archaeology. For the text presented here we have converted all instances of Roman Numerals to their Arabic equivalents.

We also have scanned all the stamped sherd motif data (sherd photographs, drawings, and quantities by level) that Smith did not include in here attempt and are including it here (Appendix 3) as perhaps the most important new dataset from Fairchilds Landing. Also we are including, as he apparently intended to do, a short paper he wrote, but apparently never submitted to *American Antiquity* in which he laid out clearly the reasons that Sears was mistaken in his Kolomoki chronology. This is presented here as Appendix 1.

Current readers will find the overall presentation a bit disjointed, since he was obviously planning many analyses that he never completed. This is undoubtedly one of the reasons he never completed the report. Hopefully some future students will see the value of continued analysis of this valuable collection.

Figure 2, the Fairchilds Landing excavation map is the product of work by Betty Smith in 1975, Karen Smith in the last few years, and myself in 2014. There was no surviving single map of the excavations, and I believe that this one is about as close as possible at this late date.

We have no information on the locations of Features 3, 6-8, 17, 23, 40, 47-49, and 54. The Conclusion section of the report obviously represents a variety of interesting ideas Caldwell was toying with, but is unfortunately quite disorganized and incomplete. We have chosen to leave it as it was found in the draft.

Foreword 2014

Karen Y. Smith

Introduction

The results of Joseph R. Caldwell's excavations at Fairchilds Landing, a Woodland period shell midden on the lower Chattahoochee River, in the spring of 1953 were never published, meaning that the significance of the site and the importance of what he did there cannot be fully appreciated today. Yet, one need only follow the events and attitudes chronicled in Knight and Schnell (2004), Pluckhahn (2007), and Trowell (1998) to realize that Caldwell's work at Fairchilds Landing marked a critical turning point in the public and private debate over the chronological sequence at – Kolomoki, the more visible and visually more impressive site upstream. In the following pages, I review the historical and social context for what Trowell (1998) termed "the Kolomoki Problem"; although, here the focus is on the decade or so during which the new Kolomoki chronology was openly discussed, that is, before it became a problem. Additional citations and correspondence not included in previous treatments of the debate over Kolomoki are included here to make specific points. My intent is to show that Caldwell's work at Fairchilds Landing marked a turning point in an important and active debate but that it did so because he marshaled a particular kind of archaeological evidence – stratigraphic superposition – evidence viewed at the time as being superior to, or the final arbiter of, chronological hypotheses formed from seriation. I also suggest that Caldwell's already long-term professional and personal relationships allowed him simply to communicate his findings without full public dissemination of data supporting his claims. With these social and historical contexts in mind, one can review the evidence Caldwell had on hand but never published in the manuscript that follows.

The Debate over Kolomoki

Joseph R. Caldwell and William H. Sears were key participants in what has been described as "one of the most fascinating controversies in the history of North American archaeology" (Knight and Schnell 2004:1), known colloquially as "the Kolomoki Problem" (Trowell 1998). But the problem could well be cast as a decade-long debate, spanning the 1950s, that took place privately in correspondence (see Pluckhahn 2007) and publically primarily in a series of *American Antiquity* book reviews (Caldwell 1960; Fairbanks 1955; Sears 1959; Williams 1958; see also Knight and Schnell 2004). What was the issue that held the attention of so many eastern North American archaeologists for a decade or more? The problem involved Sears's ordering of "fine chronological subdivisions" at the Kolomoki site by means of ceramic seriation (Sears 1962:117). The debate was over whether or not Sears's proposed ceramic chronology – at odds with the only other one available at that time in the region (Willey and Woodbury 1942; Willey 1949) – was correct.

As described by Trowell (1998) and Pluckhahn (2003), work at Kolomoki had been sporadic until Sears's assignment to the site in 1948. Over the next five years, however, Sears produced three seasonal reports (Sears 1951a, 1951b) and a final report (Sears 1956), a dissertation at the University of Michigan (Sears 1950), and a series of journal articles (Sears 1953), all of which either documented or drew on his recent work at Kolomoki. His prompt publication of seasonal reports and ultimately the final report in 1956 was admired even by critics of his interpretations. By the time Sears submitted his dissertation to the University of Michigan in 1950, he had developed a new ceramic and occupational sequence for Kolomoki. James B. Griffin, as his dissertation supervisor, had endorsed it. Yet, the details of his ceramic

chronology were at odds with the one to which most southeastern archaeologists at the time referred, and so a debate ensued.

Willey and Woodbury (1942; see also Willey 1949) claimed a complicated stamped (Swift Creek) to incised/punctated/painted (Weeden Island I) to check stamped (Weeden Island II) ceramic continuum, with temporal overlap among these decorative modes. Sears's proposed an incised/punctated/painted (Weeden Island Ia) with a somewhat early version of complicated stamped in small amounts to a mixed complicated stamped/incised/punctated/painted (Weeden Island Ib) to a late version of complicated stamped (Kolomoki/Weeden Island II) ceramic sequence. In more simple terms, in Willey's version Swift Creek preceded Weeden Island. In Sears's version, however, Weeden Island preceded the version of Swift Creek he named Kolomoki. Because chronological situations in many parts of the East were still being sorted out, and Willey's sequence, although based on stratigraphic excavations in the Florida panhandle, had yet to be tested at other sites within the panhandle and elsewhere, chronological revisions and refinements were not out of the question in 1950. Thus, from at least 1950 until sometime during 1954, it seems that, although scholars scrutinized Sears's proposal, most who wrote on the subject ultimately resigned to give Sears's the benefit of the doubt (Pluckhahn 2007:68–70). Even Willey (1953:371), whose own work stood to be revised significantly if Sears's were right, was prepared to be "swayed" by Sears' argument (letter Willey to Waring; cited in Pluckhahn 2007:70). So, what changed between 1953 and 1954?

The Turning Point

Privately – in 1953 – Caldwell began to describe the results of his own work at a shell midden site south of Kolomoki called Fairchilds Landing to colleagues who had not fully embraced the sequence proposed by Sears.

To Caldwell and others, the work at Fairchilds Landing appeared to provide unequivocal stratigraphic evidence – what Gordon Willey called "the real dope" – demonstrating that Sears' Kolomoki ceramic sequence was in error (letter Willey to Waring; cited in Pluckhahn 2007:70). That others were learning of the Fairchilds Landing results even in the absence of a published report of the work is evident in letters written to Caldwell and in references to the site or to "Caldwell, personal communication" made on the part of those engaged in the public side of the debate (Williams 1958:322; see also Knight and Schnell 2004:6). Caldwell also wrote a response to Sears sometime between Fairchilds Landing and his work in 1954 at Hares Landing but the treatise, apparently intended for *American Antiquity*'s Notes and Reviews, was never published (Appendix 1 herein).

What did Willey mean when he said Caldwell had "the real dope"? In short, seriation was viewed, and rightly so, as a chronological hypothesis. Hypotheses need to be tested and weighed against the evidence. Stratigraphy, on the other hand, which is what Caldwell had unearthed at Fairchilds Landing, *is* evidence. Caldwell had *real* information on the sequence; despite the logical arguments put forth by Sears, at the end of the day he still only had a hypothetical sequence.

Radiocarbon dating was still quite new – results were trickling in and routinely met with skepticism. In the absence of it, the only acceptable test of a proposed chronology built using seriation, such as Sears's Kolomoki chronology, remained to put a shovel in the ground: "The final proof [that a seriation is a chronology was still] in the spade" (Kroeber 1916:20). Caldwell's ceramic sequence was "the real dope", as Willey put it, or the "proof" because it was derived from stratigraphic evidence which invoked the law of superposition rather than an

ambiguous notion of popularity or one's personal ideas about the direction or nature of change. Wittingly or not, Caldwell had put Sears's proposed sequence to the test, and it was becoming apparent that the sequence did not pass the spade test. Between 1950 and the early 1960s, the stance of those who addressed Sears' Kolomoki sequence in print moved from deference (Fairbanks 1952) to doubt (Fairbanks 1955) to dismissal (Williams 1958; Caldwell 1960). Caldwell (1960:433) was one of the last to dismiss publically the Kolomoki chronology:

> In order to put Kolomoki subsequent to Weeden Island and equivalent to Mississippian times, Sears was forced to discount Willey's stratigraphic evidence at Mound Field in Florida, my own stratigraphic sequence at Fairchilds Landing in Georgia, and a stratigraphic sequence at the Kolomoki site itself.

The "descent into silence" (Knight and Schnell 2004:7) came about not because many archaeologists "preferred to pretend that [Kolomoki] wasn't there and ignored it" (Sears 1992:66). Rather, as Knight and Schnell (2004:7) point out, by 1960, to Caldwell and many others the issue had been resolved:

> Actually, I think most workers are now beginning to believe that Sears did make a blunder and that he has compounded this by his preoccupation with the idea of a "Mature Mississippian". (Kelly to Caldwell, letter, February 1960)

In a reflective piece written some forty years later, Sears (1992:66) acknowledged his interpretations of the Kolomoki data had been misguided by a lack of stratigraphic evidence that could have been used, were it available, to anchor his seriation and by his own perception of similarities between Kolomoki and Mississippian material culture. But if Sears also could be faulted at the time for "the lack of use of multiple working hypotheses" (Williams 1958:322) to sort through the chronological possibilities, Caldwell shoulders the responsibility for failing to produce a public account of the material evidence to support his counterclaim, relying instead on "heavily unpublished or inadequately published materials" which only he "controlled" (Sears 1959:274).

The Fairchilds Landing report apparently was slated to be published as a BAE Bulletin in the River Basin Report series with a submission schedule of fall 1954. However, despite the urging of his superior J. C. Harrington, the Regional Chief of Interpretation for the National Park Service, to "not [make] the Fairchilds Landing report too ambitious a project and too comprehensive … to make it beyond the scope of the BAE series" and also "to complete the manuscript just as soon as humanly possible" (Harrington 1955), for reasons unknown the manuscript never made it to print.

One wonders if the Kolomoki debate would have played out differently had Caldwell followed through with Harrington's request. Today still the Fairchilds Landing site report languishes only in manuscript form and in a much trimmer version compiled by Betty Smith, which too is not widely available. The manuscript that follows, thus, brings Caldwell's influential work at Fairchilds Landing to the public and professional stage for the first time.

River Basin Surveys

By the 1930s, the federal government had begun to consider new ways in which major rivers and their valleys could be utilized. Hydro-electric dams and large reservoirs, politicians and engineers determined, were the solution to power and recreational needs while at the same time solving three major problems: erosion, flooding, and navigation. By 1940, hundreds of dams were either being planned or were already being built in order "to develop the river valleys of the country" (Brew 1947:212). The scale of the threat to archaeological resources was unprecedented, but it was not until the mid-1940s that archaeologists collectively realized something had to be done. The Smithsonian Institution, under the direction of Frank H. H. Roberts, Jr. of the Bureau of American Ethnology, was the lead agency charged with managing the effort to salvage "vital information of American prehistory … before the waters rise (Brew 1947:209; see also Lyon 1996:203). With severely limited funding and staff compared to the monumental river basin projects in the pipe, the Smithsonian entered into agreements with local institutions to carry out survey work and, in some cases, subsequent salvage excavations. One easily senses that these were not the leisurely pursuits of a WPA archaeologist with tens to hundreds of laborers on the payroll. Rather, River Basin Survey projects had little or, in some cases, no federal appropriations and a timeline driven by dam construction.

The Jim Woodruff Lock and Dam was the first of three dams to be built on the lower Chattahoochee River -- the stretch between Columbus, Georgia and the confluence of the Chattahoochee and Flint rivers. Construction of the dam began in 1947, just a mile or so north of Chattahoochee, Florida and the lake (now called Lake Seminole) opened 10 years later. The result was the inundation of 37,500 acres of land in Seminole and Decatur counties, Georgia and Jackson County, Florida (White 1981:1). Probably close to a hundred archaeological sites now lie beneath these waters. Fairchilds Landing and Hares Landing are among them.

Under the auspices of the Florida Park Service, Ripley P. Bullen conducted a surface survey and limited testing on the Florida side of the river in the fall of 1948. That same year, Arthur R. Kelly, chair of the newly reestablished Department of Anthropology at the University of Georgia, began to survey for archaeological resources on the Georgia side. This is also the year that Sears was hired to start working at Kolomoki (Trowell 1998:43). Significant rainfall in 1948 caused considerable flooding and delayed Kelly's work on the Chattahoochee River until the following season (Kelly 1950:27, Kelly 1960:1). Thus, Kelly spent his first season primarily at sites in and around Bainbridge, Georgia on the Flint River, as well as apparently being involved in Sears's survey work at Kolomoki. The following year, relying heavily on reconnaissance from the river because the area was still "a wild and largely inaccessible woodland with heavy underbrush" (Kelly 1960:24), site searches were made in river cuts, upturned trees, and animal disturbances (Kelly 1950:27).

On the eastern bank of the lower Chattahoochee River, Kelly and a local historian observed a shell exposed deposit below a two-foot thick layer of alluvium at the historic river boat landing of Fairchilds. Caldwell later described the view (Caldwell 1975:3):

> … as a twenty-foot bluff composed of red clay overlaid by light yellow sand upon which were layers of mussel shell and dark earth. The whole was capped by a deposit of tan alluvial sand supporting trees and a dense undergrowth.

Caldwell at Fairchilds Landing

It is unclear, though not critical, which of two years Caldwell worked at Fairchilds Landing. The typed manuscript indicates he was there in 1952 (Caldwell 1978:1). The archaeological site file for 9SE14 also lists 1952 as the year Caldwell worked at Fairchilds Landing. However, a notation on one schematic site plan entitled "Layout 9SE14 and Fowltown" indicates "during flood at 11:15 May 4, 1953 water was 54" below BMA", so someone was at the site during the flood event in 1953. Further, an aerial photograph taken in December 1952 does not reveal an area cleared for excavation. This would seem to favor the year 1953. A draft report of the work at Hares Landing, written sometime in 1954 and probably by Caldwell mentions National Park Service excavations at Fairchilds Landing in 1953 (UGA Folder 8). Finally, in *American Antiquity* Notes and News, July 1953, is a note that "Caldwell is carrying on excavations at Fairchilds Landing. That site is of particular significance because it appears to be stratified which is rare in Georgia."

In any event, Caldwell approached the site with an excavation strategy that would allow the recovery of artifacts from visibly discrete depositional units. The end product Caldwell's work was a large block excavation, measuring 45-by-35 feet in area, excavated in 'physical layers' of alternating sand and shell deposits (Levels A through F). Potsherds and other artifacts were collected from each physical layer as it was removed. In instances of uncertainty, Caldwell would assign artifacts "to both zones to which it was contiguous" (Caldwell 2014:9). To get to the point where he could view these layers in order to remove them, he opened up a series of exploratory trenches. First, he extended a trench along the river bank where Kelly had worked a few years earlier. Second, he re-excavated one of Kelly's trenches in the northern midden.

Finally, I am delighted to have his work see the light of day and hope the comments presented here help put the importance of the Fairchilds Landing excavations into a proper historical and theoretical context.

References Cited

Anonymous

1953 Notes and News. *American Antiquity*, July.

Brew, J. O.

1947 Symposium on River Valley Archaeology. *American Antiquity* 12(4):209-225.

Caldwell, Joseph R.

2014 Archaeological Excavations at Fairchilds Landing and Hares Landing, Seminole County, Georgia. *University of Georgia Laboratory of Archaeology Series* 82. Athens.

1960 Review, untitled. *American Antiquity* 25:432-434.

1978 Excavations at Fairchilds Landing and Hares Landing. Edited by Betty Smith. Manuscript on File at the University of Georgia Laboratory of Archaeology.

Fairbanks, Charles F.
1952 Creek and Pre-Creek. in *The Archeology of Eastern United States*, edited by J. B. Griffin. Chicago, University of Chicago Press. pp. 285-300.

1955 Review of Excavations at Kolomoki, Season III and IV, Mound D, by William H. Sears. *American Antiquity* 20(3):289-291.

1956 *Archaeology of the Funeral Mound*. U.S. National Park Service. Washington.

Harrington, J. C.
1955 Letter on file at the Laboratory of Archaeology, University of Georgia.

Kelly, Arthur R.
1950 Survey of the Lower Flint and Chattahoochee Rivers. *Early Georgia* 1:

1960 A Weeden Island Burial Mound. *University of Georgia Laboratory of Archaeology Series Number* 1. Athens.

Knight, Vernon J., and Frank Schnell
2004 Silence over Kolomoki: A Curious Episode in the History of Southeastern Archaeology *Southeastern Archaeology* 23(1):1-11.

Kroeber, Alfred
1916 Zuni Potsherds. *Anthropological Papers of the Museum of Natural History* 18(1):7-37.

Lyon, Edwin A.
1996 *A New Deal for Southeastern Archaeology*. University of Alabama Press, Tuscaloosa.

Pluckhahn, Thomas J.
2007 "The Mounds Themselves Might be Perfectly Happy in their Surroundings": The "Kolomoki Problem" in Notes and Letters. *Florida Anthropologist* 60(2-3):63-76.

Sears, William H.
1950 *The Prehistoric Cultural Position in the Southeast of Kolomoki, Early County, Georgia*. Ph.D. Dissertation University of Michigan, Ann Arbor. University Microfilms, Ann Arbor.

1951a Excavations at Kolomoki, Season I. *University of Georgia Series in Anthropology Number* 2. Athens.

1951b Excavations at Kolomoki, Season II, Mound E. *University of Georgia Series in Anthropology Number* 3. Athens.

1953 Excavations at Kolomoki, Season III and IV, Mound D. *University of Georgia Series in Anthropology Number* 4. Athens.

1956 *Excavations at Kolomoki: Final Report*. University of Georgia Press, Athens.

1959 Review, untitled. *American Antiquity* 25:274-276.

1992 Mea Culpa *Southeastern Archaeology* 11(1):66-71.

Trowell, Chris
1998 A Kolomoki Chronicle: The History of a Plantation, a State Park, and the Archaeological Search for Kolomoki's Prehistory. *Early Georgia* 26(1):12-81.

Williams, Stephen
1958 Review of Kolomoki Final Report by William H. Sears. *American Antiquity* 23(3) 321-323.

White, Nancy
1981 Archaeological Survey at Lake Seminole. *Archaeological Research Report 29.* Cleveland Museum of Natural History, Cleveland, Ohio.

Willey, Gordon R.
1949 Archaeology of the Florida Gulf Coast. *Smithsonian Miscellaneous Collections* Volume 113. Washington, D.C.

1953 A Pattern of Diffusion-Acculturation. *Southwestern Journal of Anthropology* 9:369-384.

Willey, Gordon R., and Richard W. Woodbury
1942 A Chronological Outline for the Northwest Florida Coast. *American Antiquity* 7 (3).

Table of Contents

List of Figures

List of Tables

Introduction

The excavations at Fairchilds Landing (9SE14) and at Hares Landing (9SE33), both in Seminole County, Georgia, (Figure 1) were carried out by the National Park Service River Basin Salvage Program. This was part of a combined effort of several public agencies to rescue some of the history and archaeology of the Jim Woodruff Reservoir. The writer wishes to express his thanks to those institutions and to the many individuals whose interest and participation permitted the investigations to reach a successful conclusion.

Fairchilds Landing was located during the initial archaeological survey of the Jim Woodruff Reservoir in 1948 (Kelly 1950:27-33). Hares Landing, which had been previously discovered by Clarence B. Moore (1907:429-437) was not relocated until the reservoir was cleared in 1954.

At Fairchilds Landing in 1948, Arthur R. Kelly of the University of Georgia and Frank S. Jones, Decatur County historian, discovered a large shell midden buried below recent alluvial sand. In the following season the site was investigated by the University of Georgia Summer Field School in Archaeology in 1949. Clear indications of ceramic stratigraphy were obtained. An upper zone showed a significant number of broken pottery fragments of a variety called Wakulla Check Stamped, then provisionally equated with the Weeden Island II period of northwestern Florida (Willey 1949:437-438). At a lower level were sherds of Swift Creek Complicated Stamped associated with other types, all together resembling the Weeden Island I period of northwestern Florida. Lower still some of the Florida types were absent and the pottery assemblages consisted only of complicated stamped pottery and plain sherds. In the subsoil of the site were a few varieties of earlier sherds.

The greater part of the occupation at Fairchilds Landing was during what we now call the latter part of the Swift Creek co-tradition, approximately equivalent to the end of the Middle Woodland period in other parts of the eastern United States. Kelly's examination had shown that there was a ceramic sequence at this site of extreme importance to the problems of cultural succession in southwestern Georgia and northwestern Florida, particularly in reference to the important Swift Creek pottery style, and this led him to recommend the site to the Smithsonian Institution and the U.S. National Park Service for additional investigation. Accordingly, the next campaign was carried out by the National Park Service River Basin Salvage Program in the spring of 1952. Kelly made all of his notes and materials available for study and assisted the investigation in every way.

At Hares Landing in 1954, J. C. Johnson, who resides in the vicinity, was looking over the areas which had been cleared for the new reservoir. He found the burial mound which had been excavated many years ago by Clarence Moore, and adjacent to it he located a whole series of discontinuous shell areas which had been occupation sites. The writer then made a brief reconnaissance followed by test excavations. Four distinct pottery complexes were found to be horizontally separated at this site, named beginning with the earliest: Weeden Island, Midden J, Cummings, and Wakulla. An interesting early variety of the Cummings pottery complex was found stratigraphically in Midden E, and the position of two of the Weeden Island and Wakulla complexes had been ascertained at Fairchilds Landing. The data from Hares Landing, then, filled in the upper part of the Fairchilds Landing sequence.

The information recovered from the two sites was primarily concerning the details of pottery succession and change, information which had been badly needed in this area. As is usual among the later prehistoric sites of the southeastern United States, fragments of pottery

vessels far outnumbered other artifact varieties. The main outline of ceramic sequence, however, defined as successive pottery complexes each representing a specific interval of time, will assist in working out the terms of cultural sequence in the area, and has already yielded much information.

The bulk of our data is ceramic, but the very adequacy of the samples have permitted some conclusions of general interest which have a bearing on some problems of cultural process which are central to the study of culture as well as to the study of art.

Thousands of sherds were recovered which were decorated in the intricate and often pleasing style referred to as complicated stamped. These showed in very specific terms changes which had taken place in the concept and execution of pottery ornament over a long period of time. These changes all seemed to point in one direction. Without relying too heavily on our subjective impressions we could recognize in the gradual diminution of the stamping tool, decrease in the sizes of the lands and grooves of the impressed designs, emphasis on individual stamped impressions rather than on the total appearance of the vessel, actual numerical loss of designs used, and increasing faintness of impressions, that one of the things which happened during the history of Fairchilds Landing was a declines in virtuosity in the art of paddle stamping pottery. Hares Landing showed this seeming trend carried farther. In the period following Weeden Island only one or two design motifs out of hundreds continued to be used, and the application of these to the pots became fainter until stamped ornament finally disappeared from the contemporary pottery complex.

The situation just described raises some questions which are discussed in the concluding section of this report. What is the most useful way to account for the changes which took place in pottery decoration? Are we actually justified in considering the mass of changes to have direction? If this should be true, how can the interest of the individual artisans be related to regularities of ceramic development which began before Fairchilds Landing was occupied and ended after it was abandoned? What bearing would such a formation have on the concept of cultural drift? Finally, could such a formulation be fruitfully applied to the history of any art style?

Excavations at Fairchilds Landing

Before its recent inundation in the Jim Woodruff Reservoir, the old plantation landing of Fairchilds was on the eastern side of the Chattahoochee River, 9 miles above its confluence with the Flint. It was 1.5 miles northwest of the cross roads settlement of Fairchilds, in Seminole County, Military District 3, Lot Number 196. Prior to the time the property was acquired by the Government it was owed by Bartow Saunders of Donalsonville, Georgia, who kindly permitted the University of Georgia to make preliminary explorations.

The Chattahoochee Valley was about 7000 feet wide at this point, the river followed a meander pattern, cutting away the Georgia bank and building a large flood plain on the Florida side. As one approached Fairchilds Landing from the river it appeared as a 20 foot high bluff, composed of red clay overlaid by light yellow sand upon which were layers of mussel shell and dark earth, and finally a deposit of tan alluvial sand supporting trees and a dense undergrowth.

The lower clay exposure resembled the red clay of the edge of the valley 750 feet inland and is probably the deposit called the Flint River Formation. At a point only few feet upstream the clay was replaced by successive layers of white, blue, purple, and crimson clays and imbedded in the white clay were some petrified wood.

The red clay exposure extended to within about 7 feet of the surface of the ground. The overlying sterile sand was of varying thickness, ranging from ----- to ----- inches. It did not show banding or other indication of having been deposited at successive times. The upper part was stained gray-brown by organic materials and was penetrated by occasional root molds an aboriginal pits.

Human occupation had begun on the surface of this sand zone. Layers of mussel shells alternated with darker sand with dark brown deposits of mixed sand, organic, and cultural debris. Along the river exposure the human occupation zones reached a thickness of about 20 inches.

The prehistoric occupation levels were succeeded by a heavy deposit of sterile alluvial sand which varied from 2 to 4 feet thick. Midway from the bottom of this layer was a thin line of charred wood and recent cultural material referable to a turpentine still which was said to have existed here about 75 years ago.

On the summit of the bluff was a considerable stand of trees with dense undergrowth which had to be removed before excavations could begin. A short count of trees on the spot included the ubiquitous yellow pine, willow oak, red oak, live oak, sweet gum, tupelo gum, sassafras, poplar, black walnut, hickory, locust, persimmon and plum. Spanish moss festooned their branches and nearer the ground were cassina, sumac, muskadines, blackberries, and, of course, poison ivy and poison oak.

Fairchilds Landing had evidently provided well for the people who chose to live there. In addition to edible seeds and roots, abundant game, fish, and shell fish, the river bank provided sand, clay, red, blue, and purple, and yellow pigment, and the numerous chips and spalls indicated that the siliceous petrified wood under the bluff was sometimes used for the manufacture of cutting and scraping tools.

Horizontal and Vertical Control

In staking out the site for excavation, two zero lines were established, one north-south along the river bank, and the other perpendicular at what was then presumed to be the northern margin of the site (Figure 2). From River Zero any parallel line east of it was described as 1, 2, 5, 10, or 100 or more feet east. From Zero North any parallel line southward could be located in

a like manner. Distance from River Zero is always given first and where coordinated are used is always above the line. For example 5 East or 5/ East always means 5 feet east of River Zero. Distances from North 0 are always given second, or in the case of coordinated, below the line. /10 South always means 10 feet south of North 0. In Figure 2 it will be seen that 110/90 means 110 feet east and 90 feet south of the river and northern zeros respectively. Any line can be described by extending one of the coordinates as shown in the illustration, but lines not parallel to the zeros have to be located by describing to points. Rectangular areas of any size are described by giving the notation for two sides.

An arbitrary benchmark (BMA) was established by driving a nail into the base of a sweetgum tree at coordinate points 9.0 East / 9.5 South. There was no instrument available and levels were extended from this point by means of string and line level. The elevation of BMA was determined approximately by noting that during the flood of the river on May 4, 1953, high water reached to within 54 inches of the benchmark.

River Profile

A profile was cut along the river bank 10 feet east of the river Zero line and was extended 70 feet between the 10/60 and 10/130 stakes (Figures 3, 7, and 8). The sequence of strata was essentially as already described, but it was seen that the occupation zone included portions of two distinct shell middens, a southern midden downstream and a northern midden upstream. These were separated on the profile wall, which projected about 5 feet toward the river. We cleared off sections of the two shell deposit noting that several pits had been dug into them in prehistoric times. The northern midden here had a thickness of only 6 inches, but later excavations showed that this was only the edge of it. It increased inland toward the northeast to become a sizable shell midden. The University of Georgia explorations along the river bank had been in the southern of the two shell heaps. We attempted little further work there beyond noting that at stake 110 South the southern shell midden bifurcated into upper and lower sections, the upper 7 inches thick separated by a 4 inch deposit of tan sand from the lower, which was 3 inches thick. This separation had been noted by Kelly. Our own sample of sherds from the upper layer of shell turned out to mostly plain and Kolomoki Complicated Stamped with some Swift Creek II Complicated Stamped sherds which we have named Fairchilds Complicated Stamped. Decorated sherds from the lower shell level were all Kolomoki Complicated Stamped. Apparently the lower level of shell was deposited during the Kolomoki period, the upper, in Weeden Island times.

Southern Shell Heap

Features 19, 20, 21, and 22 were pits and disturbances in the southern shell midden. Although they contained some Kolomoki sherds, all are dateable to the Weeden Island period.

Feature 19, on the edge of the University of Georgia excavations, was the corner of an irregular pit or other disturbance, penetrating 12 inches below the surface of the upper shell level. It contained mussel shell, scraps of deer and terrapin bones, a few sherds of Fairchilds Complicated Stamped and one or two which appeared to be Kolomoki. It is assignable to the Weeden Island period on the basis of the latest materials.

Feature 20 was a circular pit cut from the top of the shell, 24 inches in diameter and 14 inches deep with nearly straight sides and a rounded bottom. In addition to mussel shells and a few deer bones, there was a small flint projectile point with a straight base and rounded corners. Sherds were small and fragmentary, many doubtless derived from the shell into which the pit

was dug. Twenty specimens were plain, 1 was Weeden Island Red Filmed with a thick wedge-shaped rim and the filming confined to the interior of the vessel. Another was Fairchilds Complicated Stamped of Motif 74, and 5 were probably Fairchilds Complicated Stamped, but too small or indistinct to show motifs. Six sherds were probably Kolomoki Complicated Stamped, again too small to show the motif. The pit evidently belonged to Weeden Island times.

Feature 21, nearly adjacent to the last, was nearly circular, 36 inches in diameter and 14 inches deep. In addition to shell and a few deer bones there were three sherds of a Fairchilds Complicated Stamped vessel, Motif 126 with a large folded rim, three others with indistinct decoration, one sherd of Carrabelle Punctated, one Fairchilds Cord Marked, one plain with a wedge shaped rim and incised line 17 millimeters below the lip, and another sherd from a crudely made miniature vessel with a similar incised line below the lip. This pit is ascribed to the Weeden Island period.

Feature 22 was an irregular pit or disturbance, 2 by 3 feet across penetrating 12 inches below the top of the shell. It contained, in addition to mussel shells, some deer bones, walnut hulls, the tip of a bone awl made of mammalian long bone, some fragments of coquina, and ferruginous rock. Sherds included 24 plain, 1 Carrabelle Punctated, and 13 complicated stamped. Of the latter, 7 were probably Kolomoki Complicated Stamped, but too small to show motifs. Another sherd was of Motif 87, probably intermediate between Kolomoki and Fairchilds Complicated Stamped, and another was Fairchilds Complicated Stamped, Motif 104. This feature is dated from the latest material in it as belonging to the Weeden Island period.

Northern Shell Heap

Sherds from the Northern Shell Midden indicated that the portion of it exposed along the river profile had been deposited during the Weeden Island period. Features 16, 27, 28, and 29 were pits and disturbances of the same date or slightly later.

Feature 16 was the edge of what had apparently been a circular pit about 5 feet in diameter, the preserved portion penetrating a depth of 15 inches. Whether it was intrusive from the top of the midden was not ascertained. The contents included shell, flint fragments, animal bones, and sherds. One section of mammalian long bone smoothed at the end had been used as some kind of tool. Sherds included a number of fragments from a vessel with a small folded rim with Motif 72. Other motifs present were 69, 94, 98, and 127. Four complicated stamped sherds were too indistinct to determine the motif, and there was one sherd of Mound Field Net Marked. All the recognized stamped motifs from this pit were among those which the stratigraphic sample showed continuity from Kolomoki to Weeden Island times. The finding of these together in Feature 16 is one additional bit of evidence that the suggested continuity is real.

Feature 27, situated about 8 inches from the last, was oval in horizontal section, 15 inches long by 12 inches wide, 10 inches deep, with sloping sides rounding to the bottom. It combined a mixture of sand and shell, with a few animal bones, flint chips, and some sherds. There was one sherd of Motif 77 and another of Motif 86, both probably Fairchilds Complicated Stamped. There were 12 plain sherds, one with medium size folded rim. This pit was probably dug during the Weeden Island period.

Feature 28 was another pit near the two last, 1 foot in diameter, 10 inches deep, with straight sides and a flat bottom. It contained only one flint fragment, a piece of bone, and an unidentifiable sherd.

Feature 29 was a deposit of fired shell between the northern and southern shell heaps and measured 4 by 2 feet in extent. Among the shells was a part of a restorable vessel of

Fairchilds Complicated Stamped, Motif 104, with a large folded rim, 2 indistinct sherds of the same type, and 3 sherds of Kolomoki Complicated Stamped, one of which was Motif 125. Judging from the latest material, the deposit belongs to Weeden Island times.

Expansion of UGA 1949 Unit 3

The northern shell heap along the river profile was only the edge, and midden thickened toward the northeast. About ___ feet beyond the UGA summer 1949 field school exploratory trench (Unit 3) had cut into a heavy deposit of shell. It was possible that the northern shell heap and the shell encountered in Unit 3 might be the same, and we cleaned out the old excavation with the plan of enlarging it (Figure 3).

The summer school excavation was 5 feet wide, extending from the riverbank east-west for 20 feet. It reached clean sand at a depth of nearly 5 feet from the surface except at the western end where discovery of a deep pit necessitated digging to a depth of 7 feet. The profile of the western end of the trench showed a separation of two shell layers which had been indistinguishably merged toward the east. The upper of these, 6 inches thick, was below narrow band of brown sand and the thick deposit of recent alluvial sand. The lower 6-12 inches thick, was separated from the upper by a 6 inch layer of brown sand. The complete clearing out of the Unit 3 excavation showed that this separation of layers continued along the northern profile for the entire distance of the trench though they were merged on the southern wall which was closer to the center of the shell heap. Apparently the separating layer of dark brown sand had developed and on the northern and northwestern edges of the shell heap, where it covered the earlier shell midden. When the last shell midden was deposited, the part of the earlier midden toward the center of the shell heap was still exposed and the upper shell merged with it without any separating layer of sand. Sherds counts made by University of Georgia students at the end of their season showed 56 sherds of Wakulla Check Stamped out of a total of 358 in the two 3 inch levels corresponding to the upper layer of shell. The next lower 3 inch level showed only 5 check stamped sherds out of 110, and in the thick deposits below that, only one check stamped sherd occurred.

The University of Georgia 1949 Field School had shown definitely that Wakulla Check Stamped appeared late in the history of the site. Since the separation of the upper and lower shell layers was better in the peripheral part of the shell heap beyond Unit 3, this area was selected for National Park Service investigation. The upper shell layer was labeled Shell Layer A, the intervening sand was labeled Layer B, and the lower shell layer was labeled Shell Layer C. A 10 by 20 foot area at the western end of Unit 3 was systematically stripped by the physical layers which had been first observed in the Unit 3 profile, and the alluvial sand above the top shell was taken out in 3 inch arbitrary levels. As each layer was exposed the surface was cleaned by trowel and searched repeatedly for evidence of intrusive pits so that their contents might not affect the sherd counts of the depositional layers. A number of such pits were discovered and troweled out before the depositional zone in which they occurred was removed.

The sherd counts and percentages in in this unit confirmed the University of Georgia finding in regard to the late position of Wakulla Check Stamped. Moreover, the occurrence of Wakulla with a distinctive plain type in the stratigraphic levels and in midden pits derived from Shell Layer A provided the basis for establishing a Wakulla ceramic complex. It was now possible to distinguish rim sherds of Wakulla Plain from Weeden Island Plain, and it appears that this complex consists overwhelmingly of the two plain and check stamped types. Other varieties are rare.

The alluvial sand above the shell midden was removed in 3 inch levels. Considering the type of deposit, there is probably some mixing though most of the sherds were evidently derived from Shell Layer A below. Wakulla Check Stamped ranged from 45 percent to 68 percent of the sherds in the alluvial levels; if we include the plain, the percentages of sherds assigned to the Wakulla Complex are 73 percent to 88 percent.

Shell Layer A, a very white thin zone of crushed and trodden mussel shells, exposed in this area by troweling, was carefully brushed with a whisk broom to search for midden pits which may have originated from it. A number of such pits were located and are described below. Then the shell layer was removed by trowel. Inclusive sherds comprised 56 percent Wakulla Check Stamped; adding the plain, the Wakulla Complex was represented by 90 percent of the pottery.

Feature 14. This was a shell pit on the northeastern margin of the shell heap (coordinates 46-27), apparently originating from Shell Layer A which had sloped downward here and was not more than 6 inches from the sterile sand subsoil of the site. The pit, perfectly circular, in diameter 3 feet, with straight sides and a flat bottom, penetrated 10 inches into the subsoil, indicating a total depth of about 16 inches. It was filled with mussel shells, sherds and lesser amounts of deer bones and flint chips.

Most sherds were of the Wakulla period, including 17 Wakulla Check Stamped, two with slightly extruded rims, and 15 Wakulla Plain. Among these plain sherds was one with a small folded rim, a common characteristic of Wakulla pottery but one which is hardly distinguishable from Kolomoki Plain, and Swift Creek Plain, but large particles of quartz used as temper helped in this instance to identify the sherd as Wakulla. A few sherds of the Weeden Island period and one Kolomoki Complicated Stamped sherd were probably already in the ground in Wakulla times. Weeden Island Plain was represented by one sherd with a large folded rim, the late variety of Swift Creek Complicated Stamped by six small indistinctly decorated sherds; Fairchilds Cord Marked and Keith Incised were each represented by one sherd. The motif of the Kolomoki Stamped sherd was (Motif 18), which occurred in the earlier levels of the stratigraphic block. It was thin walled with a fine compact paste, no visible temper, and carefully smoothed on the interior. Five other sherds were classified as residual, with decoration, if any, indistinct.

Feature 24. This shell pit was 2.5 by 2 feet in diameter, 13 inches deep with straight sides and a flat bottom. It was on the northwestern margin of the site just beyond the edge of Shell Layer A, probably originating from that level. The pit was packed tightly with unburned mussel shells, but contained very little bone, stone, and only 3 sherds, all Wakulla Check Stamped.

Feature 26. This shell pit was in the northern part of the shell heap overlapping with Kelly's check stamped pit. It was circular, 3 feet in diameter, and 36 inches deep with straight sides and a flat bottom. It was filled clean unbroken mussel shells, a few deer bones, flint fragments, and also two acorns. Sherds included four Wakulla Check Stamped, two plain, and four late Swift Creek Complicated Stamped, two probably Motif VII and the others uncertain.

Feature 30. Pit at coordinates 20/20 originates from Shell Layer A. Straight sides, flat bottom, contained loosely packed shells, some large check stamped sherds (Wakulla) signs of burning of sides of pit. It was 26 inches deep and 3 by 4 feet in diameter. Feature 30 contained a number of large Wakulla Check Stamped sherds, a few plain sherds, and 3 cob-marked sherds. There was also a fragment of a small pottery spoon, some flint chips, a few animal bones, and some ferrous stones.

Feature 31. This shell pit, in the northwestern margin of the shell heap was derived from Shell Layer A. It was perfectly circular, 2.5 feet in diameter, approximately 18 inches deep, with sides rounding to the bottom. Within the pit on the northern side was a semicircular ridge of fire hardened sand indicating that the pit had been used on at least two separate occasions but Wakulla Check Stamped sherds occurring in both divisions indicated that both occasions had been during the Wakulla period.

In the outer, earlier, ring were four sherds of Wakulla Check Stamped and 4 small plain sherds. These have been counted with the others. Wakulla Check Stamped--36. The sample included 11 rim fragments of which 10 had an imperceptibly extruded and smoothed lip. The other had a fake folded rim 12 millimeters high outlined by an incised line. There were 18 plain sherds, which we presume to be Wakulla. The two rims are the common slightly extruded form of Wakulla. Two other plain sherds had a fine sandy paste which we associate with Kolomoki at this site. One sherd was from a carinated bowl. One Weeden Island Red was present that was 10 millimeters thick with heavy square rim filmed on both sides and with a dark gray paste. Sherds of Late Swift Creek Complicated stamped motifs included: Motif 94 – 3, Motif 76 - 1, Motif 127 - 1, Motif 96 - 1, St. Andrews Complicated Stamped - 1, Kolomoki Complicated Stamped motif incomplete - 1. Also animal bones (deer), flint fragments, and a piece of broken quartzite, plus a fragment of conch shell from which pieces had been cut off.

Feature 32. This was a small shell pit, 24 inches by 15inches by 5 inches deep, probably originating from Layer A. Sherds included Wakulla Check Stamped- 6; unidentified brushed-1; plain-3. Fragments of terrapin were also present. It was located on the northwestern margin of shell heap.

Feature 53. This feature was roughly circular, about 2 feet in diameter, and its depth and form were unrecorded. It contained large fragments of a large check stamped vessel, 15 sherds larger checks, more over stamping, distinctive brown, burnished black interior, possibly Wakulla Check Stamped, but with a plain shoulder, and if Wakulla, certainly aberrant. The following were present: 9 plain sherds. 9 Late Swift Creek Complicated Stamped: Motif 94- 5. Motif 116-1, 2 other indistinct, 2 fragments flint points, 1 certainly stemless, flat base with rounded corners, Motif 97 – 1, Fairchilds Cord Marked – 1. Deer, terrapin, and flint chips were also present. This feature removed on eastern margin of the shell heap. All other sherds were of the Weeden Island period.

Feature 59. Although not completely excavated, this shell pit was in the northern part of the shell pit originating from Shell Layer A. It appears to have been circular, 2 feet in diameter, and 1 foot deep with side rounding to the bottom. There was no cultural material.

Note that nearly all check stamped pits were found along the northern margin of the shell heap, the portion to which Shell Layer A was restricted. In most cases these could be traced on profiles to Shell Layer A.

The 45-50 East Exploratory Trench

When the exploratory work on the northern side of the shell heap had been completed, a trench 5 feet wide, between the 45-50 lines east, were dug north-south for 70 feet, intersecting the UGA Summer School's Unit 3. These two explorations effectively isolated the main portion of the northern shell heap and their profiles were used to outline the large stratigraphic block, the excavation of which was to be the final phase of the investigations.

The profiles of the 45-50 East Exploratory Trench showed the same strata we had noted on the northern edge of the shell heap (Figure 4). Only two shell pits were located in the clean sand at the bottom of the trench.

Feature 14 was a shell pit where this trench crossed the northeastern margin of the shell heap. The pit had apparently originated from Shell Layer A, which sloped downward here and was not more than 6 inches above the sterile subsoil. The pit, perfectly circular, 3 feet in diameter, with straight sides and flat bottom, penetrated 10 inches into the subsoil, indicating a total depth of about 16 inches. It was filled with mussel shells and contained sherds, deer bones, and flint chips. Most sherds were of the Wakulla period, including 17 check stamped, 2 slightly extruded rims, and 15 other sherds which appeared to be Wakulla Plain. Among the plain sherds was an extruded rim which had reached the proportions of a small fold. This occurs fairly commonly on Wakulla Plain and is sometimes difficult to distinguish from Kolomoki Plain which often has the small fold. In this case the large particles of quartz temper in the paste helped identify the sherd as Wakulla. Weeden Island Plain was represented in this pit by one sherd with a large folded rim, and Fairchilds Complicated Stamped by 6 small sherds with indistinct decoration. Fairchilds Cord Marked and Keith Incised types were each represented by a single sherd each. There was 1 sherd of Kolomoki Complicated Stamped, Motif 18, that was thin walled, had a fine compact paste, and with no visible temper. Five other sherds were too small or the decoration too indistinct to be identified.

Feature 15 was a circular depression which originated about 15 inches below the top of the dark sand in this area, and was derived either from Sand Layer B or Shell Layer C, to judge from the pottery, probably the former. In it were large parts of two pottery vessels, one Fairchilds Cord Marked with a large folded rim and the other, evidently Weeden Island Plain, was a small buff jar with a direct rim. There were 4 small complicated stamped sherds, 1 of Motif 64, 1 Motif 71, 1 probably Motif 111, and the other unidentified.

The Stratigraphic Block

When the various exploratory trenches had been dug, and work completed along the river profile and in the extension of the Summer School's Unit 3, the main excavation was begun. This was the investigation of a stratigraphic block, 45 by 35 feet in extent, which resulted in the removal of most of the northern shell heap. The digging was carried down through six distinct physical layers to virgin sand. Analysis of the recovered material showed that there was a strong continuity between the Kolomoki and Weeden Island periods, and that the Kolomoki period, distinguished by the pottery type Kolomoki Complicated Stamped, underlay and was earlier than the Weeden Island period, represented by Fairchilds Complicated Stamped and by some of the Weeden Island defined by Gordon Willey on the Florida northwestern coast.

Removal of the successive deposits was according to physical layers, designated top to bottom: A, B, C, D, E, and F (Figures 5 and 9). In many instance sherds were found on the dividing line between two physical layers or in smaller sand or shell deposits difficult to attribute to one major zone or another. In such cases the doubtful material was assigned to both zones to which it was contiguous, giving a secondary system of levels: A-B, B-C, C-D, and E-F. Vertical control was provided by standing profiles of the exploratory trenches and other excavations around the stratigraphic block (Figure 10). This permitted the physical layers to be correlated throughout, and to make doubly sure a narrow control trench was dug diagonally across the area to be excavated (Figure 11). Each physical layer was removed as a unit, but only after the surface had been brushed and carefully searched for evidence of intrusion from above which

might result in ceramic mixing. Horizontal control was secured by dividing the bloc into four unequal quadrants. These quadrants were completely excavated to subsoil, but part of the southwestern quadrant below Shell Layer C was left undisturbed.

The overwhelming bulk of the recovered material was pottery, comprising 6,065 sherds Table 1). Nearly half of these were decorated with complicated stamping, and in order to recognize temporal variations we analyzed all of this material by design motifs or recognizable portions thereof, correlated with the physical levels. Design motifs occurring in the stratigraphic block were numbered 1-118 and include both the Kolomoki and the Fairchilds Complicated Stamped variants.

Level	Combined Weeden Island Minority Types	Plain	Complicated Stamped	Shell Stamped	Deptford Check Stamped	Total Sherds
A-B	112	933	565	1	0	1611
Level Percentage	6.95	57.91	35.07	0.00	0.00	100.00
B	29	167	139	0	0	335
Level Percentage	8.66	49.85	41.49	0.00	0.00	100.00
B-C	10	107	79	0	0	196
Level Percentage	5.10	54.59	40.31	0.00	0.00	100.00
C1	13	148	114	0	0	275
Level Percentage	4.73	53.82	41.45	0.00	0.00	100.00
C	27	743	655	2	0	1427
Level Percentage	1.89	52.07	45.90	0.14	0.00	100.00
C-D	18	504	407	8	0	937
Level Percentage	1.92	53.79	43.44	0.85	0.00	100.00
D	13	261	204	3	0	481
Level Percentage	2.70	54.26	42.41	0.62	0.00	100.00
D2	0	31	49	3	0	83
Level Percentage	0.00	37.35	59.04	3.61	0.00	100.00
D-E	1	75	116	1	0	193
Level Percentage	0.30	38.86	60.10	0.52	0.00	100.00
E	0	0	0	0	0	0
Level Percentage	0.00	0.00	0.00	0.00	0.00	100.00
E-F	0	257	250	0	0	507
Level Percentage	0.00	0.00	0.00	0.00	0.00	100.00
F	0	10	9	0	1	20
Level Percentage	0.00	50.00	45.00	0.00	5.00	100.00
Total	223	3236	2587	18	1	6065

Table 1. Fairchilds Landing Ceramics in Stratigraphic Block. Weeden Island includes: Wakulla Check Stamped, Fairchilds Cord Marked, and Carabelle Punctated.

As interesting phenomenon noticed was that pottery types and particular design motifs which were characteristics of the deepest levels in the shell heap showed a tendency to be represented in relatively small amounts in the upper layers, but material characteristics of the upper layers was rarely represented in the lower. We did not interpret the appearance of earlier sherds in the upper levels as evidence of continuity per se. The shell midden had been actually lived upon, trampled, and scuffed up, and we knew that in many instances cooking pits had been dug down from upper layers into the lower. It is then suggested that the mechanisms by which earlier sherds could finally come to rest in later physical layers, i.e. by being scuffed up or being dug out in pits, are difficult for the archaeologist to recognize in the field. On the other hand, later sherds can be intruded into earlier levels by means of pits, postholes, and root holes, all features which the archaeologist is trained to recognize and remove separately. This, I think, accounts for the fact that the pottery from physical levels showed earlier sherds in the upper layers, although the relative number was never large.

In analyzing the material we noticed that particular design motifs with a stronger occurrence in the lower levels and only one or two sherds in the higher zones appeared on a graph in the shape of tadpoles suspended head downward. In many cases this tadpole effect is evidently a result of the chance upward migration of sherds as described above. However, in instances where there was a relatively strong occurrence in the upper levels as well, the possibility was opened that the particular variant was actually in use over a longer period of time. We have charted a number of pottery and design motifs strongly present in successive levels, and these are regarded as evidence of ceramic continuity during the occupation of the site. Some of these became more and some less popular as time went on. Each case had to be determined separately, but accordingly to the interpretation that it is easier for sherds to migrate upward without being caught than it is for them to proceed downward, our tendency has been to interpret upside down tadpoles as often due to chance, tadpoles facing the other direction, as often due to continuity and tradition.

Recent Sand Deposits

The deposit of alluvial sand which was everywhere present on the site was generally two feet thick above the stratigraphic block. As earlier noted, this could be divided into upper and lower zones by a thin streak of charcoal representing ground surface about 75 years ago when a turpentine still was situated on the spot. In the northwestern quadrant or the stratigraphic block only the upper layer of sand was present and the charcoal line converged with the top of the shell heap, indicating that some shell was still exposed at the time the still was operating. On the southern side of the stratigraphic block the lower sand zone was present, and it had evidently filled in around the sides of the shell heap bringing ground surface to one level before the still was built. After the still was dismantled, another flood deposit of sand had covered all traces of shell heap and the still.

The alluvial sand contained a few sherds, brickbats, bits of glass, china, iron and nails, and occasional large fragments of solidified resin. Typologically, the historic artifacts are approximately of the reported date of the still. The charcoal line dividing the upper and lower sand layers contained relatively more historic artifacts. The lower layer showed fewer, and a greater number of sherds.

Shell Layer A and Earth Layer B

We had already encountered Shell Layer A on the northern side of the shell heap in our extension of the Summer School's Unit 3, and determined that it had been laid down during the Wakulla period, the last prehistoric occupation of the site. This was represented by a thin zone of crushed and trodden mussel shells lying over the main shell heap. It extended some 15 feet northeast of the main midden and occurred in the northeastern and northwestern quadrants of the stratigraphic block, but did not seem to be present in the southeastern or southwestern quadrants. Although part of this layer was outside the excavated area the overall extent was calculated as about 35 feet North-South by 60 feet East-West. Shell Layer A was seldom more than 2 inches thick but toward the northeastern side of the shell heap it became much thicker, attaining a maximum of 12 inches on the 50 East profile between stakes 40-50 South. It was under laid by Layer B which separated it in most places from the shell midden below. In the stratigraphic block Layer A was usually so thin that it could not be removed without including some of Layer B and as a consequence the artifact material was designated A-B.

The sherd counts showed this mixing. Layer A-B contained Wakulla Check Stamped as well as some Weeden Island and a few Kolomoki period sherds comparable to material from the lower levels. Judging from our earlier experience with Shell Layer A on the northern side of the shell heap where it was thicker and easier separated from Layer B, the pottery complex of this level was Wakulla and most of the sherds should have been Wakulla Check Stamped and Wakulla Plain. The complicated stamped sherds found in Level A-B are therefore to the B part of this mixed level. Our sample of pottery from the true Layer B below was not large. By combining the complicated stamped motifs from Layers B and A-B we have a short series of design motifs which do not occur in the layers below B and are regarded as belonging only to the time at Fairchilds Landing when Layer B was occupied. There were also a number of sherds in the two levels carrying a very faint and indistinguishable stamp reminiscent of the latter midden sherds from Hares Landing. Additional work in the area should permit distinguishing Fairchilds B as a distinct phase of the continuity within the Weeden Island period.

Distinctive design motifs of Fairchilds Complicated Stamped assigned to Layer B at Fairchilds Landing are: 109, 110, 112, 113, 114, 115, and 116. Three of these occurred in the Weeden Island period Middens F and/or G at Hares Landings: 110, 112, and 116.

In the A-B layer also were three design motifs of Kolomoki Complicated Stamped which did not occur in any deeper levels of the stratigraphic block. Each of these was represented by one small sherd of a much finer paste than is usual in the level in which they were found. These motifs are 111, 117, and 118. The true position of Motif 111 is further indicated by the fact that four sherds of it were found in Feature 33, a Kolomoki period pit.

Shell Layer C

This was the main layer of the northern shell heap, composed of packed mussel shells containing little earth or sand but with many sherds, animal bones, flint fragments, and small pieces of charcoal. The dimensions of this layer were approximately 40 feet East-West by 60 feet North-South. It attained its maximum thickness of about 12 inches at stake 40 East 40 South, gradually diminishing toward the margins.

It was possible to trace out Shell Layer C in most places without serious difficulty, but is the northeastern quadrant the 45 East profile showed a separate shell lens overlying a particularly thick deposit of sand belonging to Layer D below. Above the shell was a deposit of dark midden stained sand containing calcined shells, and in turn in on top of this was a red clay floor. The

floor-like area was uniformly one inch thick, shaped something like a slice of pie 7 by 4 feet is extent. Part of this had been out away is digging the 45-50 exploratory trench. The nature of this feature was not determined, but as there appeared to have been some connection between the shell lens, the dark earth zone, floor, and the sand deposit pertaining to Layer D below, we could not include the shell lens with Layer C and distinguished it as Layer C1 Another floor-like area of red clay was located on top of Layer C in the southwestern quadrant. There were a few postholes nearby but these formed no recognizable pattern. The purpose of these clay areas is unknown. It seems quite possible that they were actually floors of some kind.

On the surface of the shell layer were two areas where flint chips and sherds seemed to be concentrated (Features 50 and 63), and 8 pits of the ordinary kind filled with shells, sand and dark earth, and occasional flint chips and animal bones. Four pits yielded no ceramic material, but the others showed random sherds principally of the Weeden Island period.

Features 43 and 44 were two pits, not containing pottery, found two feet apart on the northwestern side of Shell Layer C. Feature 43 was 18 inches in diameter and 24 inches deep, Feature 44, 12 inches in diameter and 12 inches deep.

A concentration of flint chips and spalls were found in a slight depression in the northwestern quadrant of Shell Layer C. Two areas of concentration could be distinguished:

Feature 50A measuring 12 inches in diameter, and **Feature 50B**, two feet distant, measured 36 by 24 inches. With Area 50B was a posthole 5 inches in diameter, one foot deep, but whether there was any essential connection with the flint concentration is not known. The flint fragments ranged from miniscule chips to large spalls 12cm long. Most material was the blue gray and white petrified wood similar to the petrified stumps in the river bank exposure, but there were chips of other varieties including one with a rich chocolate patina. There was one true artifact in this collection, and elongated ovate with the point broken off.

Sherds lying at random among the flint chips were nearly all of the Weeden Island period. Fourteen were plain, two with medium size folded rims. Eight sherds were Fairchilds Complicated Stamped of 4, from the same vessel was Motif 95, one was Motif 94, another was Motif 77, and one was Motif 52. One sherd was decorated with a small check stamp; if Wakulla, it was certainly intrusive. Another sherd was Weeden Island Red Filmed with the red film confined to the interior. Another sherd was Fairchilds Cord Marked. There was one sherd of Kolomoki Complicated Stamped, Motif 123. From the B area of the flint concentration came a few scrappy sherds of the Weeden Island period, including one of Fairchilds Complicated Stamped, Motif 94.

Feature 51 was a pit or disturbance in the red clay floor in the southwestern quadrant. In as much as the clay did not extend over it, the pit was either contemporary or slightly later. The pit was circular, 18 inches in diameter, but depth and shape were unfortunately not recorded. In the pit fill were a few flint chips and some deer and bird bones. Potsherds all seemed to be of the Weeden Island period. There were 17 sherds of Fairchilds Complicated Stamped: Motif 94, 3 sherds; Motif 77, 1 sherd with a small folded rim; Motif 73, 2 sherds; and Motif 77, 6 sherds from one vessel. There was 1 sherd of Keith Incised, and 20 plain sherds, including a small to medium folded rim.

Feature 55 was a circular pit, 3 feet in diameter and at least 12 inches deep, originating from the surface of Shell Layer C or perhaps higher. It had straight sides and a flat bottom and was completely filled with mussel shells. Among the shells were some flint chips and spalls, deer bones, and sherds. A thick flint tool, probably a knife, was recovered from the feature. With it was a fragment of fossiliferous limestone that resembled coquina, sometimes used at this

site to make manos or hand stones. Sherds were again principally of the Weeden Island period. Fairchilds Complicated Stamped included Motifs: 95, 5 sherds; Motif 73, 1 sherd; Motif 94, 1 sherd; Motif 86, 1 sherd; Motif 105, 1 sherd; and 5 sherds with indistinct decoration. There was a single sherd of Carrabelle Punctated with a large folded rim, 1 Kolomoki Complicated Stamped, motif, uncertain, and 1 sherd of Alachua Cob Marked.

Lying directly above this pit and apparently representing Shell Layer A and Layer B were several large sherds of Wakulla Check Stamped, 1 sherd of Fairchilds Cord Marked, a plain sherd with a large folded rim and a few small sherds of Fairchilds Complicated Stamped. One sherd from the same vessel as the Fairchilds Landing may also account for the origin of 3 check stamped sherds also found in the pit, and also for the specimen of cob marked.

Feature 56 was a circular pit 3 feet across, 12 inches deep, with straight sides and a flat bottom. It contained some flint, deer, and terrapin bones, fragments of two flints knives, and a few scrappy sherds. The last included 5 plain, two Weeden Island Red Filmed sherds from one vessel with filming on the interior only, and 1 sherd of Kolomoki Complicated Stamped, Motif 50.

Feature 57 was a circular pit 2 feet in diameter, 16 inches deep, with sides rounding to the bottom. It was exposed on the profile of the control trench which had been dug diagonally across the stratigraphic block, and may actually have originated at a higher level than we found it. No material was recovered.

Feature 58 was a pit exposed on the northern profile of Unit 3 originating from Shell Layer C. It was 3 feet in diameter 18 inches deep with steep sides rounding toward the bottom. It was filled with mussel shell. The base of the pit showed a deposit of burned earth and charcoal. There were no sherds.

Feature 61 was an oval pit of some other kind of disturbance in the surface of Shell Layer C, filled with earth similar in composition to Layer B above, from which it may have originated. It measured 24 by 14 inches, but the rounded bottom penetrated only 9 inches into the shell layer. With the earth in the fill of the pit were some deer bones and flint spalls. Flint artifacts included a small corner notched point, a small plano-convex pointed ovate and a medium size flint blade with rounded corners and a flat base. Sherds were of the Weeden Island period. Fairchilds Complicated Stamped included 5 of Motif 94, 1 of Motif 72 with a medium size folded rim, 4 of Motif 73 1 of which had a medium to large folded rim, 1 was Motif 103, 7 were Motif 95, and 1 was Motif 69. Forty sherds were classified as Weeden Island Plain, including one with a small folded rim and another with a wedge shaped folded rim. One sherd was Fairchilds Cord Marked, another was Mound Field Net Marked, and one was Weeden Island Red Filmed with the filming confined to the vessel interior.

Feature 63 was a concentration of flint chips in an area on the surface of the shell heap measuring 14 inches across. Associated sherds were of the Weeden Island period. Fairchilds Complicated Stamped was represented by 1 of Motif 95, 1 of Motif 95 with a small folded rim, and 2 of Motif 52. One sherd was plain.

Feature 64 was a pit or disturbance in the shell layer, but the origination point is uncertain. It was circular, 15 inches across, the shape and depth unrecorded. In the fill were a few flint chips, a terrapin shell fragment, 4 sherds of Carrabelle Incised, 2 plain, and 3 stamped, motif indistinct.

Table 2 shows motifs of complicated stamped sherds which were found only in Shell Layer C or the immediately contiguous zones. A number of these motifs are identifiable as Kolomoki Complicated Stamped: 80, 81, 85, 89, 90, and 91. Others can be recognized as

Fairchilds Complicated Stamped: 84, 86, 92, and 93. Still others cannot be identified with certainty as belonging to one type more than the other: 82, 83, 87, and 88. There may be some error in the identification of these design motifs, but what seems significant is that both Kolomoki and Fairchilds Complicated Stamped are well represented and accompanied by some design motifs which we cannot classify with one or the other type. In contrast to this situation, the complicated stamped sherds from the various pits and other features found in the upper surface of the Shell Layer C were readily recognizable as nearly all Fairchilds Complicated Stamped and readily assignable to the Weeden Island period. It will presently be shown that Shell Layer C was for the most part accumulated during the Weeden Island period, but it was the first major Weeden Island deposit and the contemporary pottery seems to have some features intermediate with the earlier Kolomoki. We presume also that there was a large number of Kolomoki sherds exposed which were accidently incorporated among the shells.

Feature/Motif	52	69	72	73	77	86	94	95	103	105	107	Total
50	1	0	0	0	0	0	1	8	0	0	0	10
50B	0	0	0	0	1	0	0	0	0	0	0	1
51	0	0	0	2	0	0	3	0	0	0	6	11
55	0	0	0	1	1	0	1	5	0	1	0	9
61	0	1	1	4	0	1	5	7	1	0	0	20
63	2	0	0	0	0	0	1	1	0	0	0	4
27	2	0	0	0	1	1	0	0	0	0	0	4
Total	5	1	1	7	3	2	11	21	1	1	6	59

Table 2. Fairchilds Landing, Complicated Stamped Motifs in the Features in Shell Layer C.

Sand Layer D

Immediately below Shell Layer C we came upon Sand Layer D, dark brown, somewhat mixed with earth, and containing numerous animal bones, flint fragments and sherds. Sand Layer D occupied an oval area measuring 36 by 27 feet and was not as extensive as the overlying shell layer, which covered it completely. The surface of this zone was extremely uneven: the sand was piled in some places to a height of 6 or 8 inches while elsewhere it was only two inches thick. Here and there the sand was completely absent and in these cases Shell Layer C rested directly on the underlying Shell Layer E. In the southeastern quadrant of the stratigraphic block this zone showed unusual complexity. Here a series of small deposits of sand and shell attained a thickness of 14 inches. The upper most deposit (Sand Layer D1) was 4 inches thick composed of shell mixed with earth and charcoal and rather difficult to separate from Shell Layer C. Below was a layer of dark earth containing less shell, then another zone of shells (also Sand Layer D1) 2 inches thick, and below that was sand (Sand Layer D2) 2 inches thick. In the adjacent portion of the southwestern quadrant these minor shell layers disappeared and the succession appeared as two layers of sand separated by a thicker stratum of brown earth 7 inches thick.

Nearly all the inclusive sherds in this zone were Kolomoki Complicated Stamped or Kolomoki Plain. Motifs 37-45 are identified as Kolomoki Complicated Stamped. Motifs 39 and 40 also occurred in Kolomoki period pits.

There were no cooking pits which could be ascribed to this zone and the only feature was **Feature 62**, a nearly pure deposit of mussel shells containing little other debris. The deposit was oval, 12 inches high and 5 by 3 feet across. Among the shells were a few deer bones and flint

fragments. Sherds included 5 Kolomoki Complicated Stamped, one with a small folded rim, and two additional stamped sherds with the decorative indistinct. Eleven small sherds were probably Kolomoki Plain.

Shell Layer E

Directly below Sand Layer D was Shell Layer E. This was approximately oval in horizontal section, 26 by 18 feet. It was fairly level and appeared on the profiles as a stripe usually two inches thick. Although principally of shell, it contained some sand and included chipped stone fragments, bits of charcoal, and many sherds. No pits or other distinguishable features were found.

Pottery was all Kolomoki Complicated Stamped or Kolomoki Plain, but in as much as this zone was only two inches thick it was not usually possible to be certain that there was no mixture of sherds from Layer F below or Sand Layer D above. Therefore the sample which could be unhesitatingly ascribed to E is very small, and most sherds were sacked up as from either E-F or D-E depending on whether they came from the top or the bottom of this zone. All of these are Kolomoki Complicated Stamped with the possible exception of Motif 7 which has not been identified.

Midden Zone F

Below Shell Layer E was a zone of dark brown sand, 6-12 inches thick which merged downward with the virgin sand subsoil of the site. Layer F represents the original ground surface which saw the first occupation of Fairchilds Landing. Occasional patches of sand fired red indicated where campfires had been built. Sherds included some of the Kolomoki period, but scarcely any stamped motifs which were not represented in the immediately succeeding levels, indicating that the accumulation of shell began soon after the site was occupied in Kolomoki times.

Two sherds of particular interest which occurred in Layer F showed stamped designs which were not represented at any higher level. These are Motifs 1 and 2. They do not appear to be Kolomoki Complicated Stamped, and probably represent some as yet indistinguishable variety of Swift Creek. A few Deptford period sherds showed that the site had been briefly visited at a much earlier date.

Sand Layers on the Southern Side of the Stratigraphic Block

On the southern side of the stratigraphic block, where Shell Layer A was absent, there were additional sand layers on the slope of the main shell heap below the recent alluvium. It will be recalled that the lower zone of recent alluvial sand was also on the slope and did not rise above the summit of the shell heap. These lower sand layers could be regarded as a continuous series with the recent alluvium and are believed to have originated in the same way. They were, however, completely prehistoric, contained sherds and other cultural material, and showed a considerable amount of organic stain. Despite their alluvial origin, both layers had been lived on by the Indians, had been thoroughly churned up and mixed with organic debris.

The upper of these two layers was composed of brown sand and attained a maximum thickness of about 12 inches, the lower was of about the same thickness, but composed of dark brown sand, showed more cultural material and included some shell fragments. The upper layer of light brown sand occupied a stratigraphic position corresponding to Shell Layer A on the northern side, and like Shell Layer A contained a considerable amount of Wakulla Check

Stamped. The fact that it was mixed with an even greater proportion of Weeden Island period pottery is regarded as due to mechanical mixture and our own lack of skill in removing this layer. The basis for this interpretation is that in the Unit 3 extension where Shell Layer A was present, and of sufficient thickness to be properly segregated from the earth layer below, Wakulla Check Stamped was overwhelmingly the main decorated type.

The lower of the two layers, which was composed of dark brown sand, rested directly upon Shell Layer C, the main component of the shell heap. The dark brown sand layer was traced around the sides of the shell heap and merged with Sand Layer B on the northern side. On the lower margins of the shell heap this layer merged with the dark brown midden zone which was noted in the exploratory trenches.

The parts of the dark brown layer which lay upon the slope of the shell heap are regarded as of Weeden Island times, and the overwhelmingly majority of included sherds belonged to this period. In the areas beyond the shell heap this zone reached to virgin soil, and included the total occupation of the site. Evidently this layer was a result of long continued occupation and must have comprised successive levels which were no longer distinguishable except in the shell heap where they were indicated by alternate deposits of sand and shell.

Not only was Wakulla Check Stamped late in the history of the site, but if we included accompanying plain pottery as part of the complex with Wakulla (a procedure which seems to be justified by their mutual occurrence at other sites and the predominance of a particular rim form in the plain (this complex is overwhelmingly predominant at the late period, and it is further probable that scarcely any complicated stamped or other Weeden Island decorated types were being made at all. In the alluvial sand above the shell check stamped pottery ranged from 45 percent minimum to 68 percent maximum. Including the plain, the proportions are 73 to 88 percent. Considering the alluvial nature of this deposit it is probable that most of the sherds were derived from Shell Layer A below. In Shell Layer A, check stamped in 56 percent of the total sherds; adding the plain, the Wakulla complex is represented by 90 percent of pottery.

Shell Layer A was then removed by trowel before proceeding to Sand Layer B. Layer A-B is the borderline between these two physical zones. It had no natural origin but represents the material we removed from the surface of Shell Layer B to make sure there was no portion of Shell Layer A still remaining.

Sand Layer B was dark brown in color, containing occasional shell and charcoal fragments. Only 9 percent of sherds were check stamped, while 46 percent were complicated stamped divided about 40 percent Late Swift Creek and 6 percent Kolomoki. Forty percent of sherds were plain, and the presence of large folded rims indicated that most of these were the plain accompanying Late Swift Creek Complicated Stamped in Weeden Island I times. In Sand Layer B also is the maximum number of other decorated Weeden Island types. No Wakulla Check Stamped was found below Layer B.

The excavation was continued downward. Shell Layer C showed 88 percent Late Swift Creek and its accompanying variety of Weeden Island Plain. There were rare sherds of other Weeden Island types, and Kolomoki Stamped had increased to 7 percent.

Below Shell Layer C was a dark sand occupational stratum usually 6 inches thick in this area with several reddened areas showing the effects of fire. Late Swift Creek was represented only by 3 percent of sherds. Kolomoki Stamped included 45 percent and plain formed 45 percent of the collection. Presumably most of the latter is Kolomoki Plain. Below this zone 6 inches of midden stained sand gave way to the sterile sandy subsoil of the site. 17 sherds found were all Kolomoki Stamped and Plain.

Other Artifacts from the Stratigraphic Block

Chipped stone artifacts were most numerous. Most of these were made of the petrified wood, which occurs in the river bank of this site. This material is usually rather light colored, cream, buff, or light blue-gray and seldom shows the distinctive laminations of petrified wood. Had we not found the actual stumps of this material in the river bank, we should never have recognized it. About one third of the tools might be classified as flint, and the material is from some other source. One specimen of flint which was not a finished artifact showed a patinated surface with what appeared to be chipping scars visible under the patina. There were also new chipping scars made during the occupation at Fairchilds Landing which looked quite fresh. Perhaps this flint fragment had been picked up at an older site. A heavy patina is probably not in this area a necessary indication of great age. I have seen a number of points of typical Eastern Archaic forms which show it. Marine chert, which is one of the most common stones in southwestern Georgia, was not used at Fairchilds Landing to any great extent, probably because of the petrified wood available.

We have classified stemmed specimens from this site as projectile points; stemless artifacts as probably knives. Both primary flaking and secondary retouching were used, the former probably accomplished by percussion, the latter, probably by pressure. The projectile points show less retouching than the knives, and certainly retouching would not have made the latter any sharper.

Our sample does not show any conclusive evidence of change in flint work from top to bottom. It is possible that the large side notched points may have a somewhat earlier range than the others since they occurred only in Kolomoki levels, but we do not have a large enough sample to draw any conclusion. Aside from this variety, the rest of the chipped stone from all levels suggests that this complex was fairly stable and little change took place during the occupation of the site. If this is the case it forms a striking contrast to the many changes which took place in earthenware form and decoration.

Rough and ground stone artifacts included some fragments of quartzite hammer stone and a calcareous specimen, which may be a pitted hammer stone or a mano. There were also two or three flat smoothed pieces which appear to be parts of grinding platforms.

No pottery or sherd discs were found, and pottery pipes were infrequent. Three specimens were massive, and of these the one shown was part of a squared bowl with an incised decoration. The paste is rather coarse grained. Another pipe with a fine temperless paste may not be characteristic of the site.

Objects of shell were also rare. One is a pendant, and the other is a scraper. Both were made from the outer wall of the conch and we also found half a dozen discarded portions of this material, which was evidently brought or traded up from the Gulf. On the edge of the Southern Shell Heap we found a series of mussel shells closed up one inside the other, the results of someone's, possibly a child's activity.

Particularly surprising was the absence of bone tools, a fragment of an awl and one undecorated pin were all that were found in the stratigraphic block. As a great many fragments of animal bones occurred throughout the shell heap we cannot attribute this deficiency to the result of decay of the bone, but can only conclude that this material was not greatly favored for implements. The only specimen of sheet copper was an ear spool.

The 75-80 South Exploratory Trench

The next exploration, inland beyond the shell heaps, was made by driving a 5 foot trench between the 75-80 South lines for a distance of 140 feet. Below recent alluvial sand, 18 to 42 inches thick, the prehistoric humus and occupational zone was represented by a two foot thickness of dark brown sand containing sherds but little shell (Figures 6 and 12). The color of the sand lightened toward the east, and it is probable that our trench nearly reached the margin of the site.

A pronounced depression in the top of the prehistoric occupation zone between the 100 and 120 stakes corresponded to what appeared to have been an old road or trail, partly visible on the surface and running in the direction of the landing. Time did not permit investigation, but the trench profile showed the depression to be filled with numerous short sand washes and narrow bends of clay. In the bottom were several hundred very small sherds representing all occupation periods and apparently redeposited from the adjacent ground surface.

The upper layer of alluvial sand in the trench was removed as a unit. The underlying occupation zone was taken out in 3 inch levels, each series referred to a 10 foot section of the trench. The sherds did not show such clear segregations of types as were noted in other parts of the site, but generally speaking Wakulla Check Stamped had the uppermost range, Fairchilds Complicated Stamped was somewhat deeper, and Kolomoki Complicated Stamped the lowest.

Below this zone was virgin tan sand appeared at distances varying 4 to 6 feet below the present surface, but was more uniformly 2 feet below the prehistoric surface of the dark layer. When the sand appeared numerous root molds filled with brown sand could be distinguished from the lighter material, and here and there were prehistoric pits showing as dark brown circular areas in the surrounding tan sand. There were not postholes. The pits and postholes had undoubtedly originated from the dark brown occupation zone in the trench but could not be distinguished in that layer because they were filled with the same material of which it was composed. Even later when already identified pits happened to be intersected by standing profiles, it was still impossible to trace their sides into the dark zone.

Altogether, fifteen pits were found. They were fairly uniform in size and shape, usually 2.5 to 3 feet in diameter, cylindrical, with straight sides and flat bottoms. Some of them attained a depth of 3 feet and my actually have been slightly deeper. Judging from the size, shape, and contents of these pits, there were no significant differences between those which had been dug in the Kolomoki period and those of Weeden Island times. Presumably they were also used for the same purposes in both periods.

In the seven pits, Features 5, 9, 33, 34, 36, 37, and 42B, nearly all inclusive sherds were of the Kolomoki period. The motifs from these are listed in Table 5. Six other pits, Features 2, 35, 38, 39, 41, and 42A, are assigned to Weeden Island times. A few of the latter contained some Kolomoki period sherds, but it is assumed that the latest sherds in the pit fills indicated the period to which they belong, in this case Weeden Island. Features 9 and 42 are of particular interest in indicating sequence. Feature 9 was a Kolomoki period pit which definitely originated below a distinct localized Weeden Island occupation level. Feature 42 comprised two pits, and earlier (Feature 42B) dug in the Kolomoki period and a later (Feature 42A) which was intruded into it from a Weeden Island level.

Feature 1. At the base of the occupation zone and mainly between stakes 60 and 90 East was a thin stratum of somewhat darker soil containing some particles of reddish clay. This zone continued along the trench for a distance of nearly 35 feet. The red clay was most concentrated

in a patch 2.5 feet wide between stakes 80 and 90 east where it lay above a Weeden Island period pit, Feature 1 A. Sherds were more numerous in this zone than elsewhere, and its general appearance was that of a separate and distinct occupational level, or conceivably some kind of floor. In the section of trench between the 80 and 90 stakes east, a few sherds tabulated from the normal brown deposit a few inches above this level were predominantly Weeden Island types. Sherds from the deposit itself were both Weeden Island and Kolomoki. Other sherds rom a few inches below the deposit, in the brown sand merging into virgin soil was predominantly Kolomoki.

The suggestion is that Feature 1 is a Weeden Island occupation level or floor directly upon a Kolomoki deposit, with earlier Kolomoki sherds intermingled with the Weeden Island. This probably does not represent a culture transition because some of the sherds appear to be relatively late Weeden Island types. The fact that we have a Weeden Island level below the main thickness of the normal dark brown occupation zone suggest that in the immediate area at least, the bulk of the dark brown zone was accumulated in Weeden Island times. It was earlier noted that most of the sherds in the exploratory trench were derived from this period.

Feature 2 was a circular pit 2 feet in diameter with straight sides and flat bottom originating at an unknown point in the occupation zone and extending 17 inches into the subsoil. It was filled with dark brown sand and contained sherds and flint fragments. Parts of two Fairchilds Complicated Stamped vessels were found, one of Motif 78 (22 sherds) and the other of Motif 93 (13 sherds). Another Fairchilds Complicated Stamped Motif, 73, was represented by 2 sherds; there was one sherd of Fairchilds Cord Marked; and 73 undecorated sherds were mostly Weeden Island Plain. Six small sherds were probably Kolomoki Complicated Stamped, but the motifs were indistinct. Another was St. Andrews Complicated Stamped, and 10 sherds were too fragmentary for identification. This pit is assigned to the Weeden Island period on the basis of the latest materials in it. The Kolomoki and St. Andrews specimens were probably redeposited.

Feature 4 was another circular pit nearly 3 feet in diameter and 12 inches deep with sides rounding to the bottom. The only cultural materials were one plain, and one faintly stamped sherd.

Feature 5 was a circular pit 3 feet in diameter with straight sides and a flat bottom. It penetrated 8 inches into the subsoil, presumably from some level in the dark brown sand above. It was completely filled mussel shells and contained some chipped stone fragments, animal bones, and a considerable number of sherds of the Kolomoki period.

There were 67 sherds of Kolomoki Complicated Stamped. Most were too small to indicate the particular motifs but the following were recognized: Motifs 24, 28, 29, 30, 32, 46, 50, 52, 67, 87, 99, and 107A. There were 95 sherds of Kolomoki Plain, 3 with the usual small folded rim and one with a direct rim. There were 2 other sherds of Fairchilds Complicated Stamped, Motifs 73 and 95, possibly intrusive. Flint artifacts included a fragment of a small projectile point, fragment of a side scraper, and a small flat elongated ovate.

Feature 9 was also a circular pit, 3 feet in diameter, with straight sides and a flat bottom. It originated about one inch below Feature 1, extending down 36 inches into the subsoil. This was one of the few instances where the actual top of a pit was located, and it is of interest that this pit was about as deep as it was wide. The lower portions of the walls, though composed of sand, were fired brick red and in the bottom 12 inches of the pit there was an almost solid mass of burned hickory not hulls. In the upper fill was a large assortment of sherds attributed to the Kolomoki period. The following motifs of Kolomoki Complicated Stamped were noted: Motifs

13, 19, 26, 28, 40, 47, 51, 60, 99, 119, 121, and 121. There were ___ other stamped sherds too fragmentary to determine the design, and ____sherds of Kolomoki Plain. Of the latter, there were ___small folded rims and ___direct rims.

Features 33 and 34. These were two circular pits about one foot apart. Both are assigned to the Kolomoki period and must have been open at the same time since both contained fragments of the same pottery vessel. Feature 33 was 2.5 feet in diameter, 24 inches deep with straight sides and flat bottom. Feature 34 was 3 feet in diameter, 39 inches deep, and slightly wider at the bottom than at the top.

The contents of Feature 33 included the following Kolomoki Stamped motifs.

Motif	Number
13	2
51	7
22	4
34	1
26	3
48	1
111	4
40	1
39	4
Total	27

Table 3. Fairchilds Landing, Feature 33 Complicated Stamped Motifs.

It also included the following:

Motif not distinguished……..47
Late Swift Creek Complicated Stamped, Motif 95 …..1
Unidentified Check Stamped……1

The contents of Feature 34 included 2 sherds of Kolomoki Complicated Stamped, Motif 40.

Feature 35. This was a circular pit 30 inches in diameter and 34 inches deep with straight sides and a flat bottom. The top was traceable upward to within 20 inches of the top of the dark zone. The pit was filled with dark brown soil containing, flint chips, deer, terrapin, and bird bones. Some fragments of ferruginous rocks and lime containing fossils. Pottery included 43 plain sherds including 4 rims all with large folds. One sherd was filmed red in the interior. Three sherds were from a vessel with an unusual punctated decoration. One sherd was Mound Field Net Marked, another was Fairchilds Cord Marked. Many fragments of charcoal, some charred bones, and some mussel shells were present. 27 Late Swift Creek including 4 large folded rims, 1 small to medium folded rim. There were 5 sherds of Motif 101, 1 of Motif 72, 1 of Motif 69, and 3 of Motif 67. All are cartouches. Eight sherds had decoration indistinct. Thirteen sherds were of Kolomoki Complicated Stamped, including one of Motif 20. Artifacts also included a rather blunt polished awl made of deer long bone, a thick pointed ovate, and a narrow elongated ovate both of flint. It also included 1 shell stamped sherd, 2 flint knives, and 1 fragmentary bone awl (splinter).

Feature 36. Feature 36, also of the Kolomoki period, was 2.5 feet in diameter with straight sides and a flat bottom. It began 24 inches below the top of the dark zone and penetrated 18 inches into the subsoil. The dark brown sand fill of the pit contained numerous fragments of flint, some deer, terrapin, and bird bones. Sherds included 33 Kolomoki stamped, including a number of fragments of a vessel with an unusually poor and faintly stamped decoration. Had this been found in another context the stamping would have been classified as Late Swift Creek, but the plain area below the small folded rim, indicates that it was derived from Kolomoki times. One tiny sherd had an unusual incised decoration. Twenty-four sherds were of Kolomoki Plain

Feature 37. This was an oval pit measuring 24 by 20 inches, 10 inches deep with straight sides and a flat bottom. Sherds were of the Kolomoki period. Table 4 lists the motifs.

Feature 37	
Motif	Number
123	5
13	1
120	9
124	1

Table 4. Fairchilds Landing, Feature 37 Complicated Stamped Motifs.
[Editor's Note: Motif 120 is ambiguous and uncertain.]

Feature 38. This was a circular pit 2 feet in diameter, 12 inches deep with rounding sides. The brown earth fill contained a few flint chis and deer bones. Sherds included examples from both the Kolomoki and Weeden Island periods, but assuming that the feature was contemporary with the latest inclusive materials, it has been assigned to Weeden Island times. There were 3 sherds of Late Swift Creek Complicated Stamped, including 1 sherd of Motif 67. Kolomoki Stamped included 2 sherds of Motif 127 and 1 sherd of Motif 28. There were 35 plain sherds, of which three were rims including a medium size folded rim and a relatively thin sherd with a squared otherwise unmodified rim.

Feature 39. This was a circular pit 2.5 feet in diameter with straight sides and a flat bottom. It began 24 inches below the top of the dark zone and penetrated 14 inches into the subsoil. The dark sand fill contained numerous fragments of flint including two side scrapers. Sherds consisted of 10 Late Swift Creek with design motifs too fragmentary for identification. One sherd of check stamped which may be Wakulla, 1 Carrabelle Punctated with a large folded rim, 1 Mound Field Net Marked, and 24 plain.

Feature 41. **T**his was a circular pit 38 inches in diameter with straight sides and a flat bottom. It was below 18 inches of dark brown soil and penetrated 22 inches into the subsoil. The walls of the pit showed signs of burning. The dark brown fill contained sherds, deer ones and some large pieces of flint. Sherds included both Kolomoki and Weeden Island types, and it is to the latter period that the pit is assigned. There were 13 sherds of Kolomoki Stamped with motifs too fragmentary to be identified, and 20 sherds of Fairchilds Complicated Stamped, including 1 sherd of Motif 67 and another of Motif 69. Three of these sherds had large folded rims. One sherd was Keith Incised, another was Fairchilds Cord Marked, and 1 sherd was Carrabelle Punctated. 25 plain sherds included three with large folded rims, one had a wedge shaped rim, and one had a medium size, thick, angular folded rim.

Feature 42. This feature consisted of two pits, and earlier pit of Kolomoki period (Feature 42B), and a later pit of the Weeden Island period (Feature 42A) which had been dug into it. Both pits were circular, with straight sides and flat bottoms. The Kolomoki period pit was 2 feet in diameter and 20 inches deep, the Weeden Island pit was about the same diameter but could only be traced to a depth of 14 inches.

The sherds of the Weeden Island pit included 7 sherds of one vessel, large folded rim, Late Swift Creek Complicated Stamped, Motif 106 and two sherds with decoration indistinct. There were 5 sherds of one vessel with an uncertain motif. Twelve sherds, probably Weeden Island Plain (coarse paste grit temper) including 1 large folded rim, and 1 large wedge shaped folded rim were recovered. Two sherds Weeden Island Red with the filming on the interior were found. One of these had a thickened, but otherwise unmodified rim. One sherd, probably Kolomoki Plain, with a slightly flaring rim and a finer paste than the others was located.

The Kolomoki period pit (Feature 42B) included 5 sherds of Kolomoki Stamped, Motif 51, one, Motif 32, two, Motif 88. This last motif is rare at the site and rather interesting in suggesting one of the few cases were an older Kolomoki motif reappears in Fairchilds Complicated Stamped in Feature 42 has the very fine Kolomoki paste and the velvety smooth yet matte surface finish. Other small sherds were Kolomoki Stamped and Fairchilds Complicated Stamped. The latter may have pertained to the Weeden Island Pit. There was one sherd of Fairchilds Cord Marked. Thirty two plain sherds, which probably include both Kolomoki and Weeden Island, were recovered. Three rim sherds one small folded one, medium folded, one unmodified, flint chips and spalls one with retouching that may be a knife or scraper.

Features	9	13	18	19	22	24	26	28	29	30	32	34	39	40	46	47	48	50	51	52	67	87	88	99	107A	111	58	122	124	119	121	Chi	Omega	Tau	Total
5	0	0	0	0	0	1	0	1	1	1	1	0	0	0	1	0	0	1	0	2	2	1	0	2	1	0	0	0	0	0	0	0	4	1	20
9	0	13	0	1	0	0	8	13	0	0	0	0	0	4	0	3	0	0	17	0	0	0	0	5	0	0	7	10	0	9	4	0	0	0	94
33	0	2	0	0	4	0	3	0	0	0	0	1	4	1	0	0	1	0	7	0	0	0	0	0	0	4	0	0	0	0	0	1	0	0	28
34	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
36	9	1	2	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	19
37	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
42B	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	8
Total	9	16	2	1	5	1	11	14	6	1	2	1	6	7	3	3	1	1	31	2	2	1	2	7	1	4	7	10	1	9	4	2	4	1	178

Table 5. Fairchilds Landing, Complicated Stamped Motifs from 75-80 South Features.

Fowltown Area

{*Editor's Note: An area to the extreme north of the Fairchilds Landing site was also tested. It was called the Fowltown area for reasons that were not stated in the notes. Presumably Caldwell believed that this area had some artifacts associated with a known 18th century Creek town of that name. The description of Feature 45 below was written by us from limited field notes in the Caldwell manuscript. Figure 2 shows our understanding of the excavations in the Fowltown Area.*}

Feature 45. This feature was located in Square CR3. It was 26 by 23.5 inches in size and generally round in shape. It was about 11 inches deep. It was not revealed until about 30 inches deep into Square CR3. Its fill consisted of dark sand with a little charcoal. There was not any shell in the feature and it had a flat bottom. Sherds consisted of 11 Wakulla Check Stamped, 2 Alachua Cob Marked, 1 St. Andrews Complicated Stamped, and 2 plain.

Feature 46. This was a lens of shell appearing in the slope of the river bank: the deposit of somebody's dinner. It was about 3 feet across and 2 inches thick. The shell area was fairly level despite the slope of the bank, an indication that some of the bank has been removed at this point. It was 30 inches below the surface. The sand immediately above was the recent layer that was universal at the site. Lying among the shells were several fragments of ferrous stone, 4 plain sherds, 2 Wakulla Check Stamped sherds, and 1 rim sherd showing a combination of brushing and cob marking.

Tables 6-10 show the sherds by level from five squares excavated stratigraphically in the Fowltown area of the Fairchilds Landing site. The most significant thing is the almost complete lack of Fairchilds Complicated Stamped.

Level	Wakulla Check Stamped	Plain	Total
0-9	1	0	1
9-12	0	1	1
12-15	2	0	3
15-18	0	5	5
18-21	0	1	1
21-24	0	9	9
Total	3	16	19

Table 6. Fairchilds Landing, Fowltown Area Square B Ceramics.

Level	Chattahoochee Brushed	Wakulla Check Stamped	Plain	Cob Marked	Total
0-3	1	0	0	0	1
3-6	2	1	0	0	3
6-9	3	0	0	0	3
9-12	0	4	1	0	5
12-18	0	0	0	0	0
18-21	0	4	0	1	5
21-24	1	1	4	0	6
24-27	1	0	1	0	2
27-30	0	0	0	0	0
30-33	0	1	0	0	1
33-36	0	0	1	0	1
Total	8	11	7	1	27

Table 7. Fairchilds Landing, Fowltown Area Square C Ceramics.

Level	Cob Marked	Plain	Deptford or Wakulla Check Stamped	Deptford Check Stamped	Kolomoki Complicated Stamped	Unknown Stamped	Total
0-9	0	0	0	0	0	0	0
9-12	0	0	0	0	0	0	0
12-15	0	0	0	0	0	0	0
15-18	0	0	0	0	0	0	0
18-21	0	0	7	0	0	0	7
21-24	0	0	0	0	0	0	0
24-27	1	1	5	0	0	0	7
27-30	0	1	4	1	1	2	9
30-33	0	0	0	0	0	0	0
33-36	0	0	0	0	0	0	0
Total	1	2	16	1	1	2	23

Table 8. Fairchilds Landing, Fowltown Area Square CR3 Ceramics.

Level	Nail	China	Chattahoochee Brushed	Plain	Wakulla Check Stamped	Complicated Stamped	Deptford Check Stamped Tetrapod	Total
0-3	0	1	8	4	0	0	0	13
3-6	1	0	4	2	0	0	0	7
6-9	0	0	0	0	2	0	0	2
9-12	0	0	0	0	1	0	0	1
12-15	0	0	0	2	1	0	0	3
15-18	0	0	0	0	1	0	0	1
18-21	0	0	0	0	1	0	0	1
21-24	0	0	0	0	1	0	0	1
24-27	0	0	0	0	1	0	0	1
27-30	0	0	0	0	5	0	0	5
30-33	0	0	0	2	5	1	1	9
Total	1	1	12	10	18	1	1	44

Table 9. Fairchilds Landing, Fowltown Area Square D Ceramics.

Level	Chattahoochee Brushed	Wakulla Check Stamped	Plain	Deptford check Stamped	Cob Marked	Total
0-9	0	2	2	0	0	4
9-12	0	0	0	0	0	0
12-15	0	2	3	0	0	5
15-18	0	1	1	0	0	2
18-21	1	2	1	0	0	4
21-24	0	1	1	0	0	2
24-27	0	1	2	0	1	4
27-30	0	0	2	1	0	3
30-33	0	0	0	0	0	0
33-36	0	0	0	0	0	0
Total	1	9	12	1	1	24

Table 10. Fairchilds Landing, Fowltown Area Square E Ceramics.

Excavations at Hares Landing

The burial mound at Hares Landing (9SE33) was excavated by Clarence B. Moore (1907:429-437), and subsequently reviewed by Willey (1949:259). Willey did not personally visit the site, and, following Moore, listed it in Decatur County, Georgia (9DR1). It is now in Seminole County, hence the new number, 9SE33. Willey's description is a convenient summary of previous information:

> This mound… is described by Moore as being 5 feet high and 48 feet in diameter… Forty-three bundle and flexed burials were found in the mound. Both masses of phosphate rock and charcoal were found near many of the skeletons. Possibly the rocks had been used to construct a sort of crud cover for the burials. Pottery was in a major mortuary deposit and also in caches distributed through the mound. Other artifacts were found in at random in the sandy-clay mound fill. Celts, hammerstones, lump galena, sheet-mica fragments, and conch shell cups are all listed.
>
> Moore mentions plain, incised, check stamped, complicated stamped, and red painted pottery. Vessels were either perforated or were made with holes as a special mortuary ware. Moore (1907:429 ff.) illustrates the following pottery which is classified below:
>
> Weeden Island Complex
>
> Weeden Island Series:
>
> Weeden Island Incised……Figures 3, 5, and 7
> Weeden Island Punctated….. Figure 2
> Weeden Island Plain…….. Figures 7, 8, 9, 10, and 12
> Carrabelle Punctated……. Figure11
>
> This site is of the Weeden Island period. (Willey 1949:259).

A search was made for this site during the 1948 survey of the Jim Woodruff Reservoir, but since the area was heavily wooded and Moore's directions not specific, it was not located until the reservoir was cleared in 1954, one year before the scheduled flooding date. At that time, J. C. Johnson, who resides in the vicinity, located the site and it was brought to the attention of the U.S. National Park Service by Frank S. Jones, Decatur County historian. The clearing operation disclosed that the site, in high swamp one mile below Hares Landing, consisted of much more than the burial mound investigated by Clarence Moore. There was a line of discontinuous occupation areas marked by patches of mussel shell, each area on ground slightly elevated above the general terrain. The closest approach to the river was about 700 feet, and from this point the site extended in a southwesterly direction towards the oxbow Curry Lake for a total distance of 1900 feet. The burial mound was at the fare end of the occupied area, the most distant point from the river.

The writer made a brief reconnaissance and a transit survey of the various shell areas, March 25-27, 1954. Sherds picked up on the surface of each area were sacked separately and analysis of these collections showed a very striking horizontal segregation of pottery types. The total of eight occupation areas located at that time could be separated on the basis of the surface collections into three discontinuous groups, each characterized by different pottery assemblages,

evidently representing habitation at different periods of time (Figure 13). Two of these periods could be correlated with the stratigraphic sequence obtained at Fairchilds Landing: Areas A, B, and C, with only Wakulla Check Stamped and Wakulla Plain sherds, belonged to the Wakulla period; Areas F, G, and H, showing Fairchilds Complicated Stamped and minority Gulf types, correlated with Weeden Island levels in the Fairchilds Lanning midden. The third occupation, in Areas D and E, was represented by a new pottery complex distinguished by a great majority of Weeden Island Plain sherds accompanied by several of the Gulf incised, punctated, and red-filmed types. This was tentatively named the pottery complex of a new Cummings component, and according to stylistic evidence seemed to belong to a time interval between Weeden Island and Wakulla. Additional evidence bearing on this point was later found by excavation.

A specific problem at the site below Hares Landing was to determine the time position of the rich harvest of mortuary vessels which Clarence Moore had taken from the burial mound in terms of the three occupation periods of the site. Willey had already correlated mortuary and domestic in a broad way for the entire area, but we needed more precise control. Our three distinctive occupations at this site would have been included in the Weeden Island I and II periods of Willey's scheme, and the burial mound only as Weeden Island.

The material from the surface collections and test pits made during the reconnaissance is listed with the pottery from the burial mound (See Appendix 5.). It appears from this, that in addition to some vessels in the mound which were made expressly for mortuary purposes, the mound contained types belonging to three ceramic periods represented in the domestic middens on the site. From this we concluded that the mound had been used in turn for the burials of several groups or generations which had occupied the site. The only alternative hypothesis which could account for the wide variety of pottery types found in the mound would be to suppose that the mound had been built by the users of Wakulla Check Stamped (the latest pottery in the mound) who retained some earlier domestic styles and/or Gulf styles for mortuary purposes. This seems less likely at the present time, and moreover we know of at least one site in the reservoir area, the Lake Douglas Mound (9DR21) excavated by Arthur Kelly, with a mortuary assemblages of check stamped vessels, much more what we should expect to find in a mound used only by people making Wakulla Check Stamped.

Following our reconnaissance, it was recommended that an additional investigation be made of midden areas to determine something of the material culture, other than pottery, of the three groups which had inhabited the site. This work was carried out in three weeks in June, 1954, with a small crew of laborers. Through the kindness of the Commissioners of Seminole, Georgia, a mechanized road scraper was made available for a day of operation without expense to the Federal Government. By this means, several shallow trenches were cut and it was possible to delimit the edges of some of the middens and examine them in profile. A short distance northwest of the mound the road patrol exploration disclosed Midden Area J which had not been visible on the surface. Examination of this new area disclosed a fourth cultural component with distinctive pottery assemblages including a new type, Hares Landing Complicated Stamped. Apparently this falls at the end of the Weeden Island period just prior to the establishment of the Cummings component. In the following pages are described the various midden areas on the site, given the extent of our investigations, and listings the material found in each.

Shell Areas A, B, and C

This group of shell areas was at the northwestern end of the site, nearest the river. None of these appeared to be solid middens, but each showed an area on the surface where there was a

greater mixture of shell with the soil. Scattered shell fragments occurred beyond at radii from about 100 to 200 feet. Such shell patches had already been examined at other sites in the reservoir and no excavations was attempted. It is likely small separate areas of this sort are each the locale of a singer household. Surface pottery included only Wakulla Check Stamped and Wakulla Plain.

Shell Areas D and E

These areas, close together showed the pottery complex of the newly defined Cummings Component, representing the Cummings period in the reservoir area. Area D was about 125 feet in diameter with a fairly high concentration of shell in the central portion. Adjacent on the east was a smaller area showing the same assemblages, Area D1. Two parallel trenches cut by the road patrol showed scattered shell extending to about 9 inches below the surface, but no pits or other features.

During the initial reconnaissance of the site we hailed a passing bulldozer, which obligingly took a swipe out of Area E, disclosing shallow but nearly slid shell layer as well as two shell pits, Features 1 and 2. Pottery found at that time is listed in Table___. Upon our return to the site we devoted the greater part off our investigation to this shell principally on the eastern side. This portion was laid off in 10 foot squares, and we first removed seven squares along the 10 foot line of stakes at the edge of the midden. As the deposit was shallow each square was taken out as a single unit, including the topsoil, the underlying thin layer of shell midden, and the few inches of the sand below which contained sherds. In addition to recovering quantities of sherds (Figure 15), we found in most squares deer and other animal bones, terrapin, chert chips, broken quartzite pebbles and many specimens of a dark red rock resembling iron ore. In Square 10/0 was a fragment of a rounded greenstone celt; in Square 10/10 a tool made of a chert core; in Square 10/30 an awl fragment of mammalian long bone, and a highly mineralized pointed bone. If the latter is actually of human workmanship and may have been found and brought to the site during the later period. In Square 10/50 were another unidentified chert tool and a scraper of the same material.

These seven squares yielded 1,739 sherds, the greater part of which could be assigned to the Cummings period. Over 90 percent of the total could be classified as Cummings Plain, a little over 3 percent as Carrabelle Punctated, and 1 percent as Keith Incised. The other Gulf types listed in the table were presumed to belong to the same period, but the relationship of 9 faint complicated stamped sherds and 8 Hares Landing Complicated Stamped were not indicated in this series of squares. Four sherds of Lake Jackson plain were regarded as intrusive.

The profile thus exposed along the 20 foot line showed that the midden consisted of a deposit of freshwater mussel shells, in this section about 45 feet long and reaching a thickness of 18 inches in the highest part. Lying partly upon the shell layer was a deposit of brown swamp clay (crawfish earth). Below this and only partly overlapping the sell deposit was brown stained sand containing occasional shells and sherds. Below the shell were 3-5 inches of brown sand, also containing some cultural material. At the base of this zone was tan alluvial sand.

Three 10 foot squares were then cut toward the central part of the shell heap: Squares 20/20, 20/30, and 20/40. It was now possible to excavate these by physical layers. These contained deer, bird, terrapin bones, chert chips, broken pebbles and iron ore fragments as before. A heavy stemmed chert projectile point was found in the humus of Square 20/40, but no other non-ceramic artifacts. The point appears to be an Archaic type, not in context here. The pottery assemblages were composed principally of the type Cummings Plain, with considerably

higher proportions of Weeden Island Punctated and Weeden Island Red. We were unable to see any significant differences from top to bottom.

The profile along the 30 foot line revealed by this excavation showed, between the 10 and 20 foot stakes, four inches of crawfish earth and humus above a 12 inch layer of packed mussel shells. Near the base of this zone was a one inch thick layer of sandy clay containing random charcoal specks. It was rather hard, and in appearance suggested that it was some kind of floor. Directly upon it were some crushed mussel shells which looked as though they had been trodden upon. Below the floor was an even, level layer of shell lying directly on virgin tan sand. The upper part of this sand showed some dark organic stain.

The next step was to remove the mussel shells down to the floor in two adjacent squares 30-20 and 30-30. This was as much as we could do, because of lack of time. No postholes could be found in the area of the floor which was examined, and in Square 30-30 our presumed floor was humped up eight inches over a deposit of brown earth.

The sherd counts from the physical levels within these two squares showed a significant vertical segregation of pottery types. These two squares were the most central of any we dug in Shell Midden E, and probably the reason the segregation was found only here was because the original deposition of this midden was a smaller area under the central part. The sherds in Square 30/20 from the humus and in the shell deposit above the floor corresponded to that which we had recognized as the assemblages of the Cummings period. There were only 2 sherds of faint complicated stamped, or 0.4 percent of the total. Among the sherds on the floor and in the shell below there were 47 faint complicated stamped sherds, 10.0 percent of the total. In square 30/30, there were no complicated stamped sherds above the floor. On the floor and below there were 37 faint complicated stamped sherds, 15 percent of the total.

It was concluded that below the central portion of Shell Midden E the pottery differed from the later levels in showing 10 to 15 percent of sherds decorated by a faint complicated stamped. Accompanying it were a few sherds of Hares Landing Complicated Stamped, and we shall see in the discussion of Midden J where Hares Landing Complicated Stamped was prevalent, that a few sherds of faint complicated stamped were associated there. The rim sherds associated with the Faint Complicated Stamped were of the large folded variety, differing markedly from the typical Cummings Plain rims which are usually unmodified or fake folded (fold imitated by incising a line parallel to the lip) or occasionally rolled. In order to determine what variety of plain might be associated with the faint stamped pottery from the bottom of the midden, we examined 46 rim sherds from these deposits. Of these 28 were unmodified, 13 fake folded, and 3 were possibly, but not clearly folded. As we are unwilling to believe that the faint stamped pottery was unaccompanied by any plain at all, we must conclude that it was made at the same time as the Cummings Plain sherds found with it. During this particular interval, apparently, the large folded rims were made specifically for stamped vessel but not for the plain. We also conclude that Cummings Plain in the lower and upper levels of the shell heap indicates a cultural continuity. The faint complicated stamped pottery which was made in relatively small amounts in the lower levels had ceased to be made by the time the upper levels were occupied. We shall refer to the lower level pottery complex as Early Cummings period. Probably the accompanying Gulf pottery types belong with it as well.

In Square 30/20 in the shell above the floor was a stemless chert projectile point similar to a common type at Fairchilds, a fragment of a chert ovate or scraper, and a fragment of worked bone, possibly an awl or punch. On the floor was a biscuit shaped hand stone pitted on both sides.

	Number
Cummings Plain	22
Carabelle Punctated	1
Chert Chips	some

Table 11. Hares Landing, Areas D-E, Square 10-0, Level 0-6 inches.

	Number
Cummings Plain	155
Carabelle Punctated	7
Weeden Island Punctated	2
Keith Incised	1
Tucker Ridge Pinched	1
Unidentified Stamped	2
Weeden Island Red	1
Fragment of Rounded Celt	1

Table 12. Hares Landing, Areas D-E, Square 10-0, Level 6-12 inches.

	Number
Cummings Plain	160
Carabelle Punctated	4
Weeden Island Punctated	1
Keith Incised	1
Carabelle Incised	1
Weeden Island Red	1
Weeden Island Zoned Red	1
Unidentified Stamped	2
Core Tool	1
Chert Fragments	some
Iron Ore Fragments	some
Deer Bones	some

Table 13. Hares Landing, Areas D-E, Square 10-10 all Levels.

	Number
Cummings Plain	675
Carrabelle Punctated	28
Weeden Island Punctated	6
Keith Incised	11
Carabelle Incised	1
Weeden Island Red	3
Tucker Ridge Pinched	1
Faint Complicated Stamped	2
Hare's Complicated Stamped	2
Weeden Island Incised	1
Lake Jackson Plain	1
Stemless Knife (Fairchilds Type)	1
Knife Fragment	1
Chert Chips	some
Iron Ore Fragments	some
Broken Rocks	many
Deer Bones	many

Table 14. Hares Landing, Areas D-E, Square 10-20, all Levels.

	Number
Cummings Plain	75
Carabelle Punctated	4
Keith Incised	1
Tucker Ridge Pinched	1
Indian Pass Incised	1
Weeden Island Red	3
Special Incised and Punctated Sherd imitating Mound Field Net-Marked	1
Unidentified Stamped	1

Table 15. Hares Landing, Areas D-E, Square 10-20, Sand Below Shell.

	Number
Cumming's Plain	197
Plain Polygonal Lug	1
Carabelle Punctated	7
Keith Incised	1

Table 16. Hares Landing, Areas D-E, Square 10-30, All Levels.

	20-20 Humus	20-20 Upper 6" of Shell	20-20 Lower 6" of Shell	Basal Sand	20-30 Humus	20-30 Upper 6" of Shell	20-40 Humus	20-40 Upper 6" of Shell	20-40 Lower Sand	Total
Cummings Plain	185	312	270	27	131	54	175	205	24	1383
Carrabelle Punctated	7	15	14	2	8	2	3	5	1	57
Carrabelle Incised	0	1	0	1	0	0	0	1	0	3
Keith Incised	2	3	4	0	0	0	0	2	0	11
Tucker Ridge Pinched	0	0	1	0	0	0	0	0	0	1
Weeden Island Punctated	0	10	2	2	1	0	0	0	0	15
Weeden Island Incised	0	0	1	0	0	0	0	0	0	1
Weeden Island Red	1	6	20	1	0	0	0	4	0	32
Weeden Island Zoned Red	0	0	0	0	0	0	0	0	0	0
Indian Pass Incised	0	1	3	0	0	1	0	2	0	7
Special	0	0	0	0	0	0	0	0	0	0
Faint Complicated Stamped	1	1	0	0	0	0	0	1	0	3
Hares Complicated Stamped	0	0	0	0	0	0	0	1	0	1
Fairchilds Complicated Stamped	0	0	0	0	0	0	0	0	0	0
Late Jackson Plain	0	0	0	1	1	0	1	1	0	4
Chattahoochee Brushed	0	1	0	0	0	0	0	0	0	1
Total	196	350	315	34	141	57	179	222	25	1519

Table 17. Hares Landing, Areas D-E, Ceramics from Squares 20-20, 20-30, and 20-40.

	20-30 Humus	20-30 Shell Above Floor	Total Humus and Shell Above Floor	Percent	20-30 Floor and Below	Total Floor and Below	Percent
Cummings Plain	112	378	490	88.77	388	388	82.73
Carabelle Punctated	5	13	18	3.26	9	9	1.92
Carabelle Incised	0	6	6	1.09	0	0	0.00
Keith Incised	9	16	25	4.53	2	2	0.43
Tucker Ridge Pinched	0	0	0	0.00	4	4	0.85
Weeden Island Punctated	1	1	2	0.36	0	0	0.00
Weeden Island Incised	2	2	4	0.72	2	2	0.43
Weeden Island Red	2	2	4	0.72	17	17	3.62
Indian Pass Incised	0	0	0	0.00	0	0	0.00
Special	0	0	0	0.00	0	0	0.00
Faint Complicated Stamped	0	2	2	0.36	47	47	10.02
Hares Complicated Stamped	0	0	0	0.00	0	0	0.00
Wakulla Check Stamped	0	1	1	0.18	0	0	0.00
Total	131	421	552	100.00	469	469	100.00

Table 18. Hares Landing, Areas D-E, Ceramics from Square 20-30.

	30-30 Humus	30-30 Shell Above Floor	Total Humus and Shell Above Floor	Percent	30-30 Floor	30-30 Shell Below Floor	30-30 Lowest Stain	Total Floor and Below	Percent
Cummings Plain	90	225	315	94.03	112	34	27	173	71.19
Carabelle Punctated	1	5	6	1.79	6	0	2	8	3.29
Carabelle Incised	0	0	0	0.00	0	0	0	0	0.00
Keith Incised	1	3	4	1.19	1	0	0	1	0.41
Tucker Ridge Pinched	0	0	0	0.00	0	0	0	0	0.00
Weeden Island Punctated	2	2	4	1.19	0	0	0	0	0.00
Weeden Island Incised	0	0	0	0.00	5	0	1	6	2.47
Weeden Island Red	2	4	6	1.79	13	2	1	16	6.58
Indian Pass Incised	0	0	0	0.00	0	0	0	0	0.00
Special	0	0	0	0.00	0	0	0	0	0.00
Faint Complicated Stamped	0	0	0	0.00	24	7	6	37	15.23
Hares Complicated Stamped	0	0	0	0.00	0	2	0	2	0.82
Wakulla Check Stamped	0	0	0	0.00	0	0	0	0	0.00
Total	96	239	335	100.00	161	45	37	243	100.00

Table 19. Hares Landing, Areas D-E, Ceramics from Square 30-30.

	0-10	10--10	10--20	10--30	10--40	10--50	10--60	Total	Percent
Cummings Plain	177	160	750	197	150	131	33	1598	91.89
Carrabelle Punctated	8	4	32	7	3	4	1	59	3.39
Carrabelle Incised	0	1	1	4	0	1	1	8	0.46
Keith Incised	1	1	12	1		1	2	18	1.04
Tucker Ridge Pinched	1	0	2	0	0	0	0	3	0.17
Weeden Island Punctated	2	1	6	2	2	1	0	14	0.81
Weeden Island Incised	0	0	1	0	1	0	0	2	0.12
Weeden Island Red	1	1	6	1	0	0	0	9	0.52
Weeden Island Zoned Red	0	1	0	0	0	1	0	2	0.12
Indian Pass Incised	0	0	1	0	0	1	0	2	0.12
Special	0	0	1	1	1	0	0	3	0.17
Faint Complicated Stamped	2	2	3	0	2	0	0	9	0.52
Hares Complicated Stamped	1	0	2	0	0	2	3	8	0.46
Lake Jackson Plain	0	0	1	0	1	0	2	4	0.23
Totals	193	171	818	213	160	142	42	1739	100.00

Table 20. Hares Landing, Areas D-E, Ceramics from Squares 0-10 through 10-60.

Shell Areas F, G, and H

The surface collections from these three areas showed pottery assemblages containing considerable amounts of Fairchilds Complicated Stamped, accompanied by the minority Gulf pottery types which occurred in the Weeden Island period and partly contemporary with Fairchilds Landing.

Shell Area F was represented by a nearly solid deposit of shell 50 feet in diameter and about 12 inches thick. Scattered shells were found on the surface of the ground around it over a radius of about 25 additional feet. Sherds from a 5 foot square test pit are tabulated below. The road patrol was used to make one cut through the edge of the shell suggesting that the shell deposit was actually somewhat narrower and more restricted than it appeared on the surface. *Editor's note: There are redundancies in the following tables, all of which were in the manuscript.*

	Number
Cord Marked	1
Carabelle Punctated	2
Motif 78	1
Motif 95	1
Motif 71	3
Motif 116	1
Motif 110	1
Motif 106	1
Motif 104	1
Plain	21
Rims	4
Residual	6
Artifact	1

Table 21. Hares Landing, Area F Surface.

	Number
Motif 106	1
Cord marked	2
Motif 127	1
New Motif	1
Motif 68	68
Simple Stamped	2
Motif 94	2
Motif 95	1
Motif 78	6
Residual	1
Plain	47
Rims	6

Table 22. Hares Landing, Area F, Kelly's Shell Midden.

	Surface Collection	Test Pit	Total
Residual stamped (Fairchilds)	6	15	21
Fairchilds Plain	21	47	68
Kolomoki Complicated Stamped	0	1	1
Fairchilds Cord Marked	1	2	3
Carrabelle Punctated	2	0	2
Artifact	1	0	1

Table 23. Hares Landing, Area F Ceramics.

Motif	Surface Collection	Test Pit	Total
68	1	0	1
71	3	0	3
78	1	6	7
94	0	2	2
95	1	1	2
104	1	0	1
106	1	1	2
110	1	0	1
116	1	0	1
127	0	1	1
A	1	0	1
B	1	0	1
C	1	0	1
D	0	1	1
Total	13	12	25

Table 24. Hares Landing, Area F Stamped Motifs.

Motif	Number
71	3
78	7
94	2
95	2
104	1
106	2
110	1
116	1
127	1

Table 25. Hares Landing, Area F Stamped Motifs.

Area G was a patch of solid shell about 40 feet in diameter with an area of scattered shells visible on the surface with a radius of an additional 30 feet. A road patrol cut along the western side of the midden showed a zone of crawfish earth above the solid shell deposit which attained a maximum at the southeastern end of about 13 inches. Two test pits 10 feet long and 5 feet wide were made to secure a large sample of sherds. Pottery again was of the Weeden Island period, and among the large sample of Fairchilds Complicated stamped was an extremely large proportion of Motif 78. This had been a rare design at Fairchilds Landing were it is assigned to the upper part of the Weeden Island period. In Area G at Hares Landing, this design appears to have been a specialty of the house, possibly representing the effort of a single potter. *Editor's note: There are redundancies in the following tables, all of which were in the manuscript.*

Fairchilds Complicated Stamped Motif	Surface Collection	Test Pits	Total
64	1	3	4
65	2	7	9
67	0	1	1
68	1	5	6
71	2	5	7
72	1	0	1
74	0	3	3
78	28	107	135
93	6	0	6
94	5	43	48
95	3	2	5
101	0	1	1
104	0	1	1
105	1	0	1
106	0	1	1
110	3	0	3
112	0	1	1
116	5	4	9
127	1	2	3
Residual Stamped (Fairchilds)	34	112	146
Kolomoki Complicated Stamped	0	6	6
Weeden Island Plain	66	288	354
Fairchild's Cord Marked	0	2	2
Carrabelle Punctated	1	1	2
Carrabelle Incised	1	1	2
Weeden Island Punctated	1	0	1
Unidentified Incised	2	0	2
Weeden Island Red	1	9	10
Simple Stamped (shell)	0	2	2
Mound Field Net Marked	0	1	1
Artifacts	6	9	15

Table 26. Hares Landing, Area G Ceramics and Stamped Motifs.

Motif	Surface	Test Pit
64	1	3
65	2	7
67	0	1
68	1	5
71	2	5
72	1	0
74	0	3
78	28	107
93	6	0
94	5	43
95	0	2
101	0	1
104	0	1
105	1	0
106	0	1
110	3	0
112	0	1
116	5	4
127	1	2

Table 27. Hares Landing, Area G, Stamped Motifs.

	Number
Motif 105	1
Motif 116	1
Motif 110	3
Motif 72	1
Motif 94	2
Motif 95	1
Motif 78	6
Motif 127	1
New Motif	1
Residual	13
Red Filmed	1
Plain	12
Rims	2
Artifacts	3

Table 28. Hares Landing, Area G Surface.

	Number
Motif 64	1
Motif 93	6
Motif 78	22
Motif 116	4
Motif 94	3
Motif 65	2
Motif 95	2
Motif 68	1
Motif 71	2
New Motif 2	1
Residual	21
Carabelle Punctated	1
Carabelle Incised	1
Artifacts	3
Plain	43
Rims	7

Table 29. Hares Landing, Area G Surface and Around Stump.

	Number
Motif 78	80
Motif 64	2
Motif 68	4
Motif 71	3
Motif 74	3
Motif 95	1
Motif 94	25
New Motif 1	1
New Motif 2	2
Kolomoki	2
Cord Marked	2
Carabelle Punctated	1
Plain, Double Vessel	1
Red-Filmed	5
Plain	138
Residual Stamped	74
Plain Rims	18
Artifacts	8

Table 30. Hares Landing, Area G, Square 1.

	Number
Plain	107
Rims	25
Motif 104	1
Motif 65	7
Motif 67	1
Motif 101	1
Residual	38
Motif 116	4
Motif 68	1
Motif 71	2
Motif 95	1
New Motif 1	1
Motif 94	18
New Motif	2
Motif 78	27
Motif 127	2
Motif 64	1
Carabelle Incised	1
Artifact	1
Red Filmed	4
Motif 112	1
Mound Field Net Marked	1
Simple Stamped	2

Table 31. Hares Landing, Area G, Square 2.

Shell Area H was a patch of midden about 50 feet long and 25 long and 25 feet wide, surrounded by a wider area showing scattered shell and sherds. A short distance to the east was Area H1 about 70 feet long and 35 feet wide. The latter showed less shell, but sherds were fairly numerous on the surface. The initial test pit (1) in Area H had been made during the first reconnaissance of the site. Counts from Test Pit 2 to secure a greater sample of sherds are listed below.

Type	Subtype	Number
Fairchilds Complicated Stamped	Motif 110	8
Fairchilds Complicated Stamped	Residual	19
Weeden Island Plain		49
Weeden Island Red Filmed		4

Table 32. Hares Landing, Area H, Test Pit 2 Ceramics.

A road patrol trench cut through Area H1 showed brown clayey earth with a scattering of shell extending to a depth of one foot. Below was light brown sand. A 10 by 5 foot test pit made to obtain a larger sample of pottery showed the following:

Type	Subtype	Number
Fairchilds Complicated Stamped	Motif 68	1
Fairchilds Complicated Stamped	79	1
Fairchilds Complicated Stamped	110	7
Fairchilds Complicated Stamped	116	1
Fairchilds Complicated Stamped	Residual	14
Fairchilds Complicated Stamped	New Motif	5
Weeden Island Plain		67
Fairchilds Cord Marked		1
Carrabelle Punctated		1

Table 33. Hares Landing, Area H1, Test Pit Ceramics.

Area J

On the crest of a two feet rise, 100 feet north-northwest of the burial mound, the road patrol exploration showed an area of dark brown sand, approximately circular, about 70 feet across. We dug two test pits and one 10 foot square. Below a negligible amount of topsoil, dark brown sand containing cultural material extended to a depth of 14 inches. Below this was the usual virgin yellow sand underlying the other parts of the site. Sherds, animal bones and flint fragments were numerous but there were few shells.

Test Pit 1, 2 by 5 feet in size, was carried down to the yellow sand, yielded the following sherds.

Type	Number
Fairchilds Plain	161
Hares Landing Complicated Stamped	65
Weeden Island Red Filmed	6
Tucker Ridge Pinched	2
Mound Field Net Marked	1
Carabelle Punctated	5
Carabelle Incised	1
Weeden Island Incised	2
Total	243

Table 34. Hares Landing, Area J, Test Pit 1 Ceramics.

There were also two chipped flint tools, triangular in cross section, resembling knives or punches.

The undecorated sherds from the test pit resembled Fairchilds Plain in their coarse paste, medium to large particles of temper, and in the frequent occurrence of large folded rims. There were minor differences, however, and differences which would only become apparent in relatively large samples of material: folded rims were on the average larger than at Fairchilds Landing and the lips were more squared; there were fewer examples of small folded rims, and the bowl forms predominated over jars even more strongly than at Fairchilds Landing. Briefly speaking, judging from the contrast at Fairchilds Landing between Kolomoki and Fairchilds Plain, it appears that Fairchilds Plain at Hares Landing shows the trends noted at Fairchilds Landing to an even greater degree.

The stamped sherds from the test pit again seemed similar to Fairchilds Complicated Stamped in appearance of paste, temper, and in the frequent use of the large folded rim (Figure 14). The appearance of the stamped impressions was also rather similar, the lands being fairly narrow, and not heavily impressed. Again noting the contrast between Kolomoki Stamped and Fairchilds Complicated Stamped at Fairchilds, the Hares Landing material carries the latter's characteristics to an excessive degree. The folded rims are more numerous, larger, and more squared at the lip, and there are hardly any examples of the small folded rim. Although the stamped pottery is basically similar to Fairchilds Complicated Stamped, it is perfectly distinguishable from that type in having only one decoration motif on nearly every sherd found in the test pit, and that motif was one which did not occur at Fairchilds Landing. As we shall show that this variety probably occupies a slightly later time span than Fairchilds Complicated Stamped, it has been given a separate type name: Hares Landing Complicated Stamped.

As with the plain and stamped sherds in the test pit, the presence of minor Weeden Island pottery types: red, ridge pinched, net marked, punctated, and incised, all tied in more closely with the Fairchilds Landing than the Kolomoki levels.

As it was desirable to obtain a larger sample of this interesting material, another test pit (Test Pit 2), by____ feet to virgin soil was dug, as well as a 10 foot square. We shall not tabulate the results of the second test pit, they were similar to the first. The 10 foot square was dug in 6 inch levels, but showed no significant changes from top to bottom. The materials, by level, are listed below.

The stamping was faint, in many cases hardly perceptible, but interestingly, there was relatively little over stamping. This motif had not been encountered at Fairchilds, but this size of lands and grooves, the development of the folded rim, the coarseness of paste, and the accompaniment of Weeden Island pottery types suggested that this deposit was no earlier than the upper levels at Fairchilds Landing and might indeed be later.

Accordingly we dug a 10 foot square adjacent to the test pit and sank the material in 6 inch levels. The materials from Test Pit 2 are presented here.

	Number
Plain	114
Complicated Stamped	41
Red Filmed	6
Tucker Ridge Pinched	1
Keith Incised	1
Carabelle Punctated	3
Carabelle Incised	1
Weeden Island Incised	3
Total Sherds	170
Weeden Island Percentage	8.82
Modified Flake	1

Table 35. Hares Landing, Area J, Test Pit 2, 0-6 inch Level Artifacts.

	Number
Plain	421
Complicated Stamped	162
Red Filmed	19
Weeden Island Incised	1
Keith Incised	1
Carabelle Punctated	3
Carabelle Incised	1
Tucker	3
Total Sherds	611
Weeden Island Percentage	4.58
Flint Drill	2
PPK	1
Perforated Alligator Tooth	1

Table 36. Hares Landing, Area J, Test Pit 2, 6-12 inch Level Artifacts.

	Number
Plain	74
Complicated Stamped	49
Weeden Island Incised	1
Tucker Ridge Pinched	1
Red Filmed	3
Deer Awl Fragment	1

Table 37. Hares Landing, Area J, Test Pit 2, 12-18 inch Level Artifacts.

Pottery Types and Analysis

It is reported to have been said of a noted American archaeologist that, "when he is speaking of culture, he means pottery". Our work at Fairchilds Landing suggested that, in the extreme Southeast at any rate, pottery is indeed an excellent vehicle for the study of culture. Pottery, subjected to many modifications by its makers, has long been recognized to be of great value in defining relative time sequences. Changes in paste, temper, form and decoration obtained consistent vogues during particular spans of time over particular regions. Moreover in the Eastern United States pottery is abundant, and from the time of its first introduction into the area there are few sites which do not show some fragments of pottery to enable their placement in a ceramically oriented space-time scheme.

Recent work suggests that very brief time intervals may be defined by a careful comparison of pottery assemblages. A given pottery complex (defined as the recognizable characteristics of all the pottery made by a given people, at a given time, at a given place) is undergoing continual change. Within the pottery complex the various pottery types and single ceramic features often varying independently and in the proportions in which they are present, permit finer and finer divisions of time and consequent better control of the time factor in the interpretation of archaeological data.

It is less frequently recognized that pottery variation when it is a function of spatial rather than time differences, can show more clearly than any means now available in the Southeast, the precise spatial limits cultural interaction and/or immediate historical relationship. With its sensitivity to change, pottery can show which sites are related historically and which of a group of contemporary communities maintained the closet contacts. There is an assumption here that ceramic similarities are directly proportionate to culture (whether temporal or spatial) distance.

Pottery can be studied as if it had a history of its own, completely outside human affairs. Ceramic technology in the Southeast shows a gradual betterment from its earliest beginnings. In the realm of style and ornament we see certain traditions or continua arise, develop, and pass away. What we actually see in the pottery, of course, is the objectification of the rules and formulations of the pottery maker's art at particular times and places. These formulations were in the minds of the potters-part of their culture, and a small part at that.

The history of pottery cannot represent the history of a culture, but recognition of the pottery complex can identify a culture for us, in time or in space. It probably can be assumed that there are certain intimate relationships between the history of the complex and the culture of which it is a part. If we find evidence of little change in pottery or of great change within a given time interval, it is legitimate to enquire as to what factors may have been responsible, and whether their influences affected the culture more fundamentally than just in the realm of the pottery complex.

The oldest known carved paddle decorated ware in northern Georgia is a small check or grid stamp (Cartersville Check Stamped), usually tempered with sand or grit, occasionally with limestone, and apparently closely related to Wright Check Stamped of northern Alabama. Near the Etowah River this variety was adopted by the Early Woodland people already using the older fabric marked ceramics, but eastward on the upper Chattahoochee and westward in northern Alabama it is found at some sites as the only decorated type, in some few cases associated with a few sherds of "linear check stamped" which emphasized onset of the gird lines at the expense of the other. The possibility has already been suggested that simple stamping with a parallel grooved paddle may well be an older style, although it occurs later at northern Georgia and

Alabama sites. In speculating on the origin of check stamping, it is worth noting how readily the grooved paddle could be converted into a check stamp simply by incising at right angles another set of parallel grooves across the first.

Swift Creek Complicated Stamped

In various southeastern sub-areas the earliest complicated stamped pottery is already associated with the check and simple stamped varieties. With each local pottery complex regarded as a vertical continuum undergoing temporal change, it can be suggested that the constant association of check, simple, and complicated stamping, together with cord marking toward the Tennessee region, indicates the approximate contemporaneity of such cultural units as Late Deptford on the Georgia Coast, Deptford-Santa Rosa levels in northwestern Florida, Late Cartersville in northern Georgia, Candy Creek in eastern Tennessee, and some Copena sites in northern Alabama. We are evidently dealing here with an early spread of the complicated stamped style over a large part of the Southeast at a time level equivalent to Middle Woodland. Ohio Valley Hopewell also shows some complicated stamped sherds and on that basis at least can be equated roughly with Santa Rosa, Copena, and other southerly cultures showing complicated stamped sherds.

Arthur R Kelly's investigation of the Swift Creek type site near Macon in central Georgia (Kelly 1938) clearly points to the region from which the method of ornament by complicated stamping, and perhaps some of the wooden paddles and vessels themselves may have been disseminated. The Swift Creek mound and village yielded a stratified sequence in which Early, Middle, and Late varieties of complicated stamping were distinguished.

Swift Creek Complicated Stamped is grit or sand tempered ware, generally in the form of a conidial jar. Early Swift Creek, in the first three levels of the mound, showed some notched or scalloped rims, and was decorated with a particular series of stamped motifs. The typical designs were composed of several (2-4 or more) geometric figures tied together by the use of simple elements. I am indebted to Rowena W. Kelly for the information concerning the design composition of Early and Middle Swift Creek, and to Arthur R. Kelly for other prepublication information concerning this important site. These designs show the used of open terminal lines permitting the application of the stamp to create an overall effect similar to a wide-yard lace or elaborate print. In addition to these complex interlocking designs, there is a repetition of simpler, even single, figures used. The designs are both symmetrical and asymmetrical, with the latter possibly dominant.

Middle Swift Creek, beginning in the fourth mound from the bottom, often shows a small folded or extruded rim. Design composition is more sophisticated and made up largely of what might be called independent line movements forming abstract motifs which fit the stamping tool. Balance is both formal and asymmetrical. Open terminal lines are still used.

Late Swift Creek, confined to the top of the mound and the surrounding village area, showed much larger designs with wide lands and grooves. The small folded rim now often had a plain burnished band below it. Some have a stamped zone at the rim.

The sherd study sample came from the premound level and five successive sod lines which separated the major divisions of the mound. These sod lines were separated by layers of village debris and basket laid sand, with an especially deep layer between mound 3 and 4 which represented the division between Early and Middle Swift Creek. Because of the use of village debris in mound construction, old sherds occurred in all the fill levels of the mound as well as in the village. The essential character of this kind of stratigraphy is that the older mound stages

were successively sealed off as new changes took place in the continuing pottery complex. Some Late Swift Creek material was found in the fill of the last mound but the greater part came from the village area. It was separated out typologically from older sherds, as Sears has pointed out, but represents a variety of stamping which was absent from the lower mound levels.

The terms Early, Middle, and Late Swift Creek actually refer to necessarily arbitrary divisions within a continuous ceramic development. The conidial and rounded bases of the early mound levels are at the end of the sequence associated with some flattened base vessels. The most sophisticated and precisely cut designs (Middle Swift Creek) appear in the fourth mound and continue upward yet trend toward the late Swift Creek variety begins at the same time when designs become somewhat larger to culminate in the exaggerated forms seen in the village. Vessels with a burnished band around the neck, comparable to the feature occurring on Kolomoki Complicated Stamped, have their inception in the fifth mound level and continue into the later occupation of the village, Sears (1951:15) to the contrary notwithstanding. The small folded rim also appears first in the fourth level and a broader variant is present in the fill of Mound 6 and in the village.

Comparison of the earliest complicated stamped sherds from the various parts of Georgia, Tennessee, northern Alabama, and Florida with the central Georgia sequence does not give entirely satisfactory results, but one gains the impressions that their time range is somewhere between Early and Middle Swift Creek. Early Swift Creek from the northwestern coast of Florida is of all these most similar to the central Georgia variety, and at present it may be best to regard the complicated stamped style to have developed somewhere along an axis from central Georgia to northwestern Florida, probably in Georgia. In view of the fact that the Swift Creek decoration is a complex and well developed style at the time of its first known appearance it Georgia, it is probable that a still earlier phase will one day come to light. The question of its ultimate origin is at present unanswerable. Decorations from bone carving, wood working, and body stamping have all been suggested (Sears 1952:101).

Swift Creek on the Northwestern Florida Coast

Swift Creek pottery appeared on the northwestern Florida Coast at the end of the Deptford period at a time when there were close ceramic relationships with the Marksville period of the lower Mississippi Valley (Willey1949:544-545). The variety is Early Swift Creek.

When Willey and Woodbury made their stratigraphic survey of northwestern Florida, they did not in the beginning attempt to distinguish sub-varieties of Swift Creek Complicated Stamped. Willey later found that it was possible to identify two kinds: while he referred to these as Early and Late varieties, he hesitated to assign formal type names for fear of conflicting with the unpublished central Georgia definitions of the types. He pointed out, however, that the stylistic variations in Florida corresponded in several notable respects to the history of the style at Macon. The northwestern Florida Early Variety which was associated with the Santa Rosa Swift Creek period does correspond fairly well to Early Swift Creek in central Georgia. The Florida Late Variety which was attributed to the Weeden Island I period corresponded in some respect with central Georgia Late Swift Creek, but in other respects it differed greatly.

With all the advantages which hindsight gives based on the results from Kolomoki and Fairchilds, we are now in a position to see that the Florida Late Variety of Swift Creek included pottery from two sequent periods: Kolomoki and Weeden Island. It was the Kolomoki Complicated Stamped vessels illustrated by Willey (1949: Figure51, especially a, d, e, possibly b, c, and Figure 50) which most closely resembled central Georgia Late Swift Creek, and the

Fairchilds Complicated Stamped vessels of Weeden Island date (Willey 1949: Plate 34 a, b, c, d) which were much later and did not look like any of the central Georgia varieties then known. Plate 34 shows sherds with a zone of stamping below a folded rim. This occurs in Fairchilds Complicated Stamped, but usually the zone of stamping extends from the rim almost to the base.

Kolomoki Complicated Stamped

In his investigations at Kolomoki in southwestern Georgia, Sears (1951:14-16) recognized connections and some specific similarities between one class of complicated stamped sherds from Kolomoki and those from central Georgia--Late Swift Creek. However, he listed four main features which seemed to differentiate the southwestern Georgia materials, (ibid) and for these reasons and because he was faced with the real necessity of differentiating the Kolomoki variety from the northwestern Florida Late variety which included both his and some later material, Sears named his pottery Kolomoki Complicated Stamped.

Two main occupations at Kolomoki were distinguished, represented by successive pottery complexes. The complex which was presumed on a rather slight basis to be earlier was called Weeden Island (Sears 1951:38) and it included, among several pottery types which were similar to Weeden Island I of northwestern Florida, a complicated stamped variety resembling Fairchilds Complicated Stamped. The presumably later complex was called Kolomoki. Its main constituents were Kolomoki Complicated Stamped and Kolomoki Plain.

In the meantime the Southeastern Archaeological Conference held at Knoxville Tennessee in 1950 had agreed that complicated stamped pottery from such late sites as Kolomoki Complicated Stamped rather than Swift Creek Complicated Stamped. For some reason which now escapes me it was also decided, rather prematurely it seems, that Swift Creek as a type name should survive in reference to the early material only, which was to be called Swift Creek I. Later varieties of Swift Creek were to be called Swift Creek II until separate types were distinguished by proper names.

The net result of the Conference's efforts was to compound confusion, although the general proposal to use separate type names for the complicated stamped types seems entirely reasonable. No one at the time expected the Kolomoki sequence to be reversed, or to find Kolomoki Complicated Stamped sitting squarely between Swift Creek I and II. I have not found the designation Swift Creek II to be on any used in my own studies, but have used Kelly's original Early, Middle and Late, Sears' Kolomoki, and my own Fairchilds Complicated Stamped.

Kolomoki Complicated Stamped is typically a sand tempered jar form, (taller than wide) decorated by deep and large stamped impressions on the body. The base is smoothed and there is often a smooth band below the rim, which generally shows a small fold or rim extrusion. At the Kolomoki site the bases are reported to be flat, either square or disc. In the Kolomoki levels at Fairchilds Landing flat bases were not especially numerous; suggesting that at this site at least the round base was in common use. This type as it occurred at Fairchilds Landing seems to agree in most particulars with Kolomoki Complicated Stamped as originally described by Sears and a separate type description to accompany this report seems unnecessary (Sears 1951:9-10) although a considerable amount of detail has been presented in a later section. There are probably minor differences in Kolomoki Complicated Stamped as known from the Kolomoki and Fairchilds Landing sites, and the more frequent use of the flat base at the former seems to be one of them. While the correspondence in stamped decoration is very close, we are not in a position to say just what proportion of the actual design motifs was shared by the two sites. Certainly some of the designs on sherds illustrated by Sears are not present at Fairchilds, and

other vessels of this type illustrated by Moore show designs which may not be found at either site. It is quite possible that there was a considerable amount of local variation in this respect, but insufficient material has been published to clarify this point.

The description of the stamped decoration of this type at Fairchilds Landing was approached from the point of view that the design motifs used might have chronological significance. At Kolomoki, it had been noted that only about 29 percent of the stamped sherds found in the Season I excavations were sufficiently large to allow recognition of what Sears called "the major element in the stamped design" (Sears 1951:11, Figure 4). Some of these recognized elements were closer to the whole stamp than others, but Sears felt that any other system of recording would have been too complicated to be useful

In the Fairchilds Landing study a major part of our effort went into the matter of identifying as much of the complete stamps as possible and we were fortunate in having a great many large sherds with clear impressions. Actually this study was rather unwillingly undertaken because there did not seem to be any certain way of distinguishing Kolomoki from the Florida variety of Late Swift Creek on the basis of the available type descriptions. As a result of the study however, it was determined that Kolomoki and the later material, which we named Fairchilds Complicated Stamped, represented two ends of a pottery continuum which at Fairchilds, had developed without any noticeable break. Now there are a number of designs which we can unhesitatingly class as Kolomoki, some which belong to Fairchilds Complicated Stamped, and others which were used in the transition between the two which are not clearly one or the other.

Fairchilds Complicated Stamped

The recent work at Fairchilds Landing contributed what was, in effect, a stratigraphic division within the Florida Gulf Coast variety of Late Swift Creek. Sears had already distinguished Kolomoki Complicated Stamped from this type, and had separated out another variety, which he called Swift Creek II or Late Swift Creek Complicated Stamped, and associated it with the Weeden Island period of southwestern Georgia. At Fairchilds Landing we found this variety clearly above Kolomoki Complicated Stamped, and as previously noted, it Fairchilds Complicated Stamped.

Judging from the southwestern Georgia data, the Weeden Island period of at least the adjacent portions of the northwestern Florida Coast can now be redefined to include Fairchilds Complicated Stamped as the major complicated stamped type. Willey's description of the later variety of Swift Creek included such specific Fairchilds Landing diagnostics as coarser paste, hastily applied, faint stamped impressions, and a rim strip (folded rim) which could be as much as 2 centimeters high.

Definition as a Type: This paper. Fairchilds Complicated Stamped includes part of the Northwestern coast Late Variety of Swift Creek Complicated Stamped (Willey1949:429-435) excluding the material which can now be classified as Kolomoki Complicated Stamped. It also includes sherds of the Weeden Island Complex at Kolomoki referred to as Late Swift Creek, and sometimes as Swift Creek II.

Ware Characteristics:

Method of Manufacture: Made by the coiling or annular technique.

Temper: Often indistinguishable, but possibly coarse sand in some instances, and particles of quartz averaging 1 millimeter are sometimes seen.

Paste Texture and Color: In general the paste is not as fine and compact as in Kolomoki Complicated Stamped, but coarser and often sandy. Paste color approximates that of the surface.

Surface Texture and Color: The interior surface is smoothed and the exterior was evidently smoothed before it was stamped. The smoothing is not as good as in Kolomoki, due in part to the coarser paste. Surface color is variable with firing scars present. The range is from buff to dark gray but the usual coloring is in various shades of brown. Usually exterior coloring is in various shades of brown. Usually exterior and interior colors are about the same, but in some cases the interior will be nearly black.

Thickness: Vessel walls range from about 5 to 8 millimeters, probably averaging about 7 millimeters, a litter thicker than Kolomoki. The vessels are probably larger.

Decoration:

Technique: Exterior surfaces are decorated by impressions of a carved wooden paddle.

Design: A number of complete and partial design motifs have been identified. These are abstract and geometric- none are depictive. Some of these designs are exceedingly complex, but there is more bi-lateral symmetry than in the earlier Middle Swift Creek style, and probably more than in Kolomoki. There is perhaps more of a tendency to fit the design to the shape of the paddle, and a trend noted in the Kolomoki period of inclosing the design within one or two border lines is carried further, often four to six marginal lines being used. The lands and grooves of the paddle are narrower, closer and the grooves not so deep as Kolomoki Complicated Stamped. The carving of the paddles, although often quite competent, is sometimes quite poor, and on the whole not as proficient as Middle Swift Creek or even Kolomoki.

Execution: There is a considerable amount of over stamping, more than in the case of Kolomoki Complicated Stamped, but there is also a tendency, not yet understood, for certain design motifs to be more carefully impressed than others. Impressions are considerably shallower on the average than in Kolomoki.

Distribution: The distribution of the stamping on the vessel is similar to Kolomoki. The entire vessel is covered except the lower portion and the base which are left smoothed. Less frequently decoration is confined to a band below the rim. This feature also occurs rather infrequently in Kolomoki. Such zoning of the stamping may have some chronological significance, and if so, is most frequent during the transition from Kolomoki to Fairchilds Complicated Stamped.

Form:

Total vessel: Jars with straight or slightly rounding sides are most common. Occasionally there is a slight rim flare. Bowl forms may also occur. Vessels are probably larger than the Kolomoki type.

Rim: Straight or slightly slanting in or out. Sherds in the earlier range of occurrence (Layer C) in the stratigraphic block at Fairchilds Landing show direct rims or rim folds less than 1 centimeter high. Sherds in the later range show the small folds sometimes, but also a larger fold 2-3 centimeters high.

Appendages: None

Geographical Range of Type:

The Lower Chattahoochee from Kolomoki near Blakely Georgia down into Florida. Willey's and Moore's Illustrations indicate a wide distribution in northwestern Florida, both this and the Kolomoki type.

Chronological Position of Type:

Weeden Island period. Above Kolomoki Complicated Stamped at Fairchilds Landing.

A few sherds occurred in the stratigraphic block at Fairchilds landing, for the most part in the upper, Weeden Island levels, showing design motifs similar to the motifs on the central Georgia type Napier Complicated Stamped (Motifs 67, 102, 109, and 128). Aside from the actual designs used, the other ceramic features seemed to correspond exactly to Fairchilds Landing rather than Napier, and the designs are larger and the lands and grooves wider than the central Georgia Napier type.

Napier Complicated Stamped as defined in central Georgia is a very thin-walled ware, with a straight or sometimes slightly flaring mouth. Folded rims are common and these have a range approaching Fairchilds Complicated Stamped, although the average may be slightly smaller. Only a limited variety of complicated stamped designs, probably less than ten, were used to decorate this type. These designs are rather diminutive, composed of very narrow lands and grooves and characterized often by horizontal line filling.

Most of the known central Georgia Napier designs occur in the Weeden Island levels at Fairchilds Landing but only one in the Kolomoki layers (Motif 67, Early). The designs are greatly enlarged, falling within the Fairchilds Complicated Stamped size range, and in all other ceramic features correspond to Fairchilds Complicated Stamped. At Kolomoki, Sears found significant quantities of Napier sheds much more closely resembling the central Georgia variety in two pits belonging to the Weeden Island village at that site. Sears' Weeden Island village, according to the interpretation advanced in this report, but I think we have here the evidence that Central Georgia Napier crossties fairly well with the Weeden Island period, and the degree of enlargement of the folded rim in central Georgia Napier reinforces this interpretation. Just why Napier designs should appear in Fairchilds Complicated stamped is uncertain at present. It is possible that they were borrowed from Napier, but more probable, since we place the Napier in the latter part of the Weeden Island period, that Napier derived its particular motifs out of a more typical Swift Creek assortment. The Napier line block occurs in Early Swift Creek, and the very common loop motif (Motif 67 at Fairchilds Landing) is present in Kolomoki Complicated Stamped, definitely antedating central Georgia Napier as it is known today.

The stratigraphic position of Napier in central Georgia is indicated, although not as closely as would be desirable, by the occurrence of sherds below the Mississippian (Macon Plateau) earth lodge as reported by Fairbanks (1946:98). It was also concentrated in the upper village levels at the Swift Creek type site (Personal Communication Arthur R. Kelly). On present evidence then, it intervenes between Central Georgia Late Swift Creek (which is closely allied to Kolomoki Complicated Stamped) and the Mississippian Macon Plateau focus.

The very distinctiveness of Napier probably makes it an excellent horizon style to cross check our ceramic sequences. In addition to the correlation with late Weeden Island we find Napier designs abundant in northern Georgia Early Woodstock period (Caldwell 1953:15-16). In eastern Tennessee some of the complicated stamped sherds illustrated from the Hamilton component on Hiwassee Island are Napier (Lewis and Kneberg 1946:Plate 47).

It is Napier Complicated Stamped which seems to have begun the angular style which Sears (1952) suggested prevailed in the northern part of Georgia. This can be recognized as a distinct stamping tradition, ultimately developed, and as previously suggested, from a late phase of Swift Creek. The angular straight-line motifs are illustrated in the succeeding northern Georgia pottery types Woodstock Complicated Stamped and Etowah Complicated Stamped. The

time range of this series beginning with Napier starts just prior to Early Mississippian in Georgia. It is then, a fairly late development, and I know of no evidence for Sear's suggestion that earliest Napier probably dates close to earliest Swift Creek, and the supposition that Napier might be derived from Mossy Oak is highly conjectural in view of the long time span between Mossy Oak Simple Stamped and the position of Napier above Late Swift Creek in central Georgia. Prior to the appearance of Napier in northern Georgia, curvilinear stamps approximately equivalent to Early-Middle Swift Creek occur sparingly in the Etowah Valley, possibly a little more frequently than in northern Alabama or Eastern Tennessee. These three areas are all marginal to the central and southwestern Georgia axis of Swift Creek stamping. In a later period a small carefully impressed curvilinear stamp of Swift Creek deviation is associated with Napier on the upper Chattahoochee, and is especially abundant in northeastern Georgia.

Hares Landing Complicated Stamped

Work at Hares Landing permitted definition of another pottery type in the Swift Creek style, Hares Landing Complicated Stamped. Test pits in Midden Area J at that site showed a "pure" pottery complex in which the majority of sherds were plain, somewhat resembling Fairchilds Plain. There were also minorities of Weeden Island period decorated types in the Gulf Tradition. The majority of decorated sherds, however, were complicated stamped. These resembled Fairchilds Complicated Stamped in paste, temper, general appearance of the stamped impressions and in the frequent use of the large folded rim. On a seriating basis, this is in terms of the contrast between the Kolomoki and Fairchilds Complicated Stamped; Hares Landing carries the Fairchilds Complicated Stamped characteristics to an excessive degree. The folded rims are more numerous, larger, and more squared at the lip, and there were hardly any examples of the small folded rim. What makes this type perfectly distinguishable from Fairchilds Complicated Stamped however, is the fact that only one stamped design was used to decorate the sherds. This is Motif 118 (?) of the Fairchilds Complicated Stamped series of which only one example was found at that site, and it was in Layer A-B, the highest zone in the shell heap. A few sherds of Hares Landing Complicated Stamped occurred in the basal zone of Midden E at the Hares Landing site below deposits of the Cummings period. Thus this pottery type and the accompanying complex can be placed with some degree of certainly after the Weeden Island period but before Cummings. Midden J of Hares Landing represents this minor time interval.

Definition as a type: This paper.

Ware Characteristics:

Method of manufacture: Made by coiling or annular technique.

Temper: Coarse sand or quartz grit.

Paste color and texture: Paste is coarse and shows distinct lamination. Color ranges from rusty brown to black, and is usually either lighter or darker than the surfaces.

Surface texture and color: Interior surfaces and exteriors before stamping are smoothed, about as well as Fairchilds Complicated Stamped. Stamped surfaces show a fairly rough texture. Surface color is somewhat variable but ranges from buff through dark brown, usually the latter.

Decoration:

Technique: Exterior surfaces are decorated by impressions of a carved wooden paddle.

Design: The most distinctive feature of this type is that only one design motif continues to be used. This is the end of the trend to favor paddle designs which was observed from Kolomoki to Fairchilds Complicated Stamped. The width of lands and grooves is about

the same as Fairchilds Complicated Stamped but the stamped impressions are somewhat fainter. The design motif is enclosed by four marginal lines, also a characteristic of Fairchilds Complicated Stamped.

Distribution: Probably the same as Fairchilds Complicated Stamped and Kolomoki Complicated Stamped in which the exterior of the vessel except the base is stamped.

Form:

Total Vessel: The most usual form appears to be a large jar as deep bowl with a vertical rim.

Rim: Straight or slightly slanting inward. The rim is usually folded, usually between 2 and 3 centimeters high, and averages higher than Fairchilds Landing. Again, this seems to be the end point of a trend: from the small folded rim of Kolomoki through the larger rims of Fairchilds Complicated Stamped.

Thickness: About the same as Fairchilds Complicated Stamped, from 5 to 8 millimeters, with an average of about 6 or 7 millimeters. Vessel size is estimated to be about the same as Fairchilds Complicated Stamped.

Geographic Position of the Type: Since Hares Landing Complicated Stamped is most similar to Fairchilds Complicated Stamped, and since it carries further some of the ceramic trends noted in the Kolomoki to Weeden Island sequence, we can place it later than Fairchilds Complicated Stamped and at the end of Weeden Island times. Midden J represents this interval. Some sherds of this type were also found at the base of Midden E at Hares, indicating that Hares Landing Complicated Stamped is prior to the Cummings period.

The Cummings period, defined at Hares Landing, has a very high incidence of plain and burnished pottery, accompanied by some of the decorated Floridian types of the Gulf Tradition. The complicated stamped decoration style which we have traced from Early and Middle Swift Creek, through Kolomoki to Weeden Island, and to Midden J at Hares Landing seems to have disappeared from the southwestern Georgia area during Cummings times. At the base of the Cummings period Midden E at Hares Landing there were, as previously noted, a few sherds of Hares Landing there were, as previously noted, a few sherds of Hares Landing Complicated Stamped. Accompanying these, together with associated plain and Gulf pottery types were a greater number of sherds bearing a faint complicated stamp. These comprised 10-15 percent of the total. So faint was this stamping, that the sherds had to be carefully examined and held to the light just so, in order to see it at all. In the upper levels of the Cummings period midden this complicated stamped type was practically absent. As there was evidence of ceramic continuity throughout the Cummings period Midden, we have called the lower levels which contained the sherds with faint stamping Early Cummings.

It seems probable that Hares Landing Complicated Stamped sherds were already on the site of Midden E before Early Cummings times and before the faint stamps were used. They are relatively infrequent, and moreover the faint stamps do not appear in the pure Hares Landing Complicated Stamped assemblage at Midden J. Some temporal overlap is possible, but probably Midden J is older than Early Cummings, for the latter continues into a plain pottery complex without stamping of any kind.

It has not been possible to reexamine all of the surface collections from the Jim Woodruff Reservoir to determine which of these might be Cummings period sites. While we were working at Hares, however, we located another Cummings period site, 9SE35 upstream on the

Chattahoochee River. A large shell pit we excavated here showed plain and some of the Gulf types characteristic of the Cummings pottery complex, and no complicated stamping.

The subsequent Wakulla period middens at Hares Landing also showed no complicated stamped pottery, but another Wakulla site (9SE32), 1000 feet above Fairchilds Landing which was excavated by DeBaillou contained a few sherds resembling Tampa Complicated Stamped (Willey 1949:436-437). Willey had noted that this variety, which is common around Tampa Bay and south into the Manatee Region, also occurred sporadically farther north. He assigns this type to the Weeden Island II period, corresponding in southwestern Georgia to the recently defined Wakulla period. It thus appears that the Tampa Complicated Stamped sherds found by DeBaillou are in their expected chronological position. Willey also noted that the late complicated stamped types continued to be made in the Tampa and Manatee region, and opinion with which the southwestern Georgia sequence is in perfect agreement. Apparently the old Swift Creek tradition was maintained on the southern periphery of its homeland for some time after it was abandoned in southwestern Georgia.

Pottery of the Gulf Tradition

We have seen that as late as the Middle Woodland period, to which we may date the Deptford cultures of the Coastal Plain as well as the Piedmont potteries to the north (Cartersville Series, northern Alabama Copena assemblages, Tennessee Candy Creek), the extreme Southeast with the exception of peninsular Florida was united in pottery decoration by stamping. The Deptford cultures of the southern Atlantic and the Gulf areas formed one major unity within this system. The Piedmont pottery with some differences among themselves seems rather alike when compared to Deptford, and on this basis might be considered another major unity. At about the same time, the complicated stamped style arose to dominate central Georgia and the Florida Gulf Coast. Domination in Florida was achieved during the Santa Rosa period, which follows Deptford there. It is during the Santa Rosa interval that we first find in Florida pottery which Goggin (1949:34-39) and Willey (1949:144) describe as belonging to the Gulf Tradition.

The earlier phase of Gulf, as it occurs in Santa Rosa for instances, is a basically Hopewellian ornament employing incising and rocker stamping, and which has probably come to Florida from Marksville in the Lower Mississippi Valley. Other kinds of decoration: incising, punctuation, painting (direct and negative) can in part be derived from the Marksville-Troyville-Coles Creek continuum. It is very striking to note how, in contrast to the complicated stamped pottery we have been discussing, each of the Gulf types of southwestern Georgia has its analogue in Louisiana. It might be inferred from this that the Gulf littoral was a culture area within which there was high interaction rate, reflected in the spread of ceramic styles. A striking example can be seen in the behavior of Mulberry Creek Cord Marked, a clay grit tempered type of Northern Alabama which becomes common in the Lower Mississippi Valley in Troyville times and then appears as Fairchilds Cord Marked during the Weeden Island period in southwestern Georgia, where it is made on the local paste. With the development of the Gulf Tradition we might expect certain ideas to have traveled from Florida west to the Lower Valley, and probably they did, as Ford has suggested (1951:66-67). Yet, the evidence from southwestern Georgia, peripheral to the Gulf, is that decorated domestic pottery does not become completely in the Gulf Tradition until a relatively late date, that is, during the Cummings period. Here, one gains the impression that the inspiration for Gulf ceramics is a long way to the westward, and nearer the Lower Valley.

Weeden Island Incised

Included under this type name there are actually two major variants as Sears (1951b:18) pointed out: "One of these is zoned incision. On this variant the design area is filled in by, or outlined by, parallel incised lines, the alternate areas being left plain…Opposed to this we have variant which may be called "free" incised. Here the incised lines themselves form designs, no zoned or alternate area concepts being used."

Definition as a Type: Gulf Coast of Florida (Willey 1949:411-419).

Chronological Position of the Type: Sears (1951:18) suggests that each of the two varieties of Weeden Island Incised has a separate chronological range that in the Weeden Island village at Kolomoki decoration was of the zoned variety, while the incised ware in Burial Mound E was the free variant. In a later publication he indicates that free incising was characteristic of Mound D as well (Sears 1953:42-43). His conclusion had been (1951:12-13) that the zoned variant was earlier than the free variant of Weeden Island Incised, and the latter was related to a "widespread mature Mississippian horizon".

In our investigations at Fairchilds Landing and at Hares Landing we found Sears' distinction of two varieties of Weeden Island Incised to be useful, but such evidence as we have suggests that the free variant is actually the earlier and the zoned variant the later. The former occurred rarely at Fairchilds, in most cases was in the deposits of the stratigraphic block attributable to the Weeden Island period, one specimen, however, came from deep level D-E on fine Kolomoki paste and is probably assignable to Kolomoki times. No free incised sherds at all were found in the subsequent Hares Landing or Cummings periods. The zoned variant did not occur at Fairchilds, but was found in Midden J of the Hares Landing period and was more characteristics of the Cummings period.

Our tentative conclusion based on a small number of sherds is that the free variant was in use from Kolomoki through Weeden Island is defined in this report. The zoned variant was not found earlier than the two subsequent periods. This is consistent with our interpretation that the Weeden Island village at Kolomoki is relatively late in the Weeden Island period.

Indian Pass Incised

Definition as a Type: Florida northwestern coast (Willey 1949:425-427). This is a fairly rare type in southwestern Georgia. A few sherds occurred at Hares Landing Midden E during the Cummings period occupation. Others were noted by Sears in the Weeden Island village at Kolomoki (1951a:28). The known range of this type in southwestern Georgia, then, is from Late Weeden Island times through the Cummings period. Indian Pass Incised is beautiful made, the paste is fine, and the decoration meticulously executed. Willey (ibid.) suggests that the type is related to Yokena Incised of the Lower Mississippi Valley.

Weeden Island Zoned Red

Definition as a Type: Florida northwestern coast (Willey 1949:422). This is another rare type in southwestern Georgia. Fragments of two vessels were found in the Cummings period deposit in Midden E at Hares Landing. It may occur in Mound E at Kolomoki (Sears 1951b:9). Willey (ibid) regards this type as a descendent of Pierce Zoned Red and related to Woodville Red Filmed of the Lower Mississippi Valley.

Weeden Island Red

Definition of the type: None as yet.

Weeden Island Punctated

This type as defined from the Gulf Coast by Willey (1949:419-422) did not occur at Fairchilds, and only as mortuary vessels of Hares Landing. Perhaps southwestern Georgia is beyond the range of this type, and Willey noted (ibid.) that it was more frequent on the Central Coast and Manatee regions of Florida than on the northwestern coast. A number of sherds showing stab and drag punctations from Cummings period deposits at Hares Landing have been tentatively listed as a variant of Weeden Island Punctated.

Carrabelle Incised

Definition as a Type: Northwestern coast of Florida (Willey 1949:422-425).

Chronological position of the type: Carrabelle Incised is present in small amounts in the Weeden Island levels of the stratigraphic block at Fairchilds, as well as in the contemporary Weeden Island middens at Hares Landing. The type continues into Midden J of the Hares Landing period and is found in subsequent Cummings period deposits. It is also reported from the Weeden Island village at Kolomoki (Sears 1951:28) but not in Mounds D or E. According to Ford (1951:59) it is related to Mazique Incised of the Lower Valley but lacks specialized traits which related the latter to Marksville period cambered rim decoration.

Carabelle Punctated

Definition as a type: Northwestern coast of Florida (Willey 1949:425).

Ware Characteristics: Willey suggests that these are similar to Weeden Island Plain, noting that some sherds are coarser in texture and size of temper than other Weeden Island types. At Fairchilds Landing the paste and color characteristics are about the same as Fairchilds Complicated Stamped, perhaps somewhat coarser. Medium size quartz fragments are sometimes distinguishable as temper, but one unusual sherd with a channel in the rim was tempered with crushed shell.

Decoration:

Technique: Punctation of part of exterior surface of vessel before firing.

Design: Arranged in a field around upper portion of vessel below the rim. Punctates may solidly cover an area or may be arranged in vertical or horizontal lines. All the variations in kinds of punctation noted by Willey are present at the Fairchilds Landing and Hares Landing sites. There are indications of temporal variation in the kind and size of punctations. In the Fairchilds Landing stratigraphic block small needle-like punctates, tiny irregular punctates perhaps made with a bone, and varieties of stick and triangular punctates are most common in the lower levels. In the uppermost level (A-B) there is one example of a long slit type more common in the later Midden J deposit at Hares Landing as well as in the succeeding Cummings period at that site. Also characteristic of the Midden J and Cummings times are hollow reed and semi-circular varieties. It was also noticed that within the range of this type in the Fairchilds Landing stratigraphic block that punctates not larger than 4millimeters were predominant, but again in the top level several sherds showed punctates ranging from 6-10millimeters. At Hares Landing, areas F, G, and H, approximately contemporary with

the Fairchilds Weeden Island period, showed about the same size range. Midden J at Hares, believed to belong to even larger punctations ranging from 6-16 millimeters. A sample of sherds from the following Cummings period showed a range from about 6-10millimeters.

Distribution: Decoration is confined to the upper portion of the vessel below the rim. The lower margin is often bordered by an incised line.

Form:

Total Vessel: Willey's characterization as globular bowls with a flared orifice, flattened globular bowls, short collared jars, and jars with cambered rims is applicable to Fairchilds Complicated Stamped which also shows some hemispherical bowls.

Rim: Slightly incurving or out-curving and always folded during the Weeden Island period. A "fake" fold made by incising a line a short distance below the lip appears in Cummings times.

Lip: Usually squared when associated with the folded rim, occasionally rounded or tapered.

Insert: Temporal differences in the size or rim folds are indicated by our small sample of this type. The deepest sherd in the Fairchilds Landing stratigraphic block showed, appropriately, a small folded rim of the kind associated with Kolomoki Complicated Stamped. In succeeding levels folded rims were larger, up to 2 centimeters. In the latest level at Fairchilds Landing (A-B), three out of the four rims were between 2 and 3 centimeters high, and this was also true of Midden J at Hares Landing. The later Cummings period materials showed some folded rims of about 2centimeters, but most rims were of the fake folded type.

Geographical Range of Type: Gulf Coast area, most common between the Apalachicola River and Cedar Key (Willey 1949). It also occurs in southwestern Georgia at least as far north as Kolomoki.

Chronological Position of Type: Carrabelle Punctated is associated with the Weeden Island period at Fairchilds Landing where it seems to have appeared toward the end of Kolomoki times. Some Carrabelle shreds were found in a Kolomoki period midden at Kolomoki Unit 28 (Sears 1951a:17). If the Kolomoki occurrence is not accidental, it underscores Willey's suggestion that Carrabelle may be the first of the incised or punctated Weeden Island types to have been introduced. It is also present in Mound D at Kolomoki (Sears 1953:39), but not apparently in Mound E. (Sears, 1951b:7-9). Carrabelle is also found in the later Weeden Island period at Kolomoki (Sears 1951a:27) as at Fairchilds Landing. Turning to its upper range, we note that it continues to the end of Weeden Island times (Midden J at Hares Landing) and into the following Cummings period. At least some Wakulla period sites do not show this type, and its actual association at other remains to be demonstrated.

Relationship of Type: As indicated by Willey, Rhinehardt Punctated, a Lower Valley analogue, dates to the Cole Creek period (Ford 1951:85).

Keith Incised

Definition as a Type: Northwestern coast of Florida (Willey 1949:427-428).

Chronological Position of the Type: This type did not occur in the stratigraphic block at Fairchilds Landing or in the Weeden Island period middens at Hares Landing. It was found rarely in Weeden Island pits at Fairchilds Landing and at Hares Landing and

much more frequently in the Cummings period middens at that site. The conclusion is that Keith Incised appears in the southwestern Georgia are toward the end of Weeden Island and continues through the subsequent Cummings period. A glance at Willey's (1949) stratigraphic tables indicates that this type was fairly infrequent, but usually high in the middens examined on the Florida northwestern coast. It is closely related to Beldeau Incised, a clay tempered type of the Coles Creek period in the Lower Mississippi Valley (Ford 1951:83).

Tucker Ridge Pinched

Definition as a Type: Northwestern coast of Florida (Willey 1949:428-429).

Chronological Position of Type: Only one sherd of this variety was found in the stratigraphic block at Fairchilds, in Level B-C. Another specimen, in Level C, showed vertical rows of impressions of the nails of thumb and forefinger, but without the actual pinching which would have created the ridges. This type is rare at Fairchilds Landing and has not been noted in the contemporary Weeden Island period middens at Hares Landing. It is more frequent in the Hares Landing Midden J deposit, believed to belong to the end of Weeden Island times, and continues into the Cummings period. Again, on most of these specimens the pinching is incomplete. Willey (ibid) suggest that this type is especially frequent in the Weeden Island II period, which probably included the newer Cummings division. The newest lower Valley analogue seems to be Wilkinson Punctated occurring in the latter part of the Coles Creek period and more characteristic of Plaquemine period (Ford 1951:88-89).

Mound Field Net Marked

Definition as a Type: Northwestern coast of Florida (Willey 1949:440). Only 14 sherds of this type occurred in the stratigraphic block at Fairchilds Landing. These appeared similar to Willey's description, but a few sherds showed what appeared to be random impressions of knots only, and two others exhibited impressions of a rectangular mesh similar to Mississippian salt pan sherds.

Chronological Position of Type: All sherds in the stratigraphic block lay in the upper levels (A-B to C), clearly in the Weeden Island period, as already indicated by Willey. At Kolomoki this type occurs in the Weeden Island period and one sherd was present in the limited Late Swift Creek assemblage from that site. It is not reported either from Mound D or Mound E. The type also occurs rarely at Hares Landing, in the Weeden Island period middens and in Midden J, but seems to be absent from the Cummings period deposits.

Fairchilds Cord Marked

Definition as a Type: This paper. Fairchilds Cord Marked may be related to the Late Variety of West Florida Cord-Marked (Willey 1949:440) which also has exterior folded rims, but there seem to be differences. Fairchilds Cord Marked does not usually show the semi-obliteration of the decoration which was noted by Willey, the cord impressions are frequently widely spaced, and there is no deep line underscoring the rim fold. It may be related to Mulberry Creek Cord Marked.

Ware Characteristics:

Method of manufacture: Made by the coiling or annular technique.

Temper: Usually indistinguishable, but particles or quartz averaging 1 millimeter are sometimes seen.

Paste texture and color: Ranges from the fine compact paste often characteristic of Kolomoki Complicated Stamped, to the coarser paste of Fairchilds Complicated Stamped. The paste color, generally similar to the color of the surfaces, ranges from rusty red through reddish brown.

Surface texture and color: The interior surfaces are well smoothed and the exterior surfaces were smoothed before they were decorated. Surface color is usually the same as the color of the paste but may be considerably lighter or darker.

Hardness:

Thickness: Vessel walls range from 4 to 7 millimeters with an average of about 6 millimeters.

Decoration:

Technique: Exterior surfaces decorated by impressions of a cord wrapped paddle.

Design: Cord impressions are usually wide spaced, sharp, and clear. The paddle is usually applied so that the impressions run generally one way, at a slight angle from vertical. Occasional crisscross impressions which are seen are probably accidental except in infrequent instances where widely spaced cord impressions are applied so as to form a grid design.

Distribution: Decoration is applied to the sides of the vessel only, the bottom being left smoothed as in Kolomoki and Fairchilds Complicated Stamped. One sherd from Level C-D, in the stratigraphic block, which is relatively early in the range of this type at Fairchilds, showed a plain band below the rim, a feature of Kolomoki Complicated Stamped.

Form:

Total vessel: Jars with lightly rounding sides.

Rim: Slightly slanting in or out. Sherds in the earlier range of this type in the stratigraphic block show direct rims or rims with a fold 1 centimeter or less high. Sherds from later levels show a larger fold 2 to 3 centimeters high.

Lip: Rounded or tapered with direct rim or small fold, squared when associated with the large fold.

Appendages: None.

Geographical Range of Type: Occurs at Fairchilds Landing and in contemporary assemblages at nearby Hares Landing.

Chronological Position of Type: The evidence from the stratigraphic block suggests that this type appears near the end of the Kolomoki period and continues throughout the Weeden Island period at Fairchilds Landing (up through Level A-B). It is again present in contemporary midden areas at Hares Landing, but did not occur in a large sample of sherds from Midden J at the same site which is assigned to the end of Weeden Island times. The cord marked type is also absent from the succeeding Cummings and Wakulla periods. Apparently it disappeared about the middle of Weeden Island times.

Relationships of Type: Fairchilds Cord Marked corresponds to most of the other member of the Weeden Island ceramic complex in all features except decoration. These resemblances suggest that, although the sample seldom exceeds 1 percent of the sherds in any level, this type is not a trade ware, but was made by the inhabitants of the site. Within the Weeden Island ceramic complex the various decorated varieties other than stamped

gradually increased as time went on. Fairchilds Cord Marked, however, seems to have been gradually declining in popularity. From Level D in the stratigraphic block up though Level C it comprised 0.833-0.538 of decorated sherds other than stamped. Higher, from Levels B-C to A-B it was only 0.481-0.200 of decorated sherds other than stamped.

Fairchilds Cord Marked is ultimately related to the various southeastern Cord Marked wares, probably most closely to the Late Variety of West Florida Cord Marked. There may be some relationships to the Early Variety, but if so, we note that the continuity was interrupted, for this type does not appear in the earlier Kolomoki period levels at Fairchilds Landing.

Level	Number	Percent of Level
A-B	31	27.68
B	13	44.83
B-C	2	20.00
C	22	55.00
C-D	15	83.33
D	7	53.85

Table 38. Fairchilds Cord Marked at Fairchilds Landing.

Unnamed Shell Stamped

Definition as a Type: The sample from Fairchilds Landing was too small to warrant a type name. This variety shows some similarities and differenced to Hillsborough Shell Stamped of the northwestern coast, to which it may be related. Ware characteristics are similar to Willey's description (1949) as do the small rounded rim folds. Hillsborough however, is sometimes decorated with the edge of a scallop shell, whereas in this variety only the back of the shell seems to have been used, there are, moreover, no triangular rim projections.

Decoration:

Technique: Impressions of the back of a scallop shell on the exterior of the vessel.
Design: Overall impressions of back shell, carefully stamped and parallel at diagonal with the axis of the vessel. The applications have at least 7 bars and usually more. Bars are usually 1.5 millimeters wide and more than 40 millimeters long. Between the bars are the faint regular impressions of the annual growth of the shell.

Form:

Total vessel and rim: jar from has been noted. Two rims were of the small folded variety (less than 10 millimeters) and one rim was about 12 millimeters.

Geographical Range of Type: Fairchilds Landing. The possibly related Hillsborough Shell Stamped is found mostly in the vicinity of Tampa Bay (Willey 1949)

Chronological Position of Type: Of 16 sherds of this type in the stratigraphic block at Fairchilds, all but one were confined to Levels C through D. This rather remarkable segregation suggests that the shell stamped type was made at Fairchilds Landing only in the intermediate period between Kolomoki and Weeden Island times. The fact that two of the three rims found were all of the small folded variety, and the other was only slightly larger, seemed to confirm this view.

Wakulla Check Stamped

Kelly's (1950) and Bullen's (1950) surveys of the Jim Woodruff Reservoir had shown many sites related to the Weeden Island I and II periods distinguished by Willey and Woodbury (1942) and Willey's (1949) survey of the northwestern Florida Coast. The main ceramic indicator distinguishing the two periods in Florida was Wakulla Check Stamped but Willey had indicated that in the northwestern part of Florida the complicated stamped types of Weeden Island ceramic complexes virtually disappeared when Wakulla came in. This was also found to be true of the southwestern Georgia area where it was also noteworthy that not only were the complicated stamps practically gone by Weeden Island II times but all others except variety of Weeden Island Plain associated with the check stamped. Several score sites in the Reservoir area showed surface collection in which only these two types were heavily represented. A lesser number of other sites showed various Weeden Island decorated types associates with the check stamped. The question was whether these sites showed ceramic complexes which might be intermediate between Weeden Island I and the Weeden Island II sites where Wakulla was the sole decorated type, or whether these sites might have been occupied during both periods.

University of Georgia excavations at Fairchilds Landing demonstrated the occurrence of Wakulla Check Stamped in the upper levels of the shell heap, and showed intruding shell pits containing check stamped and plain to the practical exclusion of all other types. The National Park Service investigation confirmed this result, and by careful stripping operations along the northern edge of the shell heap showed that Wakulla Check Stamped and a variety of Weeden Island Plain made up 90 percent of the pottery from the top Shell Layer A. A number of additional shell pits were found, nearly all in the northern part of the shell heap, which again showed a preponderance of Wakulla Check Stamped and the accompanying plain. Nearly all of these were shown to have originated from Shell Layer A. Complicated stamped and other Weeden Island decorated sherds were of negligible importance in Shell Layer A and in the shell pits, but a few were present in nearly every feature assigned to that level. All such sherds were small, the motifs belonging to the prior Weeden Island I and, rarely, to the Kolomoki period occupations of the site. As such they did not coincide with the few complicated stamped designs found occasionally at nearly pure Wakulla Check Stamped sites, and in the writer's opinion they had found their way up from below and were already in the ground when the Wakulla shell pits were dug. It seems probable therefore that the Weeden Island II occupation at Fairchilds Landing possessed a pottery complex which was check stamped and plain, without any appreciable use of the complicated paddle or other Weeden Island forms of decoration.

Miscellaneous Ceramic Notes

Keith Incised is not found in the stratigraphic block at Fairchilds Landing nor in the contemporary middens F, G, and H at Hares Landing. It is found rarely in Midden J at Hares Landing, and is much more frequent in the Cummings period. Conclusion is that Keith Incised appears at the end of Weeden Island times, and is characteristic of the Cummings period. Usually three are no punctations. Infrequent in most of Willey's strata pits, best sample at Mound Field, generally high in the middens.

Weeden Island Punctated does not occur at Fairchilds Landing. A few sherds showing stab and drag punctates were found in Cummings period deposits at Hares Landing but as a type it does not occur. Probably southwestern Georgia is beyond the geographical range of this type.

Willey (1949:421) noted that it occurred more frequently in the central Coast and Manatee Regions of Florida than on the northwestern coast.

Carrabelle Incised is present in the Weeden Island period at Fairchilds Landing in small amounts, as well as in the contemporary middens at Hares Landing. It continues into Midden J and into the Cummings period.

Weeden Island Incised Sears (1952:12) noted that two major variants could be distinguished in this type: "One of these is zoned incision. On this variant the design area is filled in by, or outlined by, parallel incised lines, the alternate areas being left plain. Many of the finest vessels from northwestern Florida Mounds (sic) are of this type. Opposed to this we have a variant which may be called "free" incised. Here the incised lines themselves form designs, no zoned or alternate area concepts being used. And, of course, there are combinations of the two techniques. In the Weeden Island village at Kolomoki the Weeden Island Incised was of the zoned variety. The incised ware from Mound E is only of the free incised variant. The possibility is thus opened that this stylistic variation is of temporal significance. This is strengthened almost to a certainty by a number of facts…" (here is a mistaken chain of reasoning)…

"It appears then that the incised decoration of Mound E vessels, as opposed to the zoned incision of the village areas ascribable to Weeden Island, is later and once more related this mound E ceramic assemblage to the widespread Mature Mississippian" etc.

The zoned variant distinguished by Sears did not occur at Fairchilds Landing either in Kolomoki or Weeden Island deposits, nor does it appear in the contemporary Weeden Island deposits at Hares Landing. It first appears in Midden J at the end of Weeden Island times and continues on into the Cummings period. All sherds noted so far seem to be areas of incised lines.

The free incised variant does occur rarely at Fairchilds Landing principally in Weeden Island deposits, but one specimen from deep Level D-E on a fine Kolomoki paste is probably to be assigned to the Kolomoki period. No sherds were noted in Midden J or in the Cummings period at Hares Landing.

My conclusion is that Sears' distinction is good. The free variant of Weeden Island incised is from Kolomoki through Weeden Island, but may end in or before Midden J at the end of the Weeden Island period. The zoned variant begins in Midden J at the end of the Weeden Island period and continues into the Cummings period. On this basis we should assign the Weeden Island village at Kolomoki (as described) to the end of the Weeden Island period. On this basis Mound E is earlier than the Weeden Island village and should be in the main Weeden Island period (not also the high proportion of plain in the Weeden Island village) is about equivalent to Midden J). This puts Napier rather late. Assuming that the Weeden Island village as described is later, Mound E would belong to the transitional period (Sears 1953:224) between Kolomoki and Weeden Island times, probably to the cultural complex which Sears described at the beginning of his investigation, the Late Swift Creek component, (1951:24-26) to which he made not further reference, apparently assimilating it to Weeden Island.

Tucker Ridge Pinched: One sherd of this type was found in the stratigraphic block at Fairchilds, in Level B-C. Another sherd, from Level C, showed vertical impressions of the nails of thumb and forefinger, but without the subsequent pinching which would have created the ridges. This type is rare at Fairchilds, and apparently not present in the contemporary Weeden Island Middens at Hares Landing. It is much more frequent in Midden J at the end of the Weeden Island period and occurs in Cummings, though the specimens do not show the pinching

carried out completely. Willey (1949:429) suggests that this type is especially frequent in Weeden Island II.

Mound Field Net Marked: As described by Willey, but impressions are clearer at Fairchilds Landing. It also includes a few sherds with a rectangular mesh resembling Mississippian "salt pan" impressions. It is present in Weeden Island period in stratigraphic block at Fairchilds Landing. It occurs rarely in contemporary Weeden Island middens at Hares Landing and in Midden J. Seems to be absent from Cummings period. Some sherds show what seem to be random impressions of knots only.

Unnamed Shell Stamped type: This resembles Hillsborough Shell Stamped (Willey1949:440) to which it is probably related, but there are some differences, though the sample from Fairchilds Landing was small. There were 16 sherds of this type in the stratigraphic block. Of these all but one were confined to Levels C through D. This is rather remarkable stratigraphic segregation, suggesting *{Editor's Note: The paragraph just ends here and doesn't continue onto the next page.*

The occurrence of the zoned variant of Weeden Island Incised at the Kolomoki site suggests that the portion of the Weeden Island village examined by Sears belongs to a relatively late phase of the Weeden Island period, perhaps equivalent to the transition between Midden J and the Cummings period at Hares Landing. The relatively high proportion of plain pottery in the Weeden Island village, suggests the same thing.

The absence of the zoned variant and the presence of the free variant in mounds D and E at Kolomoki suggest that these are equivalent to either the Kolomoki levels at Fairchilds Landing or to the (earlier) part of the Weeden Island period as represented at that site.
Note that his Late Swift Creek may be equivalent to the mounds, and note also that Napier occurs in the Weeden Island village—could it be as late as Cummings?

Plain Ceramics of Southwestern Georgia

Most of the decorated potteries we have been discussing are accompanied by certain amounts of plain, or in a few cases, burnished vessels. There is a Swift Creek Plain type in central Georgia which has not yet been described (Arthur R. Kelly, Personal Communication). On the Gulf Coast the accompanying type of the Santa Rosa-Swift Creek period is Franklin Plain (Willey 1949:392-393). Its ware characteristics are similar to the Early Variety of Swift Creek Complicated tamped. Most vessels are jars with straight or gradually incurving or out-curving rims. Rims are often thinned, and lips are frequently scalloped or notched. Bases are subconoidal or flattened round, sometimes with tetrapod supports.

In the Gulf Coast sequence of Willey and Woodbury (1942), the Santa Rosa period was followed by Weeden Island I and II. The type Weeden Island Plain, (regarded as belonging to the latter two intervals includes pottery which in this paper is divided into three chronologically significant types: Kolomoki Plain of the Kolomoki period which is now placed before Weeden Island; Weeden Island Plain of the Weeden Island period: and Cummings Plain of the Cummings and Wakulla periods.

Kolomoki Plain

Sears defined this type at the Kolomoki site in southwestern Georgia, indicating a relationship to Weeden Island Plain, and pointing out that paste and surface finish were similar to Kolomoki Complicated Stamped (Sears 1951a:16) Two vessel forms noted for this type were

compressed globular bowls with small folded (Form II b) rims and "a lesser number of shallow open bowls with unmodified (Form II) rims. He recognized that a considerable proportion of the plain sherds in his sample were probably undecorated lower portions of Kolomoki Complicated Stamped vessels, and, in terms of whole pots, estimated the frequency of Kolomoki Plain vessels in the complex as from 15 to 20 percent.

Kolomoki Plain accompanied Kolomoki Complicated Stamped in the lower levels of the Fairchilds Landing Stratigraphic block. Probably at a time well back in the Kolomoki period (Levels E-F) 78 percent of rims are unmodified and 5 percent show a small fold less than 1 centimeter high. During the later Level D about 23 percent of rims are unmodified and 60 percent show the small rim fold. I have tried to estimate the proportions of jar shapes as opposed to bowls among the larger plain sherds in the stratigraphic block. It appears from this that jars (deeper than wide) are most prevalent in Kolomoki Plain at Fairchilds, while bowls (wider than deep) are more characteristic of the later type Weeden Island Plain.

Kolomoki Plain at Fairchilds Landing usually showed a fine, compact, sand tempered paste comparable to that of Kolomoki Complicated Stamped. Aside from the stratigraphic evidence of its temporal position, in paste, relative thinness of vessel walls, the frequently unmodified rims of its earlier occurrence and the frequency of jar forms, and presence of flattened bases, are characteristics resembling Franklin Plain of Santa Rosa.

Weeden Island Plain

This was defined in the northwestern coast of Florida (Willey1949:409-411). This type name as used in the present paper is restricted to the plain pottery of the Weeden Island period as defined for southwestern Georgia at Fairchilds Landing. Fairchilds Landing Levels A-B through C shows the prevalent rim forms of the type as used here. From 26 to 37 percent of sherds show unmodified rims, 2 to 6 percent show wedge shaped rims, 18 to 20 percent show small folded rims less than 1 centimeters high, 23 to29 percent have rim folds up to 2 centimeters high. These rim modifications contrast with the underlying Kolomoki Plain type from which Weeden Island Plain at Fairchilds Landing is believed to be descended. The small folded rim which was developed in the Kolomoki period continues into Weeden Island and is later present in Cummings and Wakulla.

The paste of the Weeden Island Plain is similar to Fairchilds Complicated Stamped and is coarser and less homogenous than Kolomoki Plain. Tempering material is probably a slightly larger sand or coarse grit. Vessels are well smoothed on exterior and interior surfaces but are rarely burnished.

Bowls are more prevalent in Weeden Island Plain than in Kolomoki. There is a considerable variety of vessel forms.

Cummings Plain

I am defining this type here, again representing a temporal subdivision of Weeden Island Plain as described by Willey (1949). In the work at Hares Landing site it was noticed that the plain pottery in the Cummings' period shell middens showed some different rim characteristics from the plain ware of the Kolomoki or Weeden Island periods. A considerable proportion of unmodified rims were present as before, but small folded rims were often only slightly indicated as if there was less of the intention to make a rim fold than to model and finish the lips of vessels with extruded rim material. In a few cases rims are more aptly described as either rolled or thickened rather than folded. In addition we meet with a new feature, an incised line below the

lip. Often the lower edge of the incising is scraped away or obliterated leaving the upper edge sharp and clear. This modification in effect resembles a large folded rim although it was differently made, and is herein referred to as "fake folded."

The paste of Cummings Plain at Hares Landing Middens D and E ranges from fine to coarse, but it is generally more compact than Weeden Island Plain. Smoothing is if anything a little better than the Weeden Island variety and some sherds are burnished. Tempering is a medium to fine sand or grit. Forms include deep and shallow bowls. Jars are fewer and sometimes have a slightly out-curved rim. Very characteristic of this type are wide shallow bowls with sides projecting outward.

Cummings Plain also seems to be characteristic of Wakulla period sites, evidence of a certain degree of continuity, although so far as can be determined there may be a relatively brief hiatus between the Cummings and Wakulla periods of southwestern Georgia. Up to now the Wakulla sites, which usually have Wakulla Check Stamped and Cummings Plain as the only pottery types, have shown a discouraging amount of ceramic homogeneity. Therefore it is interesting to discover that some Wakulla sites such as Middens A, B, and C, at Hares Landing and a site on the Chattahoochee about 1000 feet above Fairchilds, the Wakulla occupation at Fairchilds Landing proper, show the fake folded rim treatment both on the plain and check stamped sherds, whole other sites, such as Kirkland Creek and the Indian Mound do not have the incised line. At these latter, rims are either unmodified or show the small folded or extruded varieties. This minor difference may have been chronological significant, certainly it provides an initial basis for analysis of the numerous Wakulla period sites of this area.

Level	Part	NE Quad	NW Quad	SE Quad	Total
A	Body	0	0	0	0
	Rim	0	0	0	0
	Total	0	0	0	0
A-B	Body	347	472	0	819
	Rim	38	76	0	114
	Total	385	548	0	933
B	Body	26	114	0	140
	Rim	3	24	0	27
	Total	29	138	0	167
B-C	Body	22	73	0	95
	Rim	2	10	0	12
	Total	24	83	0	107
C1	Body	135	0	0	135
	Rim	13	0	0	13
	Total	148	0	0	148
C	Body	268	371	0	639
	Rim	49	55	0	104
	Total	317	426	0	743

Level	Part	NE Quad	NW Quad	SE Quad	Total
C-D	Body	0	22	427	449
	Rim	0	1	54	55
	Total	0	23	481	504
D1	Body	70	0	30	100
	Rim	4	0	3	7
	Total	74	0	33	107
D	Body	0	69	79	148
	Rim	0	4	7	11
	Total	0	73	86	159
D2	Body	7	0	22	29
	Rim	1	0	1	2
	Total	8	0	23	31
D-E	Body	11	0	59	70
	Rim	0	0	5	5
	Total	11	0	64	75
E	Body	0	0	0	0
	Rim	0	0	0	0
	Total	0	0	0	0
E-F	Body	136	94	0	230
	Rim	12	15	0	27
	Total	148	109	0	257
F	Body	10	0	0	10
	Rim	0	0	0	0
	Total	10	0	0	10
Total	Body	1032	1215	617	2864
	Rim	122	185	70	377
	Total	1154	1400	687	3241

Table 39. Fairchilds Landing Plain Sherds by Level and Location.

Levels	Unfolded	Folded to 1cm	Folded to 2 cm	Folded to 3 cm	Wedge Shaped	Total
A	0	0	0	0	0	0
Level Percent	0.00	0.00	0.00	0.00	0.00	100.00
A-B	27	17	22	26	2	94
Level Percent	28.72	18.09	23.40	27.66	2.13	100.00
B	7	5	7	5	0	24
Level Percent	29.17	20.83	29.17	20.83	0.00	100.00
B-C	2	2	3	3	1	11
Level Percent	18.18	18.18	27.27	27.27	9.09	100.00
C	42	32	26	5	7	112
Level Percent	37.50	28.57	23.21	4.46	6.25	100.00
C-D	14	26	4	1	3	48
Level Percent	29.17	54.17	8.33	2.08	6.25	100.00
D	7	18	4	0	1	30
Level Percent	23.33	60.00	13.33	0.00	3.33	100.00
D-E	2	5	0	0	0	7
Level Percent	28.57	71.43	0.00	0.00	0.00	100.00
E	0	0	0	0	0	0
Level Percent	0.00	0.00	0.00	0.00	0.00	100.00
E-F	21	5	0	1	0	27
Level Percent	77.78	18.52	0.00	3.70	0.00	100.00
F	0	0	0	0	0	0
Level Percent	0.00	0.00	0.00	0.00	0.00	100.00
Total	122	110	66	41	14	353

Table 40. Fairchilds Landing Plain Sherds, Rim Varieties by Level.

Levels	Jars	Bowls	Total
A	0	0	0
Level Percent	0.00	0.00	100.00
A-B	2	25	27
Level Percent	7.41	92.59	100.00
B	0	7	7
Level Percent	0.00	100.00	100.00
B-C	0	2	2
Level Percent	0.00	100	100.00
C	7	35	42
Level Percent	16.67	83.33	100.00
C-D	5	9	14
Level Percent	35.71	64.29	100.00
D	3	4	7
Level Percent	42.86	57.14	100.00
D-E	2	0	2
Level Percent	100.00	0.00	100.00
E	0	0	0
Level Percent	0.00	0.00	100.00
E-F	15	6	21
Level Percent	71.43	28.57	100.00
F	0	0	0
Level Percent	0.00	0.00	100.00
Total	34	88	122

Table 41. Fairchilds Landing Plain Sherds, Unfolded Rims, on Bowls Compared to Jars.

Levels	Unfolded	Folded to 1 cm	Folded to 2 cm	Folded to 3 cm	Wedge Shaped	Total Rims
A-B	27	17	22	26	2	94
Level Percent	28.72	18.09	23.40	27.66	2.13	100.00
B	7	5	7	5	0	24
Level Percent	29.17	20.83	29.17	20.83	0.00	100.00
B-C	2	2	3	3	1	11
Level Percent	18.18	18.18	27.27	27.27	9.09	100.00
C*	42	32	26	5	7	112
Level Percent	37.50	28.57	23.21	4.46	6.25	100.00
C-D	14	26	4	1	3	48
Level Percent	29.17	54.17	8.33	2.08	6.25	100.00
D*	7	18	4	0	1	30
Level Percent	23.33	60.00	13.33	0.00	3.33	100.00
D-E	2	5	0	0	0	7
Level Percent	28.57	71.43	0.00	0.00	0.00	100.00
E	0	0	0	0	0	0
Level Percent	0.00	0.00	0.00	0.00	0.00	100.00
E-F	21	5	0	1	0	27
Level Percent	77.78	0.185	0	0.037	0	100.00
F	0	0	0	0	0	0
Level Percent	0	0	0	0	0	100.00
Total	122	110	66	41	14	353

Table 42. Fairchilds Landing Plain Vessel Rim Form Distribution in Stratigraphic Block.

Levels	Jar Fragments	Bowl Fragments	Total
A-B	2	25	27
Level Percent	0.074	0.925	100.00
B	0	7	7
Level Percent	0.00	1.000	100.00
B-C	0	2	2
Level Percent	0.00	1.000	100.00
C	7	35	42
Level Percent	0.167	0.833	100.00
C-D	5	9	14
Level Percent	0.358	0.642	100.00
D	3	4	7
Level Percent	0.429	0.571	100.00
D-E	2	0	2
Level Percent	1.000	0.00	100.00
E	0	0	0
Level Percent	0.00	0.00	100.00
E-F	15	6	21
Level Percent	0.714	0.286	100.00
F	0	0	0
Level Percent	0.00	0.00	100.00
Total	34	88	122

Table 43. Fairchilds Landing Plain Sherds with Unmodified Rims.

Sequence and Change in the Ceramic Complexes

The major part of the information concerning ceramic sequence at Fairchilds Landing came from the stratigraphic block which took out the major part of the northern shell heaps. Materials recovered from this excavation comprised 6,065 sherds, a number of flint tools and a few other artifacts of pottery, bone and copper.

Table ___ is preliminary sherd classification according to the various classes of decoration. The result shows that plain and complicated stamped sherds occurred in roughly equal amounts from the bottom to the top of the shell heap. The combined Weeden Island types begin sparingly in Level D-E and gradually increase to a maximum in Level B. The minority shell stamped type is most frequent in Levels C to D-E.

Table_is an analysis of the Weeden Island types by level. This includes Wakulla Check Stamped, which was determined in another excavation to belong to the Wakulla Complex which was distinct from Weeden Island at Fairchilds Landing. The table shows the late position of Wakulla very clearly, but the various types of the Weeden Island Complex were too sparingly represented to show clearly whether there was any distinct order of succession at this site.

Table __ shows the distribution of the rim forms on plain vessels in the stratigraphic block. It will be seen that unmodified rims and small folded rims occur from top to bottom of the shell heap but are relatively much more frequent toward the base. Larger folded rims and wedge shaped rims appear and attain their maximum frequency higher in the shell heap. On the basis of rims forms, the lower level corresponds to Kolomoki Plain, the upper level sample to Weeden Island Plain. It appears that Weeden Island continues the typical Kolomoki rim treatment, but adds the larger folded and wedge shaped rim varieties.

In the course of analysis it was notices that among plain sherds with unmodified rims a higher proportion bowls (vessels wider than high) occurred in the upper levels while more jar fragments (higher than wide) seemed to be present in the lower. Thereupon a separate listing was made of sherds large enough to indicate whether a jar or bowl, and Table __ is the result. Both jars and bowls occur throughout the shell heaps but jars are preponderant in the lower levels and bowls are most frequent in the upper. The typical Kolomoki Plain vessel with unmodified rim is evidently a jar. The most typical Weeden Island Plain in this category is evidently a bowl.

Tables _and _, represent an analysis of the stamped pottery from the stratigraphic block according to recognizable design motifs by level. Table _ shows the two motifs 1 and 2, which occurred in Layer F, the lowest level, and in no higher level. These are stratigraphically the oldest motifs found at Fairchilds; they are not Kolomoki Complicated Stamped, and probably represent some early unidentified variety of Swift Creek. Motifs 3, 4, 5, 6, 7, 8, 9, 10, 11 occurred only in Levels E-F and in no other. Some of these may be Kolomoki Complicated Stamped—Motifs 6, 10, 11, 12 (Motif 7 is not). Motifs 3, 4, 5, 8, and probably 9 show a stylist variation.

Ceramic Changes in the Kolomoki and Weeden Island Periods

It has been suggested that the Kolomoki and Weeden Island pottery complexes represent a continuum, but while closely related, they are distinguishable. What distinguishes them is texture of the paste, predominance of certain rim forms in one period or the other, occurrence of particular design motifs on stamped pottery, and the presence of Floridian Weeden Island types

in the domestic pottery of the later period. The Fairchilds Landing levels assigned to Kolomoki times are Levels D through F, and Weeden Island times are Levels B through C.

I had assumed in the beginning that, regardless of whether they were related, each pottery complex would have undergone gradual changes during the span of its existence. Such changes were recognized in the development of the complicated stamped pottery. There were two ways to approach this problem. One way was to list the stamped design motifs which seemed to be restricted to one or two contiguous levels as has been done below. Some of these design motifs are evidently diagnostic of particular levels within the Kolomoki and Weeden Island periods, but others, in a larger sample, or at other sites, might show a greater time range. Moreover there can be little doubt that a few Kolomoki motifs, which occurred sparingly in Levels A-B and C, are actually out of their true context. However, if future work in the area continues along these lines, and especially if small sites show a high proportion of the particular design motifs founds in only one or two levels at Fairchilds Landing we will be on our way to a more refined chronology, with a consequent improved control of the temporal factor in cultural interpretations.

Layers A-B	Fairchild's Complicated Stamped Motifs 109, 110, 112, 113, 114, 115, 116
	Kolomoki Complicated Stamped Motifs 111, 117, 118
Layer C Pits	Fairchild's Complicated Stamped Motifs 52, 73, 77, 94, 95, 107
	Kolomoki Complicated Stamped Motif 123
Layer C Inclusive	Fairchild's Complicated Stamped Motifs 84, 86, 92, 93
	Uncertain Motifs 82, 83, 87, 88
	Kolomoki Complicated Stamped Motifs 80, 81, 85, 89, 90, 91
Layer D	Kolomoki Complicated Stamped Motifs 37, 38, 39, 40, 41, 42, 43, 44, 45
Layer E	Kolomoki Complicated Stamped Motifs 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19
	Uncertain Motif 7
Layer F	Swift Creek Motifs 1, 2

Table 44. Fairchilds Landing Complicated Stamped Motifs by Level.

Ceramic Continuity in the Kolomoki and Weeden Island Periods

The bulk of the ceramics from the stratigraphic block can be described in terms of continuities involving more than one physical layer in the shell heap. A strong continuity running through the entire deposit can be interpreted, I think, as indicating the close relationship between the Kolomoki and Weeden Island periods. There are no sharp breaks of the sort which could represent a long period when the site was uninhabited, or could represent any sudden cultural shift, or replacement of peoples. In my opinion, Weeden Island period pottery at Fairchilds Landing developed directly out of the Kolomoki complex and was probably made by

the descendants of the first Kolomoki peoples who lived there. The entire span of time was probably not very long.

Kolomoki and Fairchilds Complicated Stamped show similar vessel profiles, both actually share the small folded rim which continued less frequently in Weeden Island times, and both show a similar distribution of stamped decoration on the sides of vessels but not on the base. The proportion of plain to stamped sherds is nearly constant from deep in the Kolomoki levels through Weeden Island times to the top of the shell heap: Motifs 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, and 79. That these are real continuities and not due to the chance of displacement of sherds is indicated by evolution of the rims from the small folded to the large folded with varieties during the history of the individual motifs.

Another continuity represented by stamped motifs found in Levels D through E-F represents variations which were present throughout the Kolomoki period, Motifs 20, 21, 22, 23, 24, 25, 26, 27. Motif 23 is actually classified as St. Andrews Complicated Stamped, but also seems to be present in Kolomoki times. Table 44 shows motifs which begin in Level E-F and continue up though Levels B-C. All of these are Kolomoki Complicated Stamped: Motifs 46, 47, 48, 49, 50, and 51. Some of these may have been moved upward in the shell heap by the insidious method earlier described. Those which did not probably represent the Kolomoki-Weeden Island continuity mentioned earlier.

The continuity indicated by the Weeden Island period Levels A-B through C is shown by the behavior of the various Florida Weeden Island types, beginning in Level D and continuing through Levels A-B. Table 44 shows design motifs of complicated stamped pottery which begin in the Levels C-D zone and continue up through Levels A-B. All of these are Fairchilds Complicated Stamped, Motifs 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, and 107A. Motif 94 may begin earlier than the others if its presence in the Kolomoki levels is not a matter of accident. Table 43 showing rim forms of plain pottery by level indicates also that the large folded and wedge shaped rims begin sparingly in the D layer and increase to A-B, i.e. they again show the continuity of the Weeden Island occupation.

The other approach to the recognition of changes in the complicated stamped pottery is to regard the development as bipolar, which probably is not the case, and to contrast what we consider as typical Kolomoki Complicated stamped sherds, with typical Fairchilds Complicated Stamped sherds. Knowing the direction of the progression we can find differences indicating the kind of changes which took place.

At first glance the Kolomoki period vessels appear to be better made. Although the paste is often sandier, it is invariably finer and more compact. The clay used in Kolomoki vessels may have been selected for homogeneity, or might have been carefully levigated before it was used. This fine paste permitted a much better smoothing off vessel interiors, which may have rendered them less porous. Certainly Kolomoki vessels are on the average thinner walled than Fairchilds Complicated Stamped (___mm as to ____mm) and vessels of equal size were lighter.

On the other hand, there is a strong probability that the average size of Fairchilds Complicated Stamped vessels was larger than the Kolomoki. It may be for this reason that the Fairchilds Complicated Stamped paste was coarser and often shows individual quartz particles which were probably temper. This may be the reason why vessel walls were, on the average, a little thicker. It seems quite possible that the Weeden Island period potters were experimenting with larger vessels and finding that coarser paste and greater quantities of temper were necessary to achieve an increase in size. Perhaps they were willing to forego a fine finish on their domestic

stamped pottery recognizing that they could still have it on some of the smaller plain vessels and on such luxury wares as Weeden Island Red.

A much greater variety of stamped and designs were used in Kolomoki times. While we know nothing of the comparative sized of the populations during the two periods, we have from this site __motifs of Fairchilds Complicated Stamped and ___ motifs of Kolomoki. The total number of Fairchilds Complicated Stamped sherds is __ of Kolomoki ___. It is also illuminating to compare the Kolomoki shell pits from the 75-80 South Exploratory Trench with the Weeden Island features from the same area. The former shows a total of ___ motifs, the latter __motifs. Either Kolomoki potters possessed more paddles individually than the Weeden Island potters, or there were more Kolomoki potters. If it could be demonstrated that populations were approximately equal during the two periods, we could argue that a tendency for certain women to become specialists had emerged in Weeden Island times.

Kolomoki Complicates Stamped impressions show wider and deeper lands and grooves, although not invariably. To cut out and polish such deep grooves in the paddle (corresponding to the lands of the impression) would seem to be more of a task than incising the narrower lines which corresponded to the narrower lands of the Fairchilds Complicated Stamped impressions. It is probably that more time was spent in carving the paddles in the earlier period.

If we compare the series of stamped sherds from Kolomoki through Weeden Island at Fairchilds Landing to pottery from the Hares Landing site, Midden J to Midden E, which are successively later, we note a progressive diminution in width of lands and grooves coupled with increasing faintness of the stamped impressions. In the last component where paddle stamping is found at Hares, at the base of Midden E, the impressions are so faint they can scarcely be seen at all. Faintness is however lass a matter of size of lands and grooves than the force with which the paddle is applied to the pot. I am indebted to Madeline Kneberg, who has been conducting practical experiments with pottery making to the benefit of modern Cherokee potters at Qualla, for the information that a stamping paddle must be applied with considerable force to make much of an impression at all. It is more difficult to make a deep impression than a shallow one, for there is a constant danger of breaking the vessel. It is probably true then, that less skill is required to decorate with shallow impressions, and no skill is required to decorate with shallow impressions, and no skill at all to execute the kind of stamping seen in the last phase of the tradition at Hares Landing. Like the proverbial old soldier, paddle stamping literally faded away in southwestern Georgia. There may be some truth in the suggestion that the last act of paddle stamping in the Swift Creek Tradition in southwestern Georgia took place at Hares Landing on the Chattahoochee. A young woman waved a paddle in front of a pot two or three times, and then decided not to risk touching it.

Conclusions

The buried shell middens at Fairchilds Landing apparently do not represent the total activity of the people who lived there. Their graves must have been elsewhere, and the absence of cultivated food remains, while nuts and acorns were present, suggests that the main occupations of the site took place during certain seasons, probably during a hunting-gathering phase of a yearly cycle. The Fairchilds Landing middens showed a great many animal bones, especially Virginia deer, with terrapin, and various birds all well represented. In sheer bulk of deposit, however, the common freshwater mussel (*Unio*) of the region far surpassed other food remains, again suggesting a seasonal occupation, for otherwise, it is supposed, that the supply of shellfish would soon have been exhausted.

National Park Service excavations at Fairchilds Landing followed the work that had started so auspiciously under the University of Georgia Summer Field School. The profile along the river bank was reexamined, disclosing two separate buried shell heaps, various exploratory trenches were run out, and work settled down to a stratigraphic removal of the main part of the northernmost shell heap. Finally, an exploratory excavation was made a short distance upstream at a small historic Indian site shown on an 1820 survey plat as Fowltown.

Broken pottery fragments comprising the bulk of the material recovered from Fairchilds Landing indicated occupation during several intervals. A few Deptford period sherds below the initial shell deposit indicated a brief visit by men at a time we currently date as about the beginning of the Christian era, equivalent to Middle Woodland. The main occupations did not begin until the Kolomoki period, in later Middle Woodland. From then on occupation was fairly continuous, although probably seasonal and judging from the strong ceramic continuity at this site, the material culture of Kolomoki times developed without any break in the continuity to become the material culture of the Weeden Island period. This was probably effected without any replacement of peoples, at least in the immediate area of Fairchilds Landing. Before the end of the Weeden Island period the site was deserted, and for a long time, no Indians came to live here, although there was a settlement at nearby Hares Landing in the later Weeden Island interval down though the Cummings period. At the end of Cummings times there was another occupation at Fairchilds Landing and at Hares Landing in what we call the Wakulla period. Again the site was abandoned, to be reoccupied briefly around the beginning of the nineteenth century. The last comers, possessing to some degree the White Man's culture and settlement incentives did not locate on the shell heaps as before, but left some debris near the river bank 200 feet upstream.

The Kolomoki-Weeden Island Sequence in Southwestern Georgia

An important result at Fairchilds Landing was a ceramic sequence of the Kolomoki and Weeden Island periods, solidly based on the stratigraphic succession of a large series of sherds. We earlier noted in this report Sears' conclusion, on the basis of work at Kolomoki, that Kolomoki pottery complex distinguished by Kolomoki Complicated Stamped, was later than a Weeden Island complex, represented by several types of the Florida Weeden Island series and including a complicated stamped type similar to Fairchilds Complicates Stamped. In reaching this conclusion, Sears dismissed the only reported case of ceramic stratigraphy at the Kolomoki sire, the pure Kolomoki midden below Burial Mound D (Sears 1953b:25), and at the time of this writing at least, had neglected the implications of the ceramic sequence at Mound Field, Wakulla

County, Florida reported by Willey and Woodbury in 1942, and again discussed by Willey in 1949.

At Mound Field, stratigraphic Pit 1 had shown sherds of Carrabelle Incised, Carrabelle Punctated and Weeden Island Incised in the six upper 3 inch (?) levels. Sherds which at that time were called Swift Creek Complicated Stamped had markedly lower range, and in the two deepest levels of the put, where none of the Weeden Island types occurred, comprised the overwhelming majority of decorated pottery. Sears examined the Mound Field material and stated (1953b:43) that "the midden materials were predominantly Kolomoki Complicated Stamp," I have seen Willey's material now at Macon and agree with this identification. The stratigraphy at Mound Field, then, indicates a Kolomoki pottery complex *below* a Weeden Island-like complex, which is what we found at Fairchilds, and would seem to reverse Sears' postulated sequence at Kolomoki.

It should be noted, however, that the levels attributed to Weeden Island at Fairchilds Landing and at Mound Field are not exactly the same. Two of the upper level pottery types at Mound Field occur at Fairchilds, but one type, Weeden Island Incised, does not. All three are associated, however, in the Cummings period middens at Hares Landing. This the upper levels at Mound Field may belong to a late phase of the Weeden Island period, perhaps equivalent to Cummings times in southwestern Georgia. If this is the case, the upper levels at Mound Field ate later than the Weeden Island period at Fairchilds, and there may be a hiatus between them and the previous Kolomoki occupation.

Reexamining Kolomoki Mound D in the light of the Fairchilds Landing and Mound Field stratigraphy, we find that Mound D shows the same sequence. There as first a Kolomoki village occupation under the mound, possibly as Sears says, "a good Kolomoki assemblage and typologically a late one." This was partially scraped up into the primary mound (Sears 1953a:225) but not until sufficient time had elapsed for Weeden Island complex pottery to be made on the site, in other words the mound above was built during the Weeden Island period. In the mound fill were additional sherds of Kolomoki Complicated Stamped, and "twenty-three sherds of Weeden Island types such as are found here in the Weeden Island refuse deposits, and seventy-one Swift Creek II period sherds (Fairchilds Complicated Stamped), usually found associated with the Weeden Island series at this site" (Sears 1953b:25). There were no Weeden Island sherds in the premound level, which is pure Kolomoki. There were, however, Weeden Island sherds on the ground before the mound was built, and it must therefore belong to the Weeden Island Period. Most of the mortuary vessels placed in Mound D at the time of its construction were classified by Sears as of Weeden Island types (Sears 1953b:40). Only two aberrant vessels of Kolomoki Complicated Stamped were used as burial offerings. Here again is the suggestion that Mound D is actually a Weeden Island Period Structure, although with the exception of two specimens of Carrabelle Punctated, the vessels do not correspond very closely to Weeden Island pottery as known from village site assemblages. They are probably to be considered a special mortuary ware.

Sears has called attention to the similarities, ceramic and non-ceramic between Mounds D and E. Mound D also contained a mortuary vessel of the interesting Mercier Red on Buff type; one of the "large Mississippian pots" (Sears 1953b:42), which were found more frequently in Mound E. The differences between the two burial mounds were, according to the excavator, "in the direction of greater elaboration and specialization in Mound D, and the two mounds are closely related." Sears also believed that Mound D was later then Mound E (Sears 1953b:43), and I think that this is correct.

Mound E contained five Kolomoki Complicated Stamped mortuary vessels, several Mercier Red on Buff vessels, and others classified as Weeden Island Plain and Weeden Island Incised. Some of the latter show what appear to be wedge shaped rims and large folded rims. On the basis of the Kolomoki Complicated Stamped vessels found in this mound, I am inclined to follow Sears and regard it as belonging to Kolomoki times, agreeing also that it is earlier than Mound D. If this is true we have the large folded and wedge shaped rims occurring earlier on mortuary ware than in village deposits, for they first appear in the Weeden Island levels at Fairchilds Landing and are probably related to the Coles Creek Plain of the Lower Mississippi Valley. Except for this feature there is nothing in the mortuary pottery which could be considered as diagnostic of Weeden Island times as opposed to Kolomoki.

Sears' point that the two mounds are closely related is, I think, well taken, while Mound E can be assigned to the Kolomoki period and Mound D to the succeeding Weeden Island, the actual time between them may not be great. Sears has suggested the presence of an intermediate period at Kolomoki, and the evidence from Fairchilds Landing was that Weeden Island material culture followed Kolomoki culture without any sharp breaks. Mortuary conservatism is probably a factor to be reckoned with when we attempt to assign Mound E too narrowly on the basis of midden stratigraphy.

The Mississippian vessel forms noted principally in Mound E where Mercier Red on Buff and bore effigy heads on open bowls (typed as Weeden Island Plain by Sears) are apparently most predominant in the mortuary complex of the Kolomoki period, are much less frequent in Mound D. Table 46 sums up some of the late ceramic characteristics of the lower Chattahoochee area.

The Decline of the Swift Creek Ornamental Style

In the introduction to this report it was stated that there was a trend in complicated stamping in the southwestern Georgia that led to its ultimate extinction. This trend began before Fairchilds Landing was occupied, and appears to be part of a phenomenon which took place over a large part of Georgia and northwestern Florida. We asked two questions, first, what factors may have fostered this trend in an ornamental style when the potters themselves may not have been aware of the beginning or end of the development, and second, could any such factors have a historical significance greater than their effect on the pottery complex.

Culture Period	Diagnostic Traits	Position in Sequence	Related to
Lower Creek	High percentage of Chattahoochee Brushed. Many White Slipped sherds (Bullen 1950:120).	Trade materials and site documentation indicate late 18th and early 19th century dates.	
Savacola (Intrusive)	Considerable Chattahoochee Brushed and/or Walnut Roughened, and or Alachua Cob Marked (intergrade) with some Ocmulgee Fields Incised, some Kasihta Red Filmed, and some late straight line stamped	Pottery from presumed site of Cherokeeleechee's fort of 1726	Ocmulgee Fields and Leon Jefferson
Leon-Jefferson	As given by Bullen (1950:118). Note similarities to presumed Savacola culture above. I am uncertain as to the significance of the absence of the Leon Check Stamped from Bullen's sites.	1633-1704?	
Fort Walton II	Lake Jackson Plain; Shell Tempered sherds	At three sites Bullen found such pottery in upper strata (j2, J5, and J22.	
Fort Walton II	At J2, Fort Walton Incised and Pinellas Incised B continued to a deeper level. Also a frog effigy in lower.	In a restricted are of Site 9SE27 I found three small plain vessels with the Lake Jackson Plain. The rest of the site is Weeden Island II. Lake Jackson Plain also dominant at Hornsby's Bluff.	
Weeden Island II	Complicated Stamped pottery lasts until the beginning of Weeden Island II (Willey 1949:545). Weeden Island II is by no means a degenerate style, but the freshness, the originality, the great number of exotic forms and designs seen in Weeden Island I are lacking (Willey 1949:407). Incised and punctated decoration tends to be bolder and heavier in the earlier period (Willey 1949:419). Weeden Island Punctated is largely a Weeden Island II type, although it occurs in Weeden Island I. Tucker Ridge Pinched is especially in Weeden Island II (Willey 1949:429); Swift Creek Complicated Stamped is mainly in Weeden Island I (Willey 1949:435). Crooked River Complicated Stamped is in Weeden Island I (Willey 1949:436). St. Andrews Complicated Stamped is in Weeden Island I (Willey 1949:436). Tampa Complicated Stamped is largely Weeden Island II. Sun City Complicated Stamped is Largely Weeden Island II.		

Table 46. Later Periods Information.

The Decline of Stamping in the Swift Creek Tradition

In some of the early Swift Creek pottery the stamped impressions are so nearly placed that they seem to form one harmonious design. As time went on less care was exercised in the placement of the stamp and by the end of the Kolomoki period nearly all vessels showed the margins of the individual impressions and there was considerable overlapping. At about the same time the designs began to be enclosed by marginal lines forming a cartouche. At first the borders were composed of one or two lines only but in the later phases of Weeden Island period borders composed of as many as six parallel lines were not uncommon. It is suggested from this that in early Swift Creek in this area the decoration of the vessel may have been considered as a continuous whole, bit later no attempt was made to disguise the fact that in reality the overall was composed of many separate applications of the paddle. One sherd of the Weeden Island period, however, while decorated with a very common motif showed how two applications of the same paddle carefully placed side by side could form an entirely new design. The careful placement of these impressions suggests that this was consciously done by the potter, but apparently the method was not generally adopted.

Stamping as Only One Consideration in the History of the Continuum

It is interesting to note that Weeden Island I pottery was considered by Willey to be the best in the continental U.S. But by this time the Swift Creek continuum was well advanced in decay. The same people who were making decadent Swift Creek pottery were making very fine polished, incised and punctated wares. This illustrates that a prime factor in the decline of any technology may be that of interest and attention in the art, we cannot presuppose inability, nor can we assume that slovenliness in one art will be carried over to another. See Kroeber.

Crawford (1932) paraphrasing Petrie notes that arts reach their maturity in an orderly succession. "Thus sculpture was the first to reach perfection in both the classical and western European phases. Painting reached its zenith in western European art about 1500, literature about 1600, and music about 1800."

Symmetry of Designs

In the periods with which we are dealing the various design motifs can be classed according to several kinds of symmetry but asymmetrical designs are present in all periods. Attention has been called to the pleasing asymmetrical designs in Early Swift Creek and there may be a slight tendency for mirror image symmetry to be more common in Weeden Island then before. However, one of the last predominant stamps of the terminal Swift Creek Midden at Hares Landing was also asymmetrical. I do not think that the distinction between symmetrical and asymmetrical designs has any significance in the materials with which we are dealing.

Similar Designs Found at Other Sites

Complex designs agreeing in all details are often found at other sites. This matter needs more study because at these other sites there are certain designs which may not be found elsewhere.

A brief and subjective examination of the other site materials and the literature suggests that there are an infinite number of designs in early Swift Creek, Kolomoki and Weeden Island and suggesting the proposition the ach little community or perhaps a group of communities in a local area have their own designs which by and large are not found elsewhere. See Pueblo material.

Nevertheless within southwestern Georgia and northwestern Florida area certain designs ate found from one site to another. Either these represent the sites of a given people in their travels, or designs were occasionally borrowed. Subjectively we may say that designs were rarely borrowed from the past or from the contemporary communities, and such contemporary borrowings as did occur may have been largely within a local area.

This interpretation certainly suggests that Hares Landing was occupied at one time by the identical individuals who lived at Fairchilds Landing. Of the couple of dozen designs found at Midden G, all are represented well during the Weeden Island period at Fairchilds Landing. The execution and carving correlation at Fairchilds Landing holds for the specific designs at Hares Landing Motif __ which shows a scratch in the paddle is present at both sites.

Local Ceramic Continuum in Swift Creek Style

That both the Kolomoki and Late Swift Creek manifestations at this site were part of a local ceramic continuum is indicated, I think, by numerous similarities of the two types which can be contrasted to Swift Creek potteries elsewhere. These include the practice of confining the stamping to the side of the vessel, leaving the bottom plain; the appearance of a narrow band of stamping (occasionally) in the shoulder area, leaving the remainder of the vessel burnished or plain; the appearance of the small folded rim on vessels of the Kolomoki period with its gradual development and exaggeration in Late Swift Creek. The differences in paste, vessel forms, size of stamps, size of lands and grooves, carefulness of execution between the two pottery types is not great and show considerable overlapping.

However, there was probably a hiatus at Fairchilds, and that even a closer continuity evidently existed in the area as indicated by such sites as Kolomoki for instance, where an intermediate period has been proposed.

Decline of Stamping: Loss of Motifs

A phenomenon which was observed at Hares Landing (Midden J) was the complete standardization of stamped pottery decoration into one or two motives. There are good reasons to suppose Midden J is the latest manifestation of our sties wherein the overwhelming majority of decorated pottery is stamped. The indication here is that the terminal Swift Creek tradition (as a distinct part of the whole stamped pottery tradition) has undergone a modification characteristic of all the later stamped potteries of the Southeast: the loss of all design elements except a very few which are repeated again and again. The same situation appears to be true of the Florida stamps of the Tampa Bay region.

Virtuosity

There is a strong tendency for particular design motifs to be executed in particular ways, one design is invariable carelessly stamped, another always shows a great deal of over-stamping, and another is always carefully made. This effect is interpreted either as that only a single woman ever used a particular paddle, or that the design and application of the design were closely bound together. I prefer the former explanations.

There also seems to be a tendency for some of the more complex stamps of the Weeden Island Period to be executed with more care than the simpler less elaborate examples. The suggestion here is that virtuosity in carving the paddle is often combined with virtuosity in the stamping. The corollary which might be suggested is that if the women actually made the pottery, as we might assume, and decorated it themselves, since paddle carving and stamping

execution show a correlation in the degree of excellence, then the women if they stamped the pottery must also have carved the paddles.

The high point of technical and artistic perfection in stamped ornamentation had been reached before Kolomoki or Weeden Island times in the Middle Swift Creek period, as Kelly (1938:28) pointed out. In Early Swift Creek terminal lines of the individual stamp had been left open and the decoration of the pot was evidently seen as a continuous whole, the stamped impressions joining to create the unity. In Middle Swift Creek the decorative unity was retained, but the repeated motif was itself better conceived, heightening the general effect. Some Kolomoki period sherds from Fairchilds Landing show open terminal stamps, indication that, in some cases at least, the continuous pattern concept was still being used. At the same time however we see beginning of marginal lines or cartouches to set off one paddle impression from another. The borders of Kolomoki stamps are usually limited to one or two concentric lines, but in the subsequent Weeden Island period we find as many as six lines enclosing the stamp. It is clear that the individual stamp motif has become something in itself, no longer seen as part of an overall pattern.

Yet at the same time this trend was progressing we find that the stamping tool was applied with increasingly less care. In the Kolomoki period at Fairchilds Landing we find many vessels were simply malleated with the paddle, no attempt being made to fit the individual impressions together, whether they were provided with open terminal lines or not. On the whole, however, the Kolomoki stamps are better impressed than the Weeden Island, and it would be quite proper to describe Fairchilds Complicated as more usually malleated than stamped or impressed. The progression is carried ever further at Hares Landing where the stamped pottery from Midden J is simply malleated. It is possible that the potters at Hares Landing were more interested in whatever compacting advantage the stamping paddle might give, than in the impression of the stamped designs as designs themselves.

It is interesting to note that while our drawings of design motifs of Fairchilds Complicated Stamped looked fairly attractive when drawn as isolated motifs, they more often than not are badly over-stamped on the vessels themselves. From any point of view the finished Kolomoki ornamentation of a vessel, poor in comparison with Middle Swift Creek, is better than the completed Fairchilds Complicated Stamped vessel. Fairchilds Complicated Stamped represents what is nearly the culmination of two logically opposed trends: increasing emphasis on the single design as indicated by placing it within bordering lines, and progressive malleation of the vessel surface, as if the design stood for nothing at all.

These people in southwestern Georgia, in whose hands the pottery stamping paddle was becoming an increasingly clumsy instrument, had begun to make vessels decorated in other styles – the Floridian types of the Gulf Tradition – which were reaching their highest point of technical and artistic perfection. For a time, stamped pottery continued to be made for household vessels while contemporary burial mounds were being furnished with Gulf "luxury wares." Then, later, Gulf pottery invaded the domestic field and stamping disappeared in the southwestern Georgia area, not to be revived for some time. The fact that this shift was gradually accomplished, over four distinguishable ceramic periods, suggests that there was not replacement of peoples in the area during that time.

I think it would be perfectly true to say that during the decline of paddle stamping and the adoption of Gulf styles, the interest of the potters was turning from one style and concentrating on others. Pater's observation that a "concentration of interest is precedent to the finest flowering of the arts," would account very well for the decline of stamping. There are, however,

further observations to be made, which suggest that we may have barely touched the surface of a problem which lies deep in the realm of cultural and historical process.

To speak of the potters' interest brings us close to the concept of cultural focus, to these aspects of peoples' cultures "which are the least apt to be taken for granted….will be most often talked about, and will be closest to the levels of consciousness for a greater part of the time than are elements that are of less interest….and will be found to manifest the greatest degree of variation" (Herskovits 1951:554). The very great variety of elaborate and different designs found in stamped pottery from Middle Swift Creek through Kolomoki to the beginning of Weeden Island times, as well as the care and skill used in carving the stamps and impressing them on vessels, suggests that pottery making during those intervals was one of the focal aspects of the participating cultures. It is not necessary to extend this idea to the point of regarding pottery making as of overwhelming importance in the lives of the people, as the term cultural focus is sometimes used, or to suggest that it was the primary focus. The pottery complexes mentioned above simply show certain characteristics which can be called focal, the objectification of consensus of behavior out of which, as Herskovits says, "alternatives rise and grow, and thus open the way to change."

The many changes which took place in the history of pottery during the Swift Creek co-tradition as it has been defined here, ultimately referable perhaps to minor seemingly random deviations in the methods and concepts of the individual potters, seem from our point of vantage to form curious regularities of ceramic development. From Early Swift to Middle Swift Creek and then to Kolomoki times the trends are to greater elaboration and sophistication of design, the loss of "archaic stiffness and symmetry, and greater freedom in the execution of the carving in the paddles, there is an increase in the size of the stamps, there is certainly an increase in the width of lands and grooves, and in the depth of the stamped impressions, and very probably an increase in the actual number of designs which were used. From the end of the Kolomoki period through Weeden Island to the Hares Landing and Cummings periods we see the gradual diminution of the stamping tool, decrease in the size of lands and grooves in the impressed designs, emphasis on individual stamped impressions rather than on the appearance of the vessel as a whole, actual loss in number of the designs used, and increasing fitness of impression.

If we judge these changes in decoration according to our own canons of artistic excellence we can unhesitatingly regard the earlier phases of the Swift Creek tradition as showing artistic improvement, and the later phases as showing decline. Such an observation would at first glance seem to be of little significance for our viewpoint is obviously engendered by our own taste, referable to our own cultural background, and not the background of the people who made the pottery, presumably with standards of their own. But if we analyze these trends into their component elements, we do see that they can be characterized. Throughout the earlier phase of stamping every change that we have listed is a change which can be listed by one of these terms: bigger, freer, or more of. Every change of the later phase could be called: smaller, more circumscribed, or less of. On this rather loose basis we can call the earlier changes *augmentative*, and the later changes *diminutional*. The turning point between these two opposable trends is somewhere between Middle Swift Creek and Kolomoki times. And of these two it is Middle Swift Creek with its combination of artistic freedom tempered by great skill in execution which pleases us the most. Kolomoki is a little too full blown, a little too lush. Kolomoki, however, is the culmination of the earlier trend before the reverse began. Using the concept of cultural focus as it was defined earlier, we can regard the earlier phase of Swift Creek as representing an increasing cultural focus, the later phase as representing a decreasing focus.

{Editor's Note: Not sure where to put the following paragraph.}

During the augmentative phase of the Swift Creek style, and later when Gulf varieties of vessels were adopted, there was some little focusing of interest on the decoration of domestic earthenware, by some women at any rate, when high skill and care went into manufacture of the vessels. The life history of a style however is not simply a reflection of the interest or lack of interest of its makers. A style contains the seeds of its own destruction. The progressive closing of possible lines of choice and development, the using up of the choices yet remaining which mark its saturation point, these are matters of pure culturology which will deflect the interest of the people to some other style.

Maturity of Swift Creek Stamping

Flinders Petrie's remarks that each phase of art passes from archaism through maturity to decline, though applied to representative arts may be borrowed in this connection. "The careful working of detail separately without treating it as a part of a whole to be blended together, is the essential mark of archaism." (Crawford 1932: 447). In many Early Swift Creek vessels the stamping was treated as a continuous whole, not as the application of separate paddles. And it is interesting to note that in the decline, interest once more may be concentrated on the paddle, carefully placed in separating cartouches, though the execution of the stamping was often careless.

Swift Creek Sequence at Fairchilds Landing

The results of the work at Fairchilds Landing which had a direct bearing on the problem of Swift Creek Sequence in the Southeast were as follows:

(1) Kolomoki Complicated Stamped was found to lie below and to be earlier than the Florida Variety of Late Swift Creek which we now call Fairchilds Complicated Stamped (?).

(2) Analysis of Kolomoki Complicated Stamped suggested that while it was readily distinguishable from the central Georgia variety of Late Swift Creek, it shared more features with that variety than with any other known type, and presumably is closer to it in time than had been suspected.

Fairchilds Complicated Stamped: Decoration in the Napier Style

At Fairchilds Landing, and included in the type Fairchilds Complicated Stamped, were a number of sherds with stamped motifs which are characteristic of the central Georgia type Napier Complicated Stamped.

The Napier village site recorded by Kelly (1938) on the outskirts of Macon, Georgia showed a distinctive ceramic style referred to as "Delta ware," but subsequently described as Napier Complicated Stamped. Sherds indicated small vessels, thin walled (average 5 millimeters.), with nearly straight sides and often a slightly flaring rim, usually folded. Tempering was quartz or limestone in a very sandy paste. The decoration was by piffle stamping, comprising a limited design series with narrow lands and grooves and abundant use of horizontal line filling.

All of those in the stratigraphic block were in Weeden Island period deposits and included motifs 102, __, 109, and 67. Two other motifs, XXX and CXXXVIII, showed a general resemblance to the Napier style, but the particular designs have not appeared in central Georgia.

In contrast to their relative frequency on Weeden Island Period sherds, only one Kolomoki period motif, showed a Napier design.

The stratigraphic position of Napier Complicated Stamped was not clear at the type site, but at Swift Creek Napier was concentrated in the village humus level and totally absent from the mound (Kelly personal communication) and on the Macon Plateau Napier sherds were below the Mississippian earth lodge reported by Fairbanks (1946). On present evidence, the Napier style in central Georgia intervenes temporally between Kolomoki Complicated Stamped (formerly late Swift Creek) and the Macon Plateau.

The significance of these Napier designs at Fairchilds Landing is that they suggest some degree of a contemporaneity between the Weeden Island period and central Georgia Napier. The single Napier design on Kolomoki period material may also indicate that they are not part of the local ceramic continuum but their origin should be sought elsewhere, probably in central Georgia Napier where these designs are abundant. Fairchilds Complicated Stamped probably shows less than half of the Napier designs known in central Georgia.

In northern Georgia a variant of Napier Complicated Stamped is assigned to the interval between Cartersville and immediately prior to the interval between Cartersville and immediately prior to the Woodstock period. At Kolomoki in southwestern Georgia Napier sherds were found associated with the Weeden Island complex.

At Fairchilds Landing a few designs in the stamped pottery of the Weeden Island complex are very specifically Napier. Reexamination of the Napier pottery from the original site at Macon, and from the Macon Plateau showed other similarities with Weeden Island at Fairchilds: the large folded rim is present and bottoms of vessels are left plain, occasionally the borders of stamping being delimited by an incised line. The large folded rim is important. It is rare in Kolomoki and abundant in Weeden Island. This was also true of the original Swift Creek site: it was rare in Kolomoki but frequent in Napier, which would bear out the original suggestion of the superior position of that type.

References Cited

Bullen, Ripley P.
1950 An Archaeological Survey of the Chattahoochee River Valley. River Basin Survey Papers 1. Washington.

Caldwell, Joseph R.
1953 The Rembert Mounds, Elbert County, Georgia. Smithsonian Institution, *Bureau of American Ethnology Bulletin* 154, River Basin Survey Papers 6:303-320. Washington.

Crawford, O.G.S.
1932 ? some unknown publication-- in *Antiquity* ?

Fairbanks, Charles F.
1946 The Macon Earth Lodge *American Antiquity* 12(2): 94-108.

Ford, James A.
1951 Greenhouse: A Troyville Coles Creek Period Site in Avoyelles Parish, Louisiana. *Anthropological Papers of the American Museum of Natural History*, Vol. 44, Part 1. New York.

Herskovits, Melville
1951 Man and His Works: Cultural Anthropology.

Kelly, Arthur R.
1938 A Preliminary Report on Archaeological Explorations at Macon, Georgia. *Bureau of American Anthropology Bulletin* 119. Smithsonian Institution. Washington.

Lewis, Thomas, and Madeline Kneberg
1946 *Hiwassee Island: An Archaeological Account of Four Tennessee Indian Peoples*. University of Tennessee Press, Knoxville.

Moore, Clarence B.
1907 *Moundville Revisited; Mounds of the Lower Chattahoochee and Lower Flint Rivers. Notes on the Ten Thousand Islands*. Philadelphia.

Sears, William H.
1951a Excavations at Kolomoki, Season I. *University of Georgia Series in Anthropology Number* 2. University of Georgia Press, Athens.

1951b Excavations at Kolomoki, Season II, Mound E. *University of Georgia Series in Anthropology Number* 3. University of Georgia Press, Athens.

1952 Ceramic Development in the South Appalachian Province. *American Antiquity* 18 (2).

1953a Kolomoki Burial Mounds and the Weeden Island Mortuary Complex. *American Antiquity* (18:3).

1953b Excavations at Kolomoki, Season III and IV, Mound D. *University of Georgia Series in Anthropology Number* 4. University of Georgia Press, Athens.

Willey, Gordon R.
1949 Archaeology of the Florida Gulf Coast. *Smithsonian Miscellaneous Collections* Volume 113. Washington, D.C.

Willey, Gordon R., and Richard W. Woodbury
1942 A Chronological Outline for the Northwest Florida Coast. *American Antiquity* 7 (3).

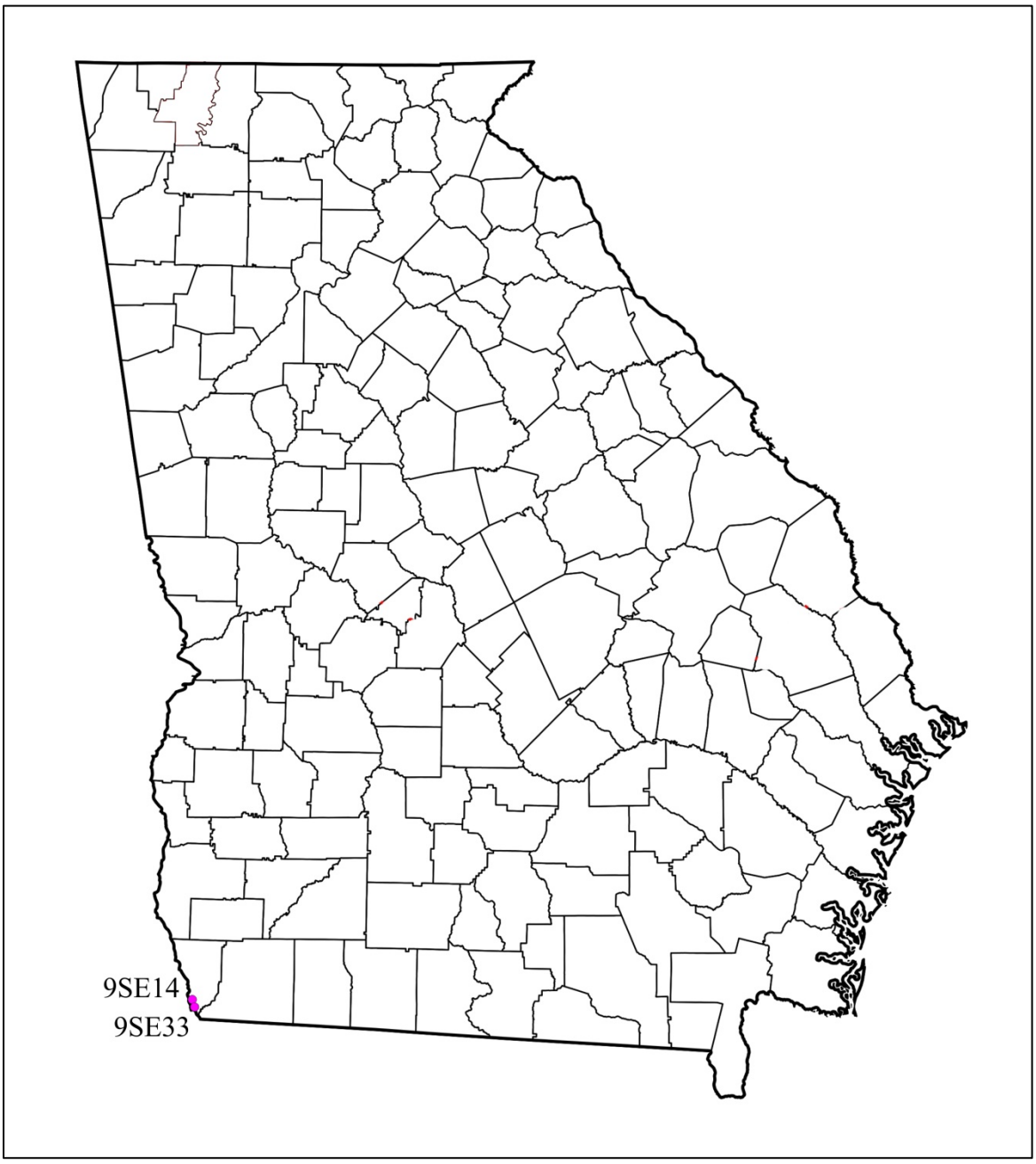


Figure 1. Site Locations in Georgia.

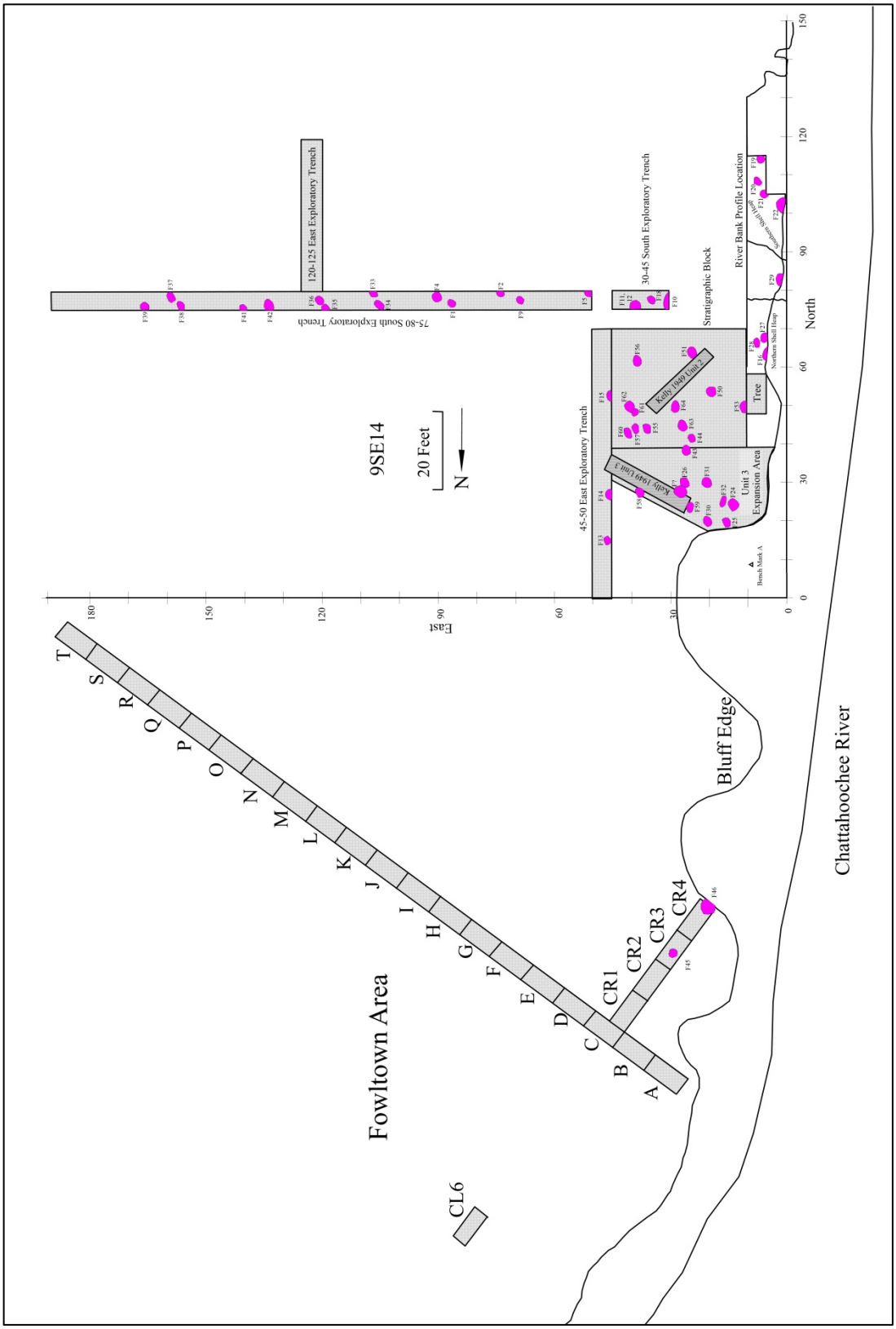


Figure 2. Fairchilds Landing, Full Excavations.

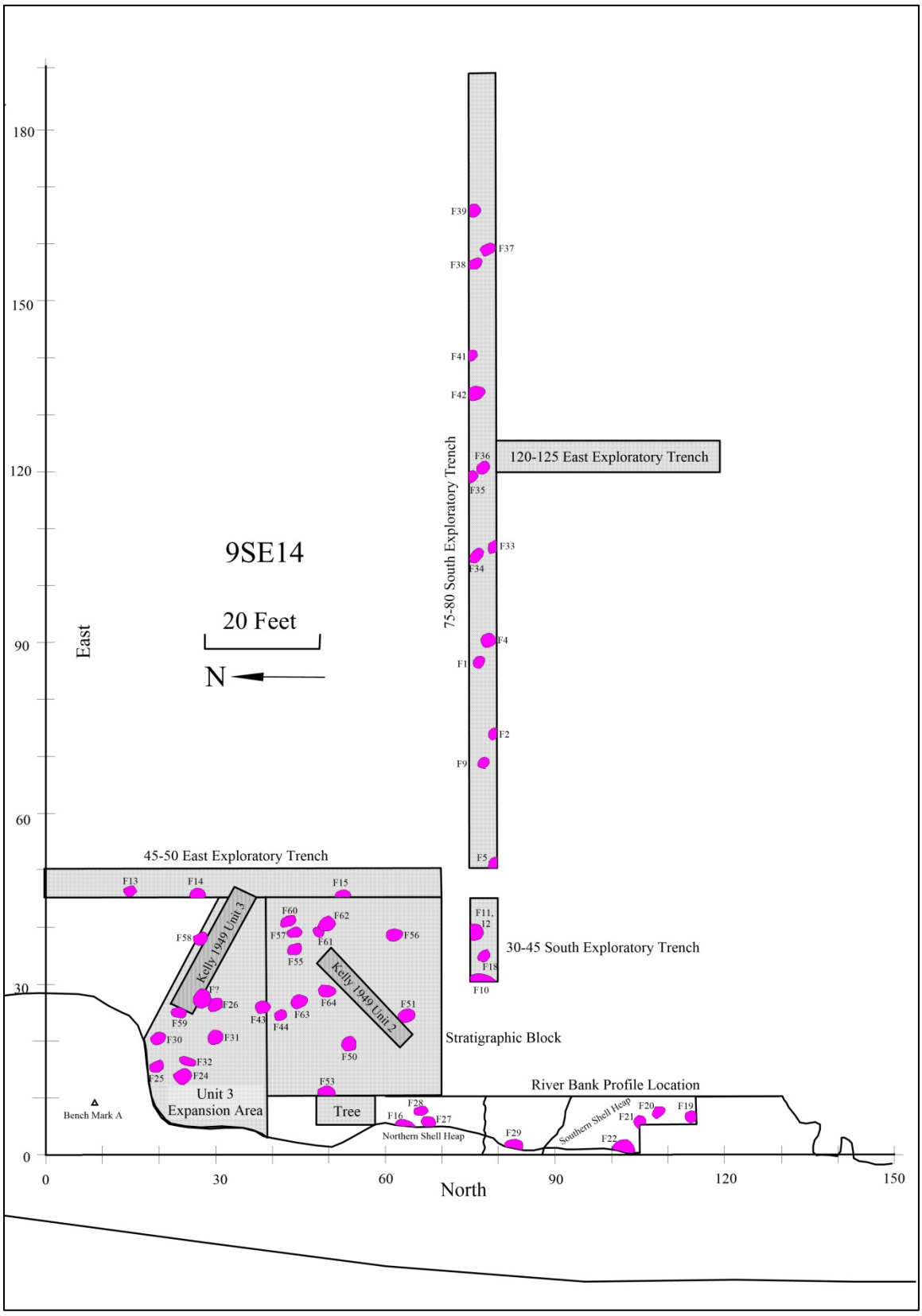


Figure 3. Fairchilds Landing, Southern Area Excavations.

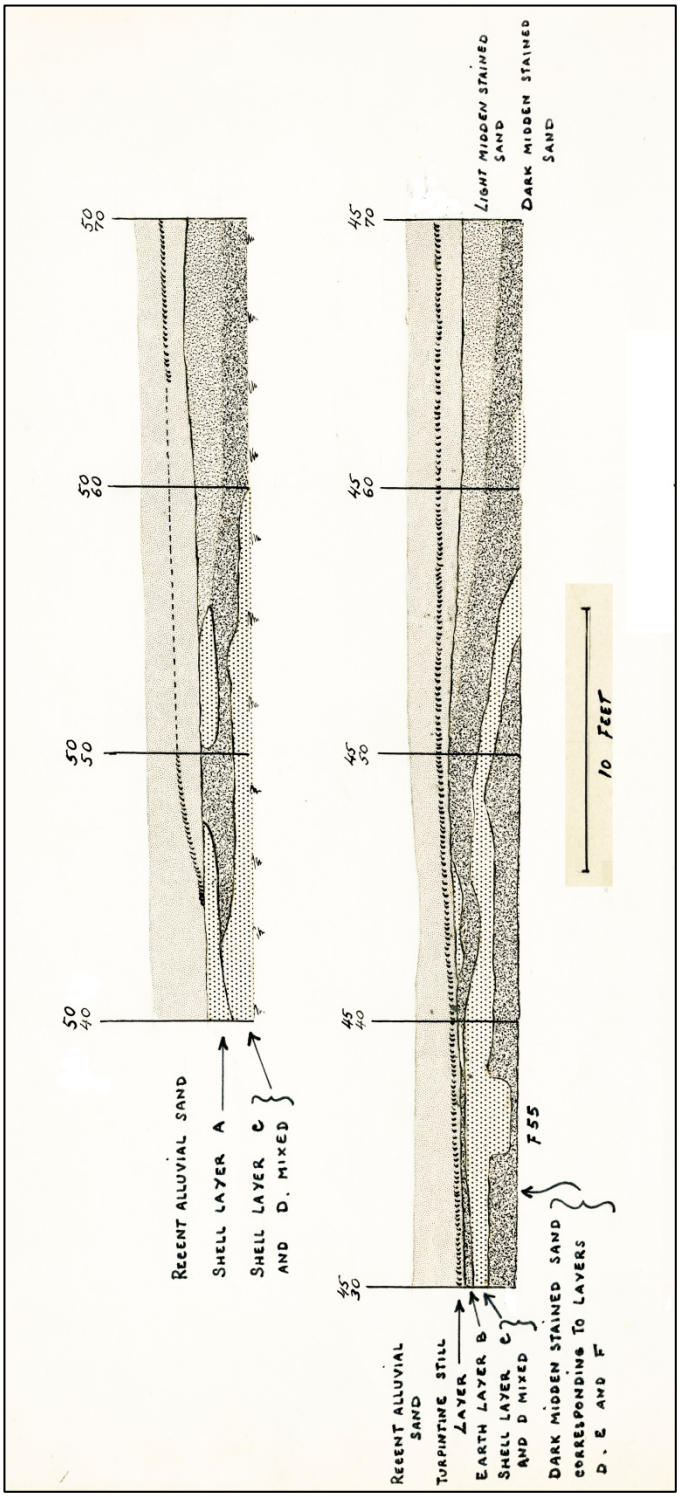


Figure 4. Fairchilds Landing, East 45-50 Exploratory Trench Profiles.

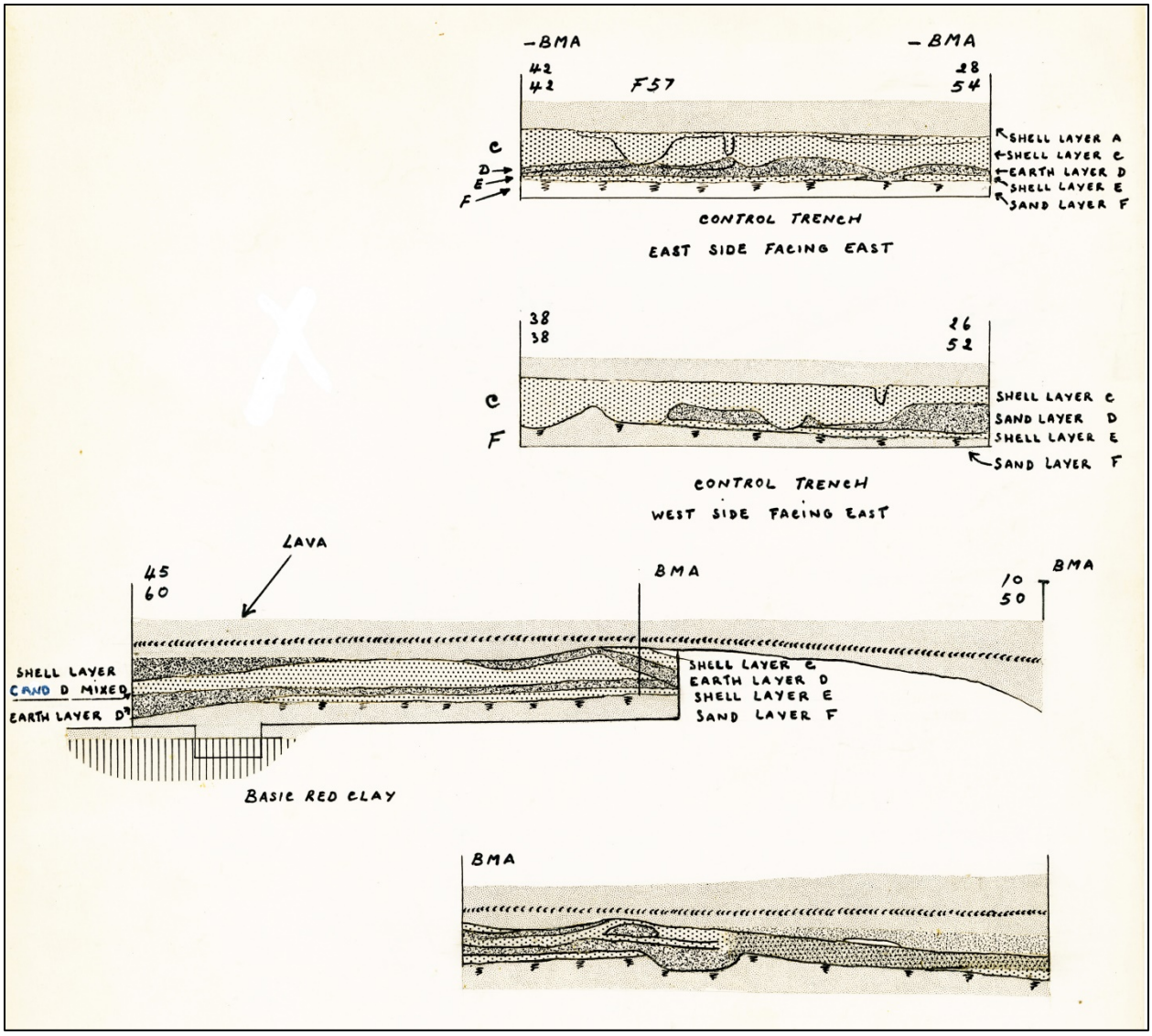


Figure 6. Fairchilds Landing, Stratigraphic Block Profiles.

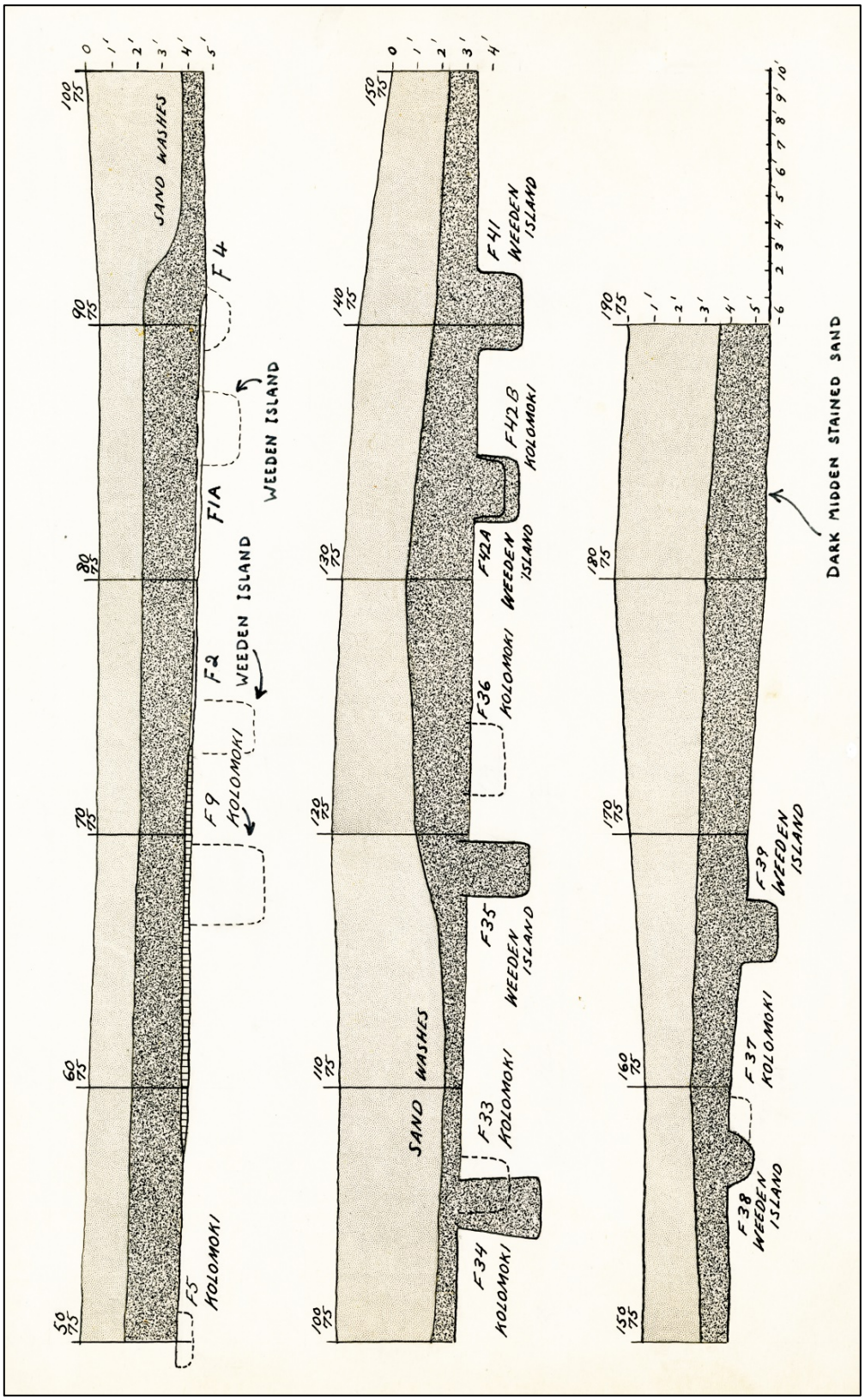


Figure 6. Fairchilds Landing, 75-80 South Exploratory Trench Profiles.

Figure 7. Fairchilds Landing, River Profile, Looking North.

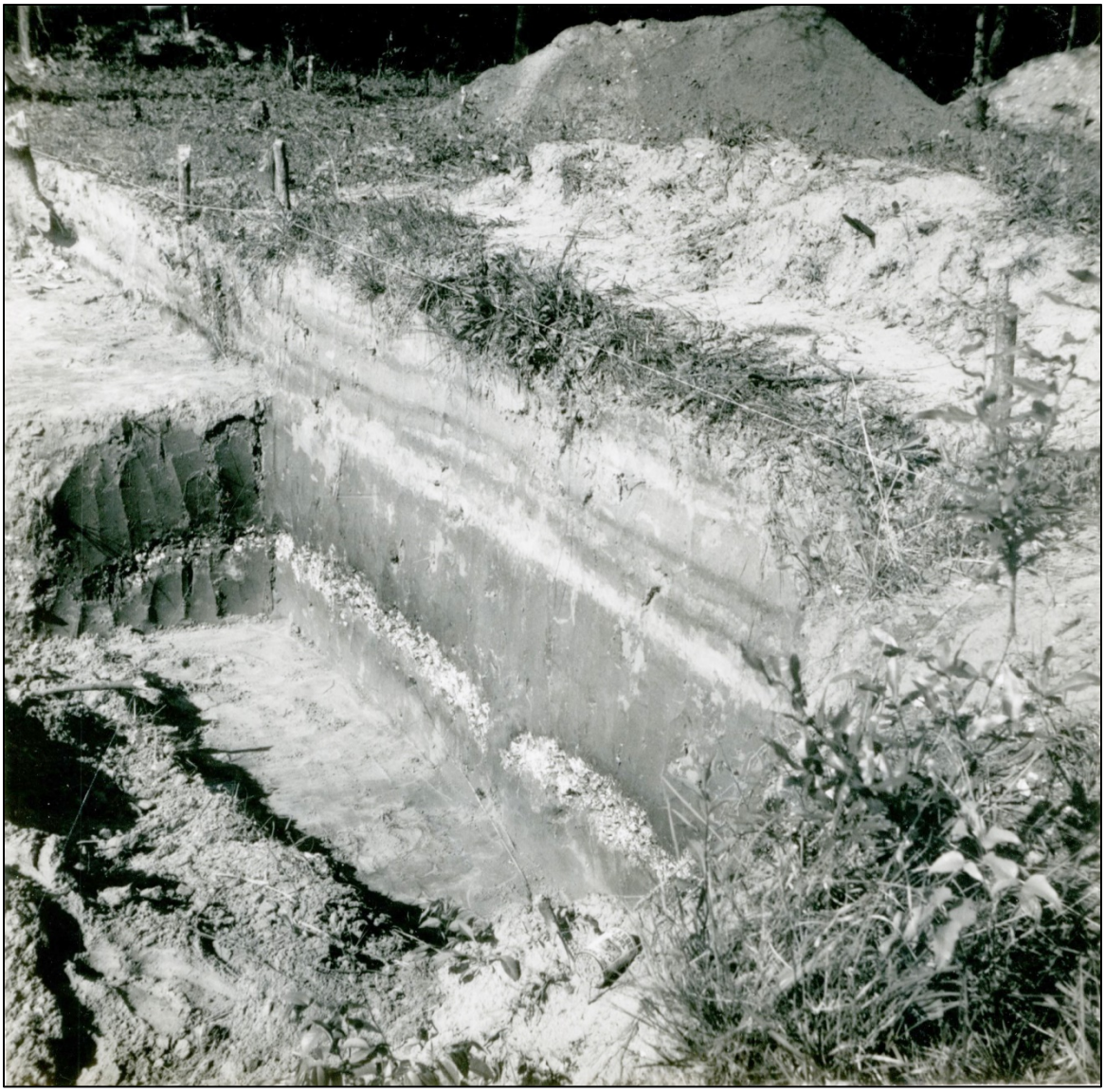


Figure 8. Fairchilds Landing, River Profile, Southern Shell Layer Below River Sand.

Figure 9. Fairchilds Landing, Stratigraphic Block, Looking Southwest, Shell Layer C Exposed.

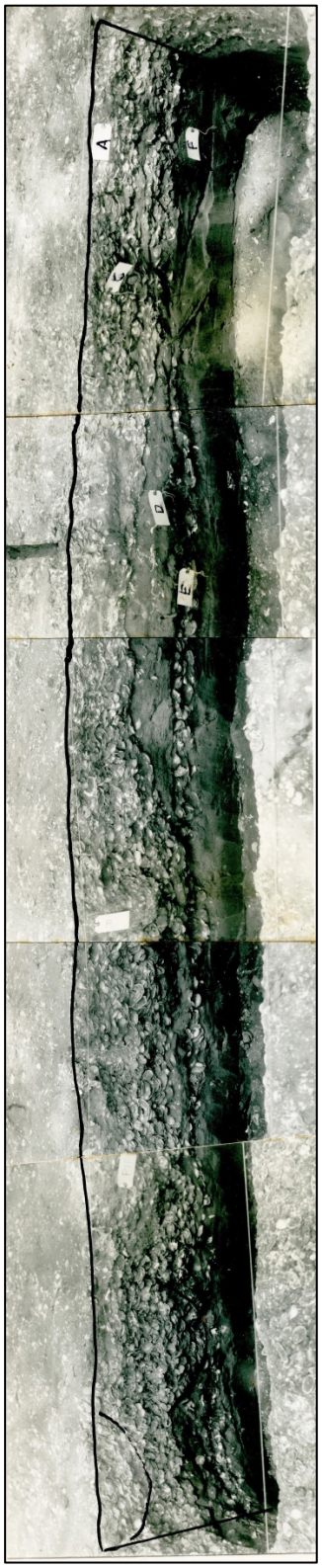


Figure 10. Fairchilds Landing, Stratigraphic Block Control Trench.

Figure 11. Fairchilds Landing, Stratigraphic Block, Shell Layers C, D, and E.

Figure 12. Fairchilds Landing, South 75-80 Exploratory Trench, Looking East.

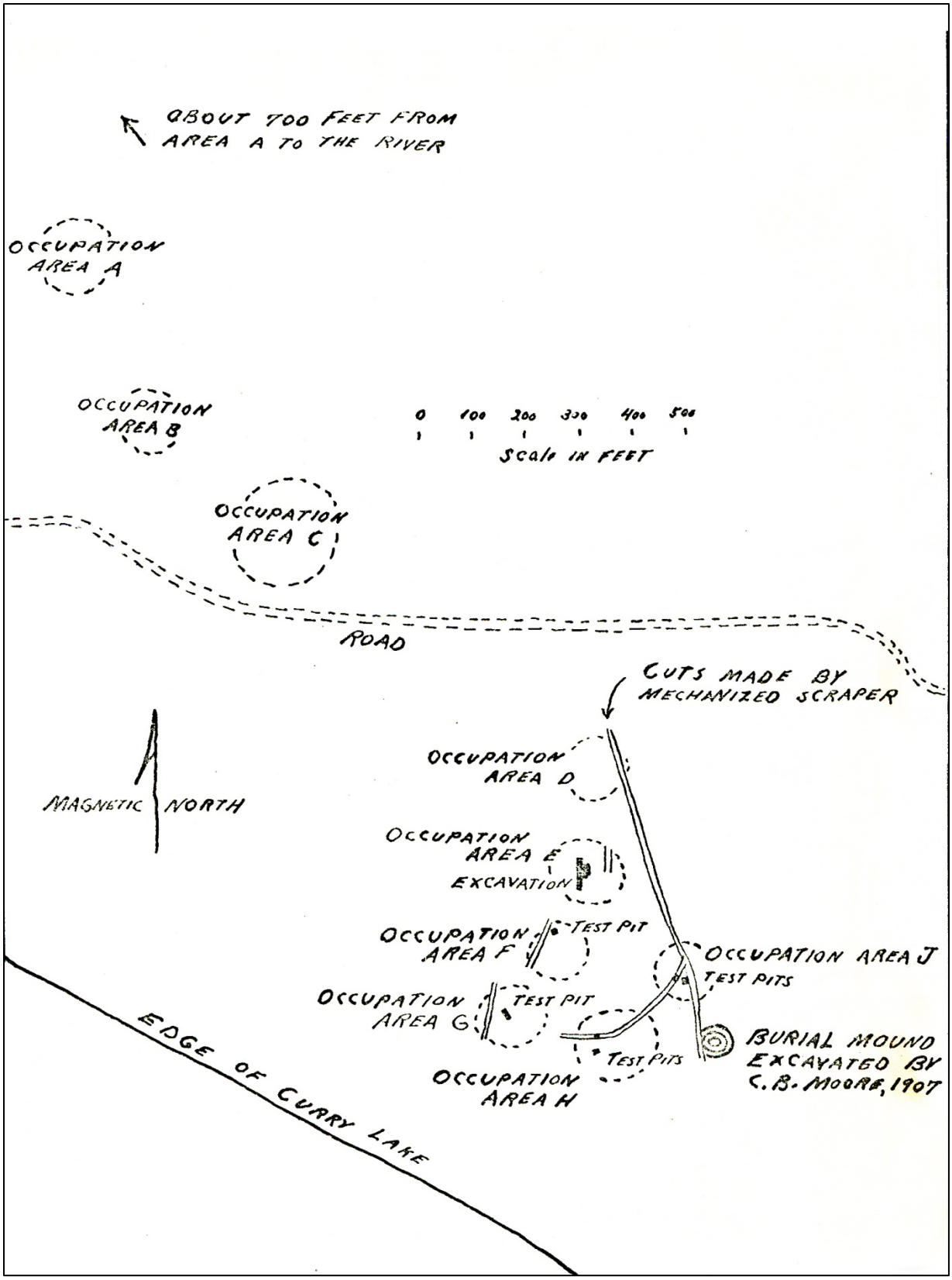


Figure 13. Hares Landing Site Map.

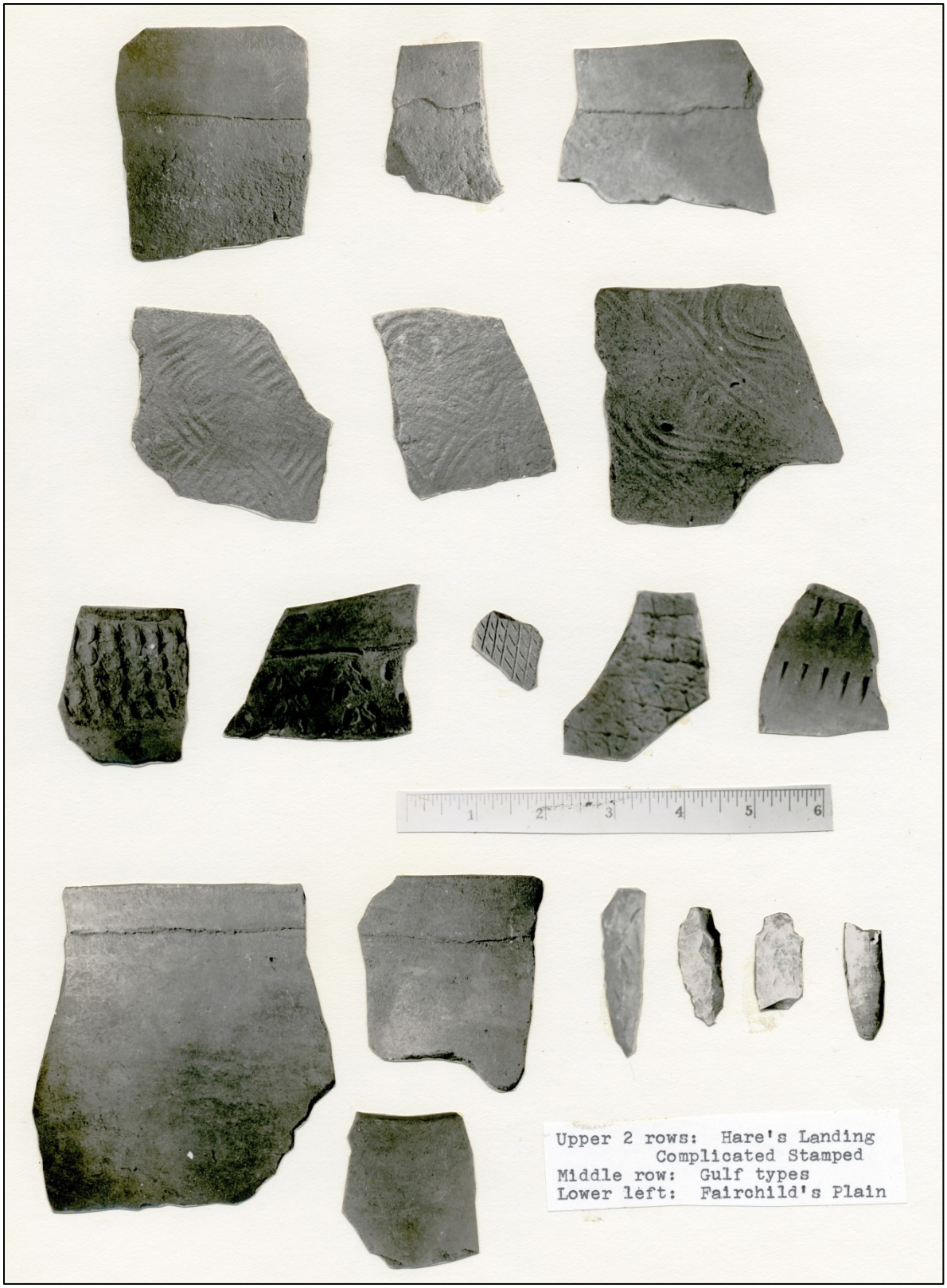


Figure 14. Hares Landing, Midden J Artifacts.

Figure 15. Hares Landing, Midden E Artifacts.

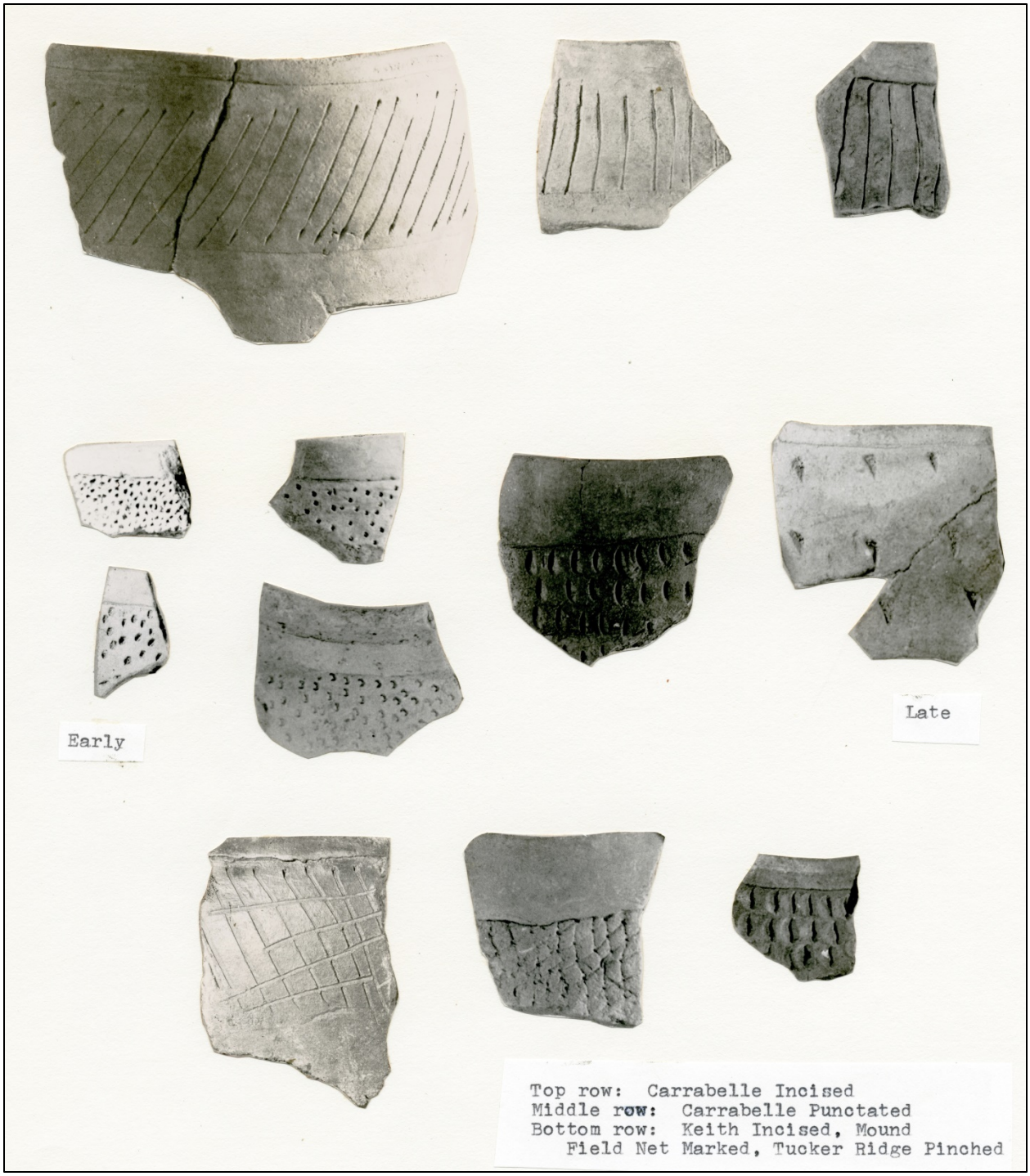


Figure 16. Fairchilds Landing and Hares Landing Pottery.

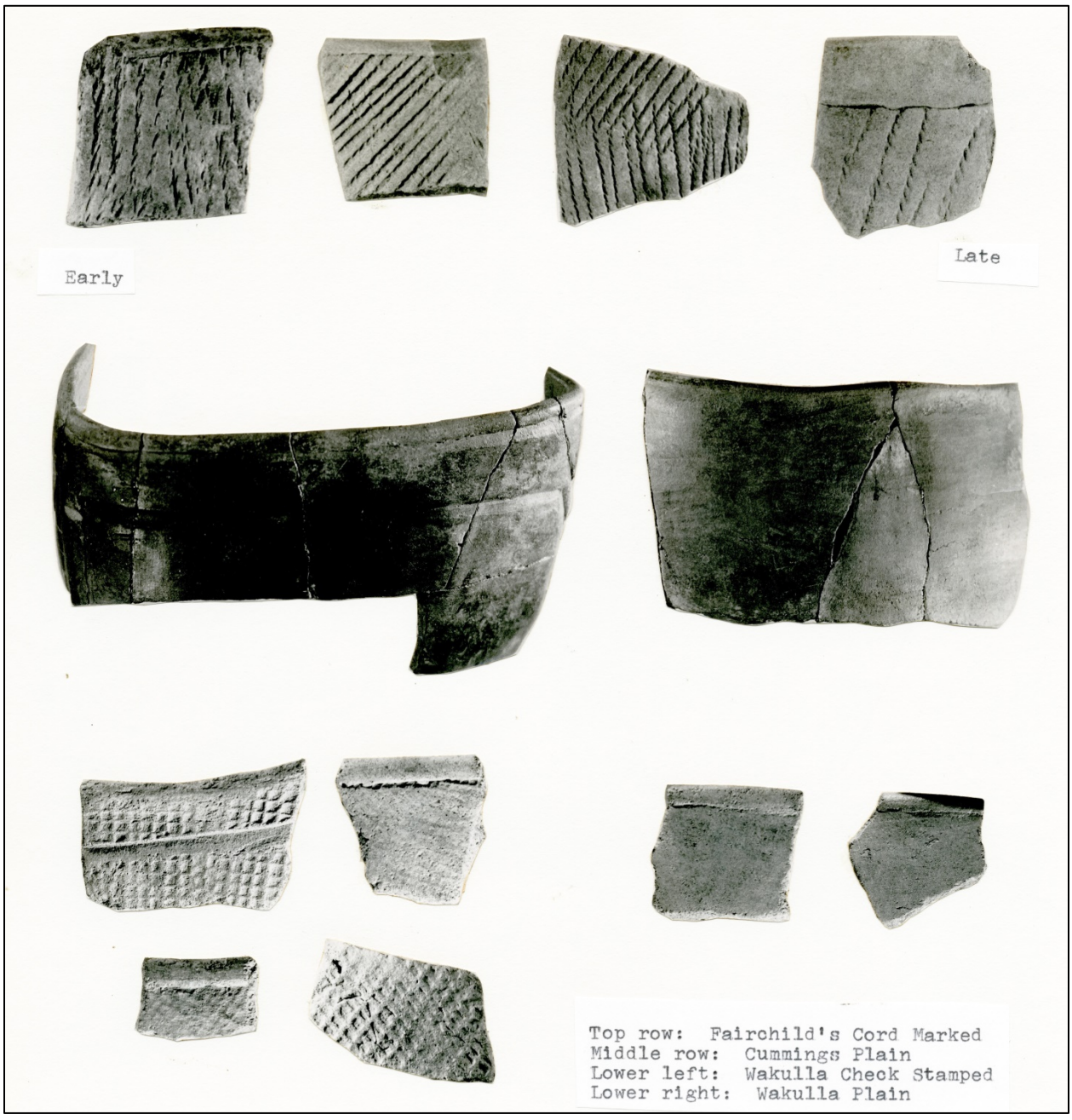


Figure 17. Fairchilds Landing and Hares Landing Pottery.

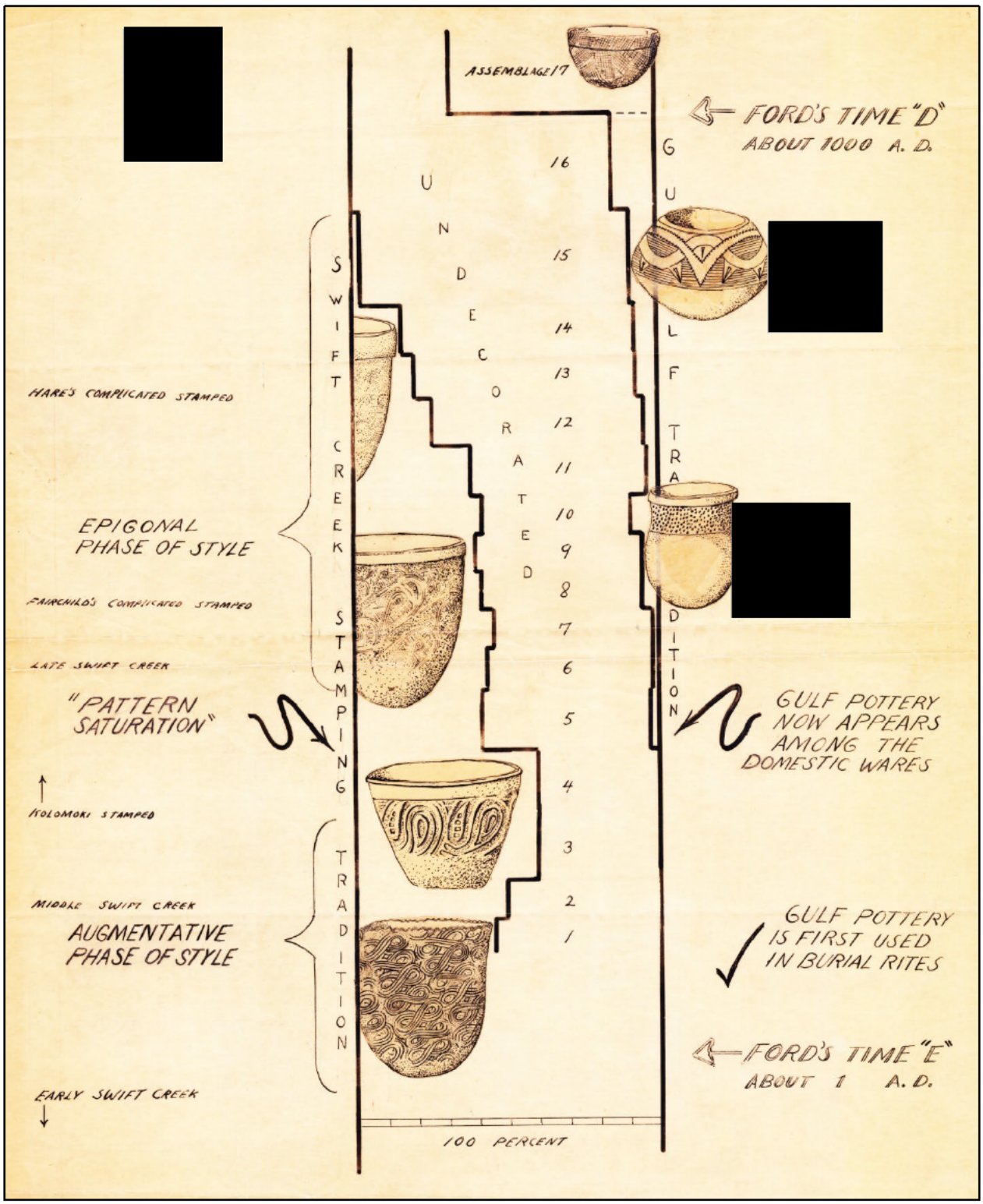


Figure 18. Graphic Showing Transition from South Appalachian to Gulf Ceramic Types through Time.

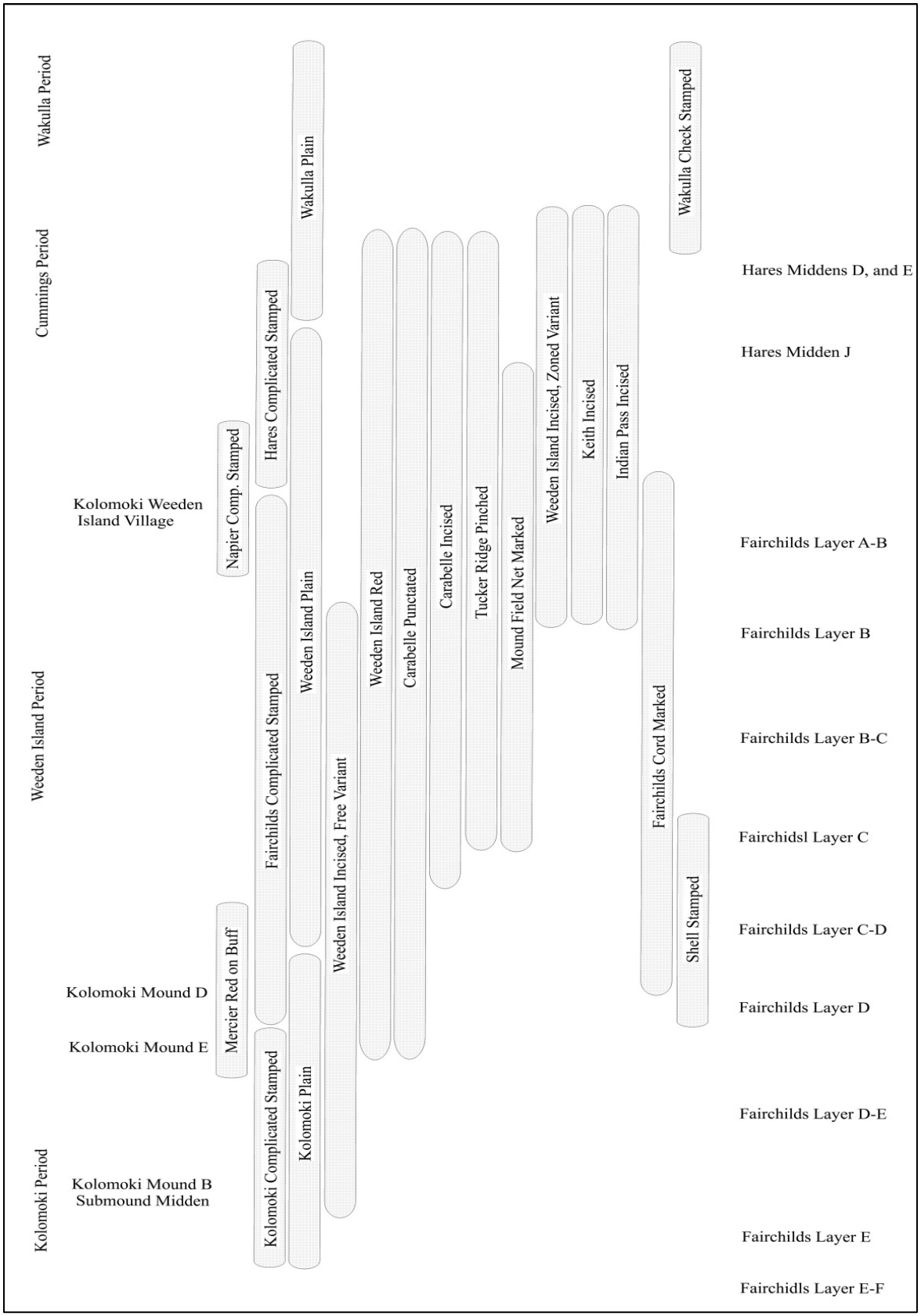


Figure 19. Ceramic Type Sequence Data for Fairchilds, Hares, and Kolomoki.

Appendix 1

Editor's Note: The following paper was prepared by Caldwell for submission to American Antiquity, but was apparently never submitted. We wish he had published it in the 1950s, and are glad to present it here now.

For American Antiquity Facts and Comments
THE STRATIGRAPHIC POSITION OF KOLOMOKI COMPLICATED STAMPED

In a recent paper in *American Antiquity* William H. Sears (Sears 1953a) discussed two ceramic complexes at Kolomoki Complicated Stamp, was later than the "Weeden Island complex," represented by several types of the Weeden Island series and by Late Swift Creek Complicated Stamped (Willey's terminology, See Willey1949:429-435), which Sears calls Swift Creek II.

The purpose of this note is to point out that physical stratigraphy bearing directly upon Sears' postulated sequence has been found in the northwestern Florida – southwestern Georgia area, and to state that the evidence indicates that the true ceramic succession at Kolomoki was probably exactly the reverse of that suggested by Sears. Sears' side of the questions raised here cannot be adequately presented in this note, and in fairness it must be said that a few quotations from his published works do not do justice to the ingenious arguments and intricate reasoning which have been presented by him in a whole series of papers. Interested readers may consult the appended bibliography.

At Mound Field, Wakulla County Florida (Willey and Woodbury 1942:249, but especially Willey 1949:60-70), stratigraphic Pit 1 showed Carrabelle Incised, Carrabelle Punctated, and Weeden Island Incised pottery in the six upper levels. Swift Creek Complicated Stamped has a markedly lower range, and in the two deepest levels of the pit, where none of the Weeden Island types occurred, Swift Creek comprised the overwhelming majority of decorated sherds. Sears has examined this Mound Field material and has stated (Sears 1953b:43) that "…the midden materials were predominantly Kolomoki Complicated Stamp." Presumably he means that the sherds formerly identified as Swift Creek are actually Kolomoki. I have also seen them and agree with Sears' identification. The stratigraphy at Mound Field, then, implies a Kolomoki occupation *below* a Weeden Island occupation.

In 1953 the National Park Service excavated a large shell midden at Fairchilds Landing, on the Chattahoochee River, Jim Woodruff Reservoir, Seminole County, Georgia. A 30 by 30 foot stratigraphic cut elided several thousand large, clear, complicated stamped sherds. Pottery from the topmost level was predominantly Wakulla Check Stamped with an accompanying plain variety. This would have been readily classifiable as Weeden Island II in Willey and Woodbury's sequence, though the period name in this area will be Wakulla (Personal Communication Gordon Willey). The shell and earth layers below included quantities of Late Swift Creek Complicated Stamped together with some types of the Weeden Island series, but no check stamped. This pottery assemblage would have fitted the older Weeden Island I criteria, but we shall follow Sears and call it simply Weeden Island complex (and period). Below this Weeden Island zone and reaching to the base of the shell midden the Weeden Island decorated types were absent, Late Swift Creek (Swift Creek II) was absent, and all the pottery, consisting of several hundred sherds, was either Kolomoki Complicated Stamp or plain. At this site, then,

the ceramic sequence was Kolomoki complex as the earliest, followed by Weeden Island, and finally by Wakulla.

The sequences at Mound Field and Fairchilds Landing are in agreement in indicating a Kolomoki complex below phases of Weeden Island. At Fairchilds Landing the Weeden Island occupation was marked by quantities of late Swift Creek pottery as at the Kolomoki site. At Fairchilds Landing also, Weeden Island was succeeded by an occupation which used predominantly Wakulla Check Stamped.

I should like to add to this, that it seems to me that Sears, by basing his interpretation of the position of Mound D at Kolomoki upon a hypothetical Weeden Island to Kolomoki sequence has overlooked evidence at his site which might have been considered indicative that the true succession at Kolomoki is headed in the other direction. In a midden deposit under Mound D he found "a good Kolomoki assemblage, and typologically a late one, "which had been partially scraped up into the primary mound" (Sears 1953a:227). In the mound fill were additional sherds of Kolomoki Complicated Stamped and for the first time we find "twenty-three sherds of Weeden Island types such as are found here in the Weeden Island refuse deposits, and seventy-one Swift Creek II period sherds, usually found associated with the Weeden Island series at this site" (1953b:25). If the Weeden Island complex were actually earlier than the Kolomoki as claimed, the Weeden Island and Swift Creek II sherds might reasonably be expected to have been in the premound deposit instead of being restricted to the mound fill. Sears plausibly explains that "The soil must have been scraped up in the immediate area, since soil from any distance to the south would have contained large numbers of Weeden Island herds, and from any distance farther north, no Weeden Island sherds at all" (1953b:25-26).

I am inclined to agree with Sears that Mound D was later than Mound E (Sears 1953b:43) but this judgment is inconsistent with his proposed sequence. Mound D contained only two pottery vessels "classified as Kolomoki Complicated Stamp, although aberrant" (Sears 1953b:43). Granting any amount of mortuary conservatism, we are entitled, I think, to expect a certain degree of consistency in direction, but Sears' "hypothesis of Kolomoki evolution from Weeden Island through development and emphasis on the stamped ware coexistent with the abandonment of the incised, punctated, and painted types of the Weeden Island series" (Sears 1953a:227) would seem to require more, not less, of Kolomoki Complicated Stamp to have been found in Mound D than in Mound E, although just the opposite is the case.

If we reinterpret Mound D in the light of the Fairchilds Landing and Mound Field stratigraphy, the apparent situation can be stated somewhat more simply. It is suggested that first there was a Kolomoki horizon under the mound, and after sufficient time had elapsed for Weeden Island complex pottery to appear on the site, the mound itself was built, incorporating both the earlier Kolomoki Complicated Stamp sherds and the later Weeden Island and late Swift Creek types into the mound fill.

I am afraid that the suggestion here is that Mound D must actually have been a Weeden Island complex mound, not late Kolomoki as Sears suggests. For significant amounts of Weeden Island sherds to appear in the mound fill means that these sherds must already have been on the ground before the mound was built. At the very earliest they could not have been prior to Sears' intermediate period (Sears 1953a:224). Presumably Kolomoki Complicated Stamp had virtually run its course by the time Mound D was built. Only two aberrant vessels of that type were used as mortuary offerings, perhaps illustrating the "mortuary conservatism" which has loomed so large in Kolomoki interpretations.

Sears has called attention to the similarities, ceramic and non-ceramic between Mound E and D. It is noteworthy that Mound D, which I should ascribe to Sears' Weeden Island complex, also contained the interesting Mercier Red on Buff mortuary ware--"the large Mississippian pots" (sic) (Sears 1953b:42) which were also found in Mound E. The differences between the two mounds are, according to Sears, "in the direction of greater elaboration and specialization in Mound D, and the two mounds are closely related." This is consonant, I think, with Sears' evidence of an intermediate period at Kolomoki, suggesting practically continuous occupation of the site which would be, according to the interpretation advanced here, from Kolomoki to Weeden Island times. The greater elaboration and specialization in Mound D would also parallel Willey's opinion, based on northwestern Florida Coast materials, that the Weeden Island periods represented a cultural climax (Willey1949:580).

Sears has suggested "that Weeden Island burial mounds, defines ceramically and on the bases of an eastern side mass pottery deposit, and Weeden Island culture, defined on the basis of ceramics in the village area, need not be related on a one to one basis." Further on he says: "Work at Kolomoki has demonstrated that the related mounds there were not produced by peoples whose culture was classifiable as Weeden Island on the basis of their everyday ceramics, we are justified in at least the suspicion that these Florida mounds too may have been produced by non-Weeden Island cultures. Thus they may be later than Weeden Island I" (Sears 1953a:227-228).

I think that Willey would be the first to admit that the useful Weeden Island concept should be redefined and subdivided as time goes on. It is clear to me, at least, that he regards the northwestern Florida burial manifestations from Santa Rosa times on as part of a continuous cultural tradition. Thus: "The Weeden Island I and II Periods were local developments out of the Santa Rosa-Swift Creek Period. The nature of sites and settlements and their distribution are much the same during these two periods as they were during the previous one, although population increased" (Willey 1949:580).

What Sears has done, I believe, is to separate another useful period, Kolomoki, out of a cultural continuum. Rather than recognize that the burial mounds he equates with this period may, as art of such a continuum, show characteristics which are also found in Weeden Island, he states that "we are justified in at least the suspicion that these Florida mounds too may have been produced by non-Weeden Island cultures." This is hardly consistent for one who has himself postulated an intermediate period between his Kolomoki and Weeden Island complexes. How much less confusing would it been for Sears to say that a new horizon has been defined in southwestern Georgia which occupies a definite time position in relation to the northwestern Florida sequence, and that some of the Florida sites can be placed in it.

No one who has worked in the area would disagree with the proposition that the mortuary pottery is highly specialized, but mortuary conservatism is quite another thing. It can be a useful concept, but isn't justified when even the relative sequence of village sites and of burial mounds can be stated only in broad terms. Indeed Kolomoki itself demonstrated that proposed sequences are in a definitely unsettled condition.

Some of the mortuary vessels in Mounds D and E have characteristics which Sears has recognized as similar to some ceramic features of the great group of cultures rather loosely called Mississippian. Sears feels that "On the whole, it seems that many of these ceremonial vessels were overelaborated derivatives of ceramic traits characteristic of a mature Mississippian horizon. Since they appear on only one or two vessels each in this late Weeden Island context, it is hardly probably that they are the prototypes of the thousands of definitely Mississippian

vessels" (Sears 1953b:45). He has given instances where some of these ceramic traits appear in post early Mississippian cultures. There is no specific criticism here, beyond the fact that I should strongly urge caution in using this sort of evidence. Personally, I do not believe that it can be accorded, at least with our present methods, the same sort of weight as the local stratigraphic sequence. Mississippian connections of some kind seem definitely to be present in the Kolomoki complex Burial Mound E, and according to the interpretation advanced here, in the Weeden Island complex Burial Mound D. Probably these two burial mounds are not far removed in absolute time, though they represent two ceramic periods or complexes. In terms of our present knowledge, or lack of knowledge, concerning Mississippian connections in the extreme Southeast, I do not think that the discovery of rather Mississippian looking ceramic forms at the end of Kolomoki and the beginning of Weeden Island times need trouble us too much at present. In northern Georgia, for instance, no less than seven local ceramic periods are distinguishable subsequent to the position assigned to the Mississippian Macon Plateau manifestation. What is clearly evident is that in the extreme Southeast "Mississippian influences" are discernable in a long succession of demonstrably sequent manifestations. Just how "mature" the Mississippian characteristics of Kolomoki mortuary pots are, I simply do not know, but a satisfactory demonstration of this point has not yet appeared in print.

The small check stamp is extremely rare at Kolomoki (Sears 1953a:224), and the absence of Wakulla Check Stamped as a pottery type at Kolomoki would be contributory evidence, according to the original northwestern Florida sequence, that Kolomoki was deserted by Weeden Island II (Wakulla) times. Thus Sears' interpretation of the Kolomoki complex as "terminal Weeden Island" (Sears 1953b:44) runs into a little difficulty in accounting for the absence of Wakulla Check Stamped at Kolomoki, and perhaps this is the reason he has taken a rather dim view of the validity of this type as a time marker, even in northwestern Florida. According to Sears: "Certainly Kolomoki demonstrates that the small check stamp does not invariably serve as a late time marker. I doubt it serves this function in at least the Wakulla and Franklin County sections of the Florida northwestern coast, although it may in other parts of the coast. It does seem to work in peninsular Florida, however."

Contrary to this opinion, in the Jim Woodruff Reservoir which extends to within 25 airline miles of Kolomoki, Wakulla Check Stamped has turned out to be an excellent time marker. It was stratigraphically segregated in the upper level of Fairchilds Landing. Moreover this type is ubiquitous in the Reservoir and is the sole decorated pottery at more than 20 sites there, where it certainly distinguishes them from sites of earlier times. A nest of pure Wakulla Period sites was also discovered on Kirkland Creek in southwestern Early County, less than 20 miles from Kolomoki. A survey of intervening area and points north of Kolomoki would be desirable at the present time.

References Cited

Sears, William H.

1951a Excavations at Kolomoki, Season I. *University of Georgia Series in Anthropology Number* 2. Athens.

1951b Excavations at Kolomoki, Season II, Mound E. *University of Georgia Series in Anthropology Number* 3. Athens.

1952 Ceramic Development in the South Appalachian Province. *American Antiquity* 18 (2).

1953a Kolomoki Burial Mounds and the Weeden Island Mortuary Complex. *American Antiquity* (18:3).

1953b Excavations at Kolomoki, Season III and IV, Mound D. *University of Georgia Series in Anthropology Number* 4. Athens.

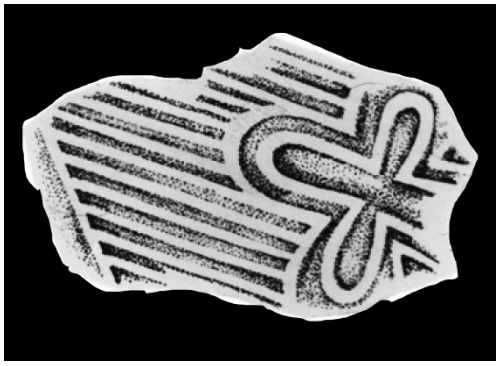
Willey, Gordon R.
1949 Archaeology of the Florida Gulf Coast. *Smithsonian Miscellaneous Collections* Volume 113. Washington, D.C.

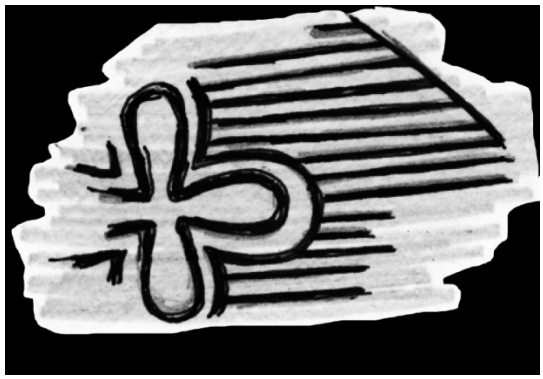
Willey, Gordon R., and Richard W. Woodbury
1942 A Chronological Outline for the Northwest Florida Coast. *American Antiquity* 7 (3).

Joseph R. Caldwell
Ocmulgee National Monument
Macon, Georgia

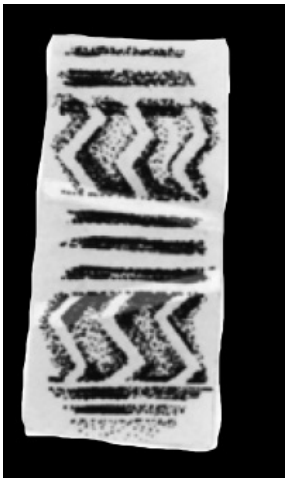
Appendix 2

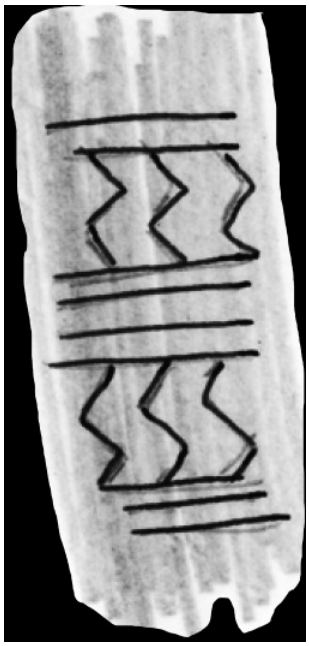
Motif 1



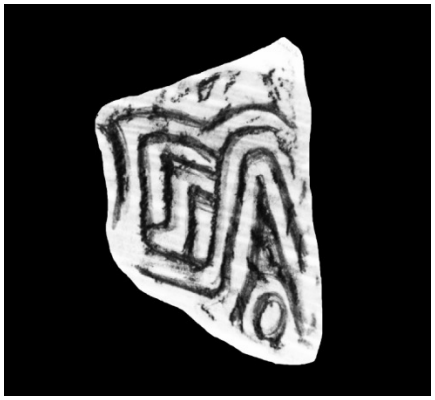


Motif 2

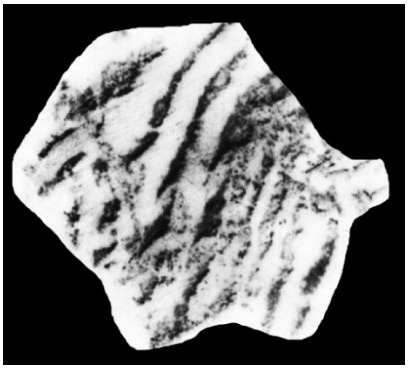




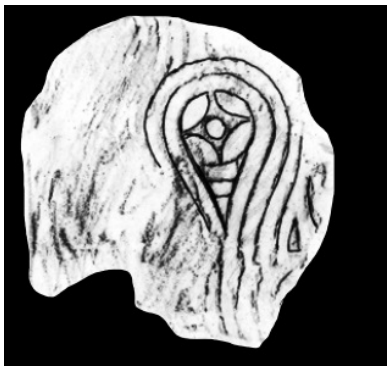
Motif 3



Motif 4



Motif 5



Motif 6

Motif 7

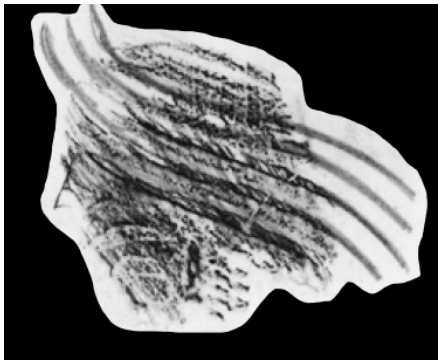
- NONE –

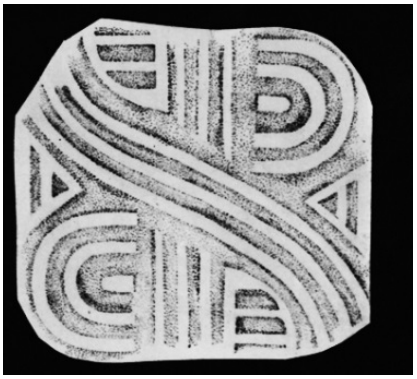
Motif 8

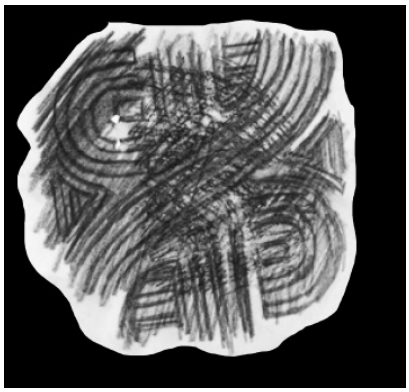
-NONE-

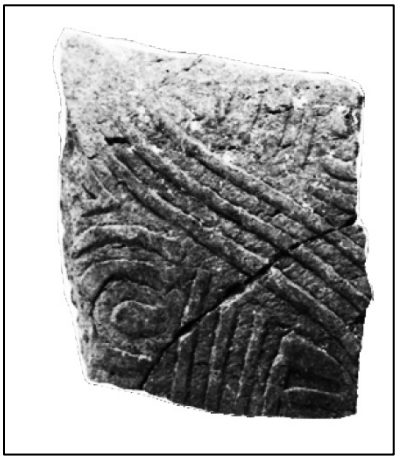
Motif 9

Motif 10



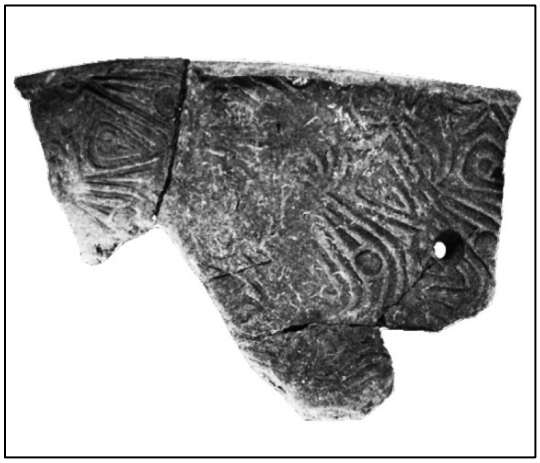




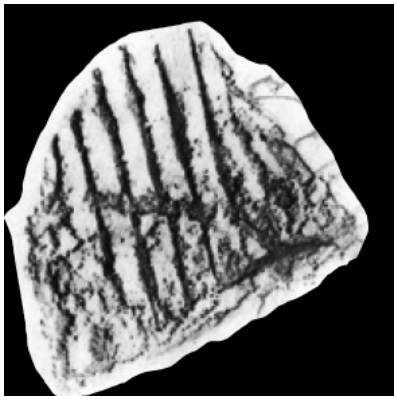


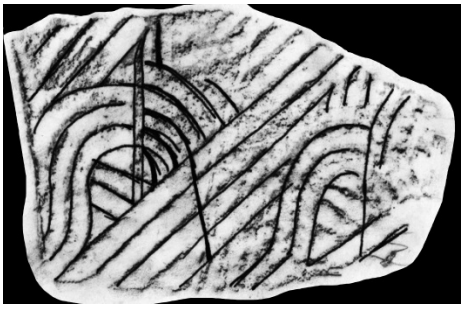
Motif 11

Motif 12



Motif 13





Motif 14

-NONE-

Motif 15

-NONE-

Motif 16

-NONE-

Motif 17

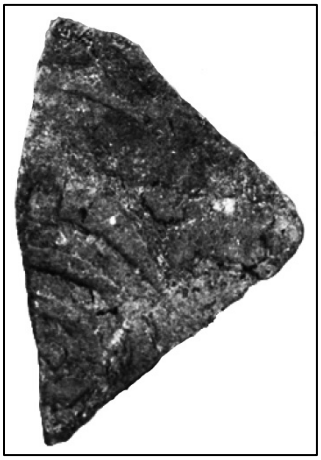
-NONE-

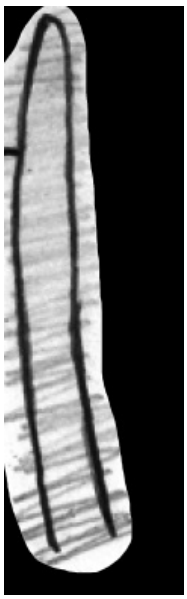
Motif 18

-NONE-

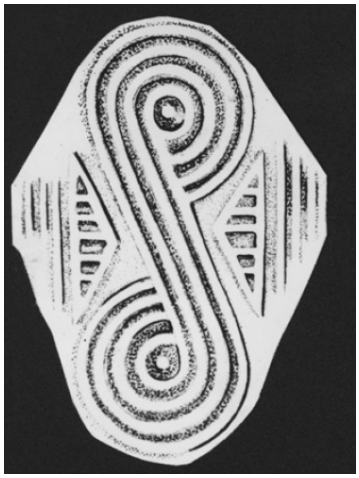
Motif 19

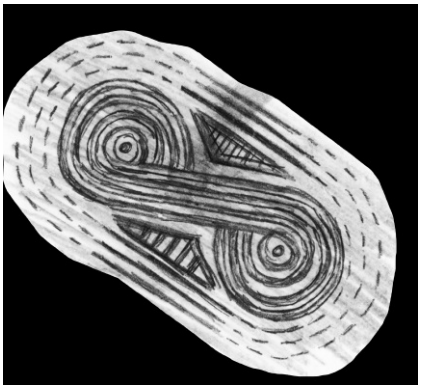
Motif 20





Motif 21





Motif 22

-NONE-

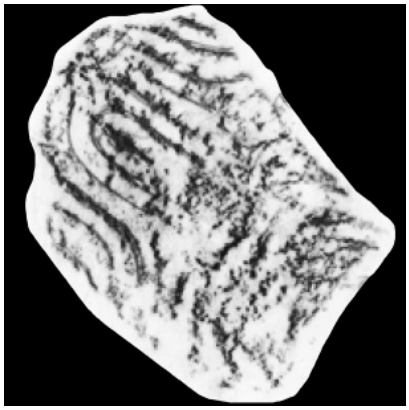
Motif 23

-NONE-

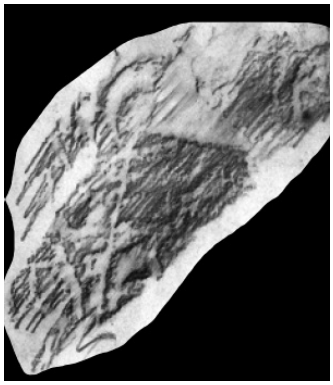
Motif 24

-NONE-

Motif 25



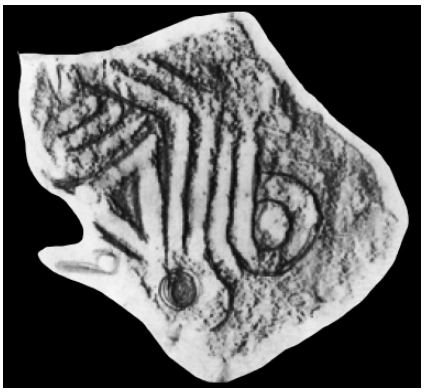
Motif 26

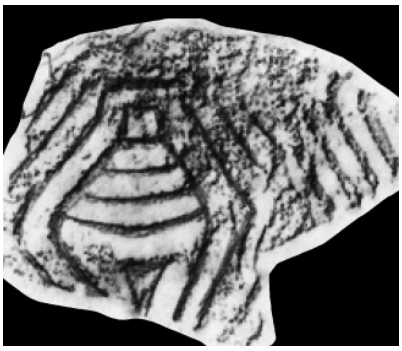


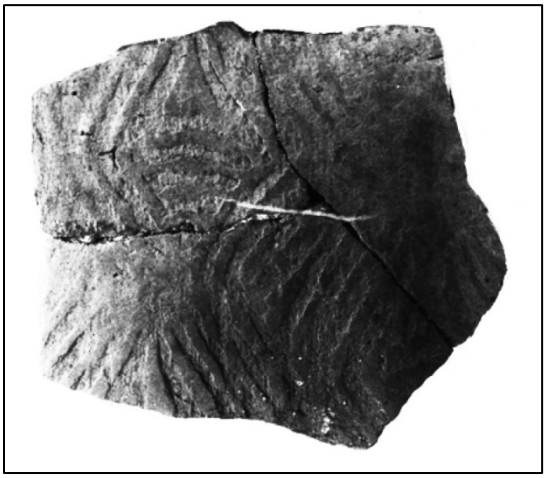
Motif 27

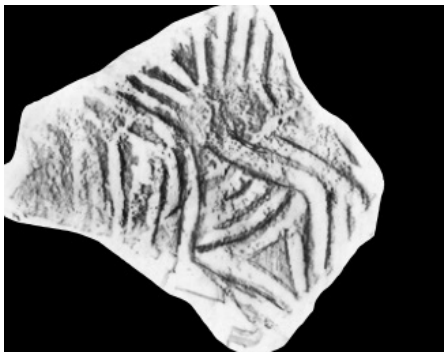
-NONE-

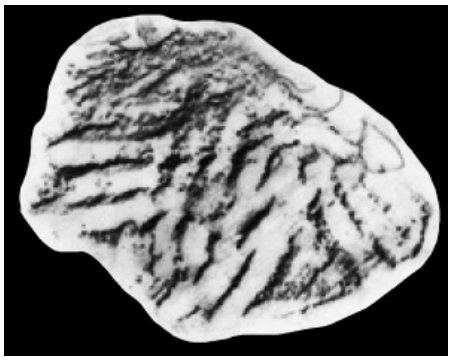
Motif 28



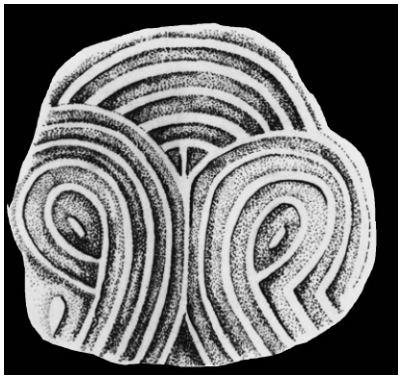


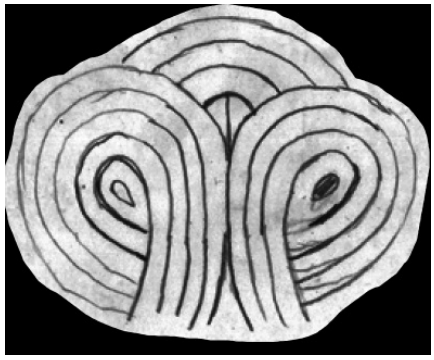


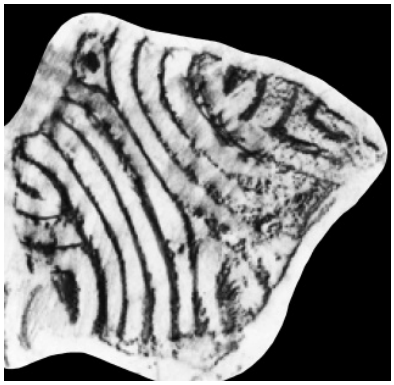


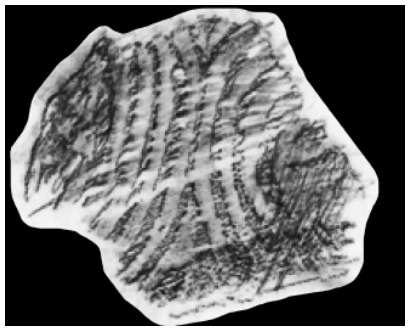


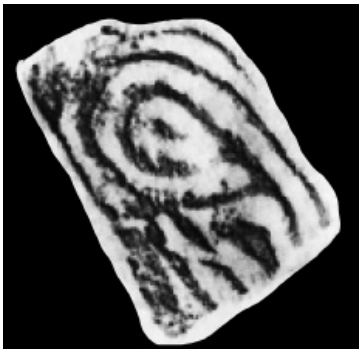
Motif 29

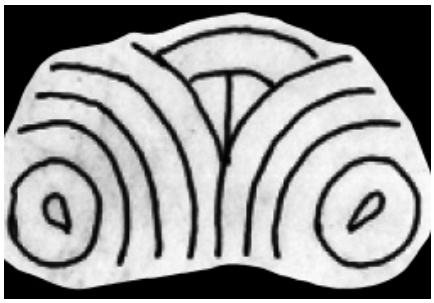


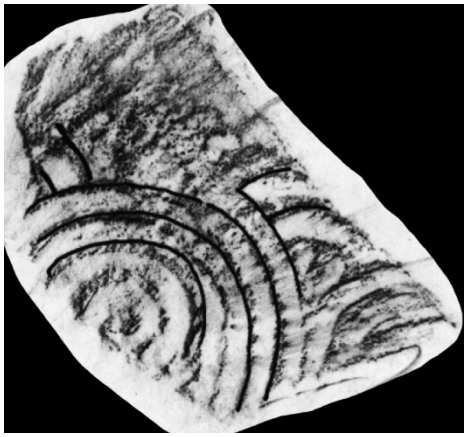












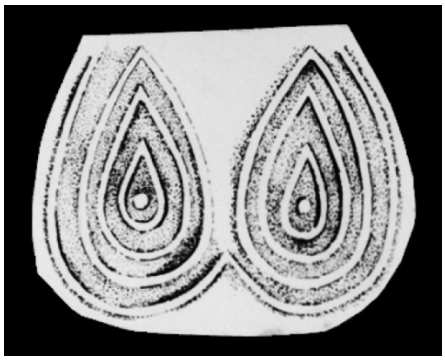
Motif 30

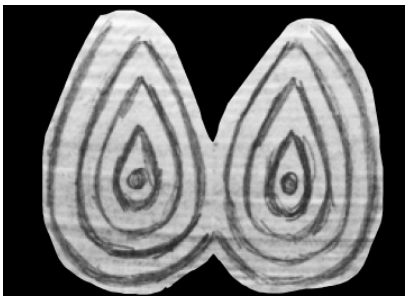
Motif 31

Motif 32

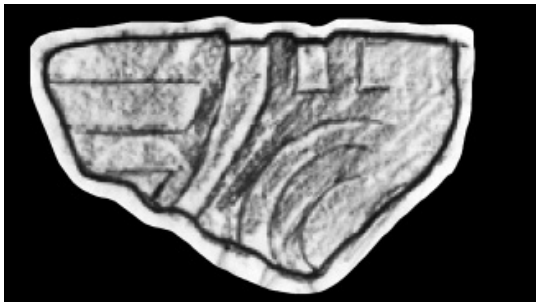
-NONE-

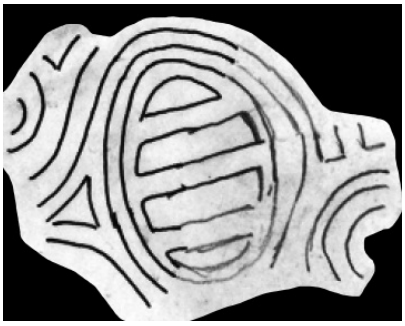
Motif 33

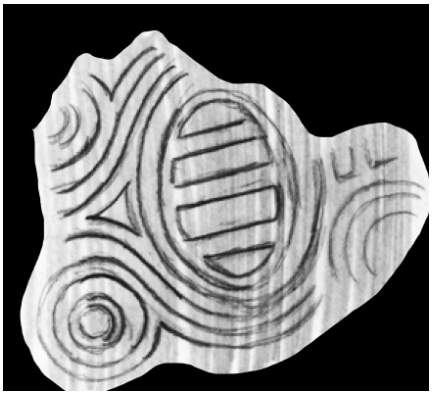


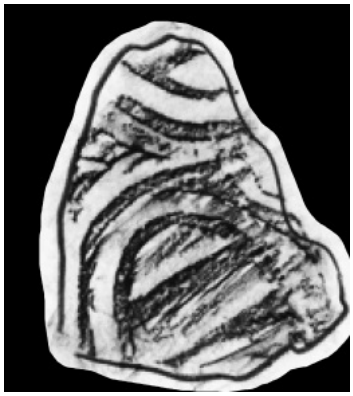


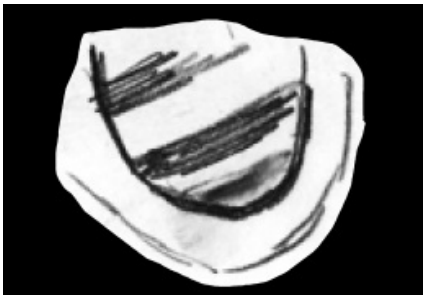
Motif 34



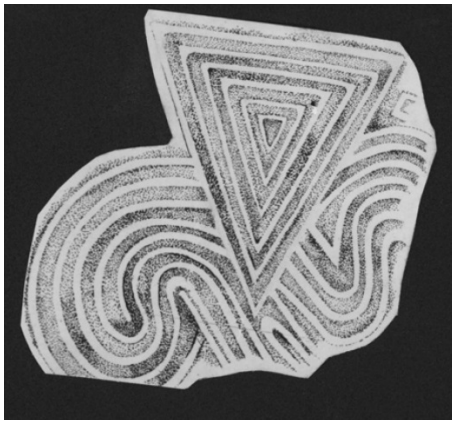


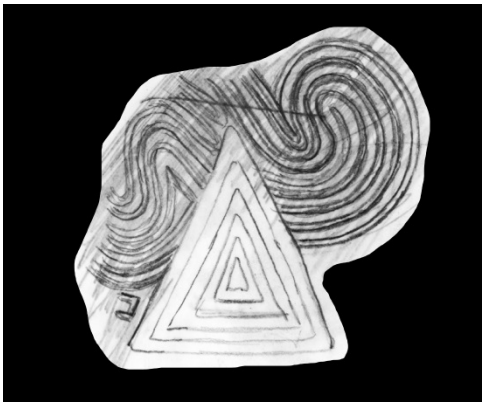






Motif 35

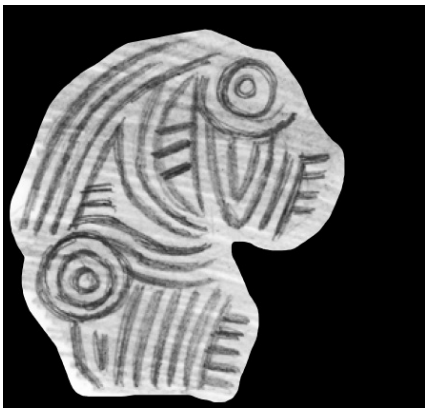


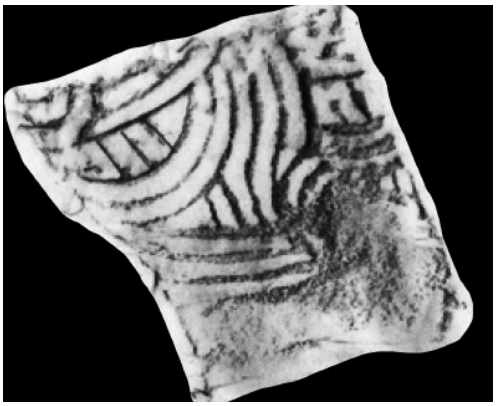


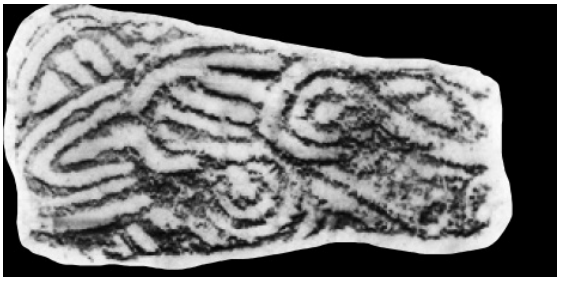
Motif 36

-NONE-

Motif 37

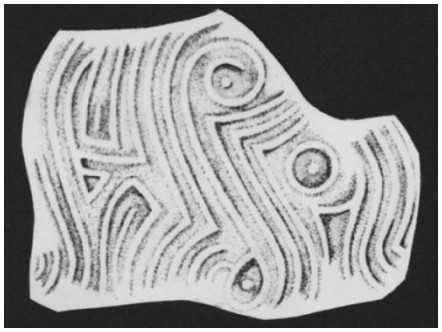




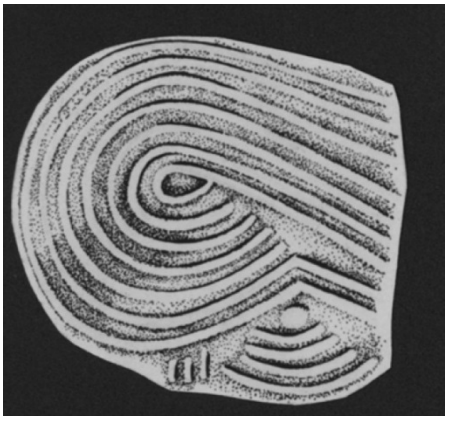


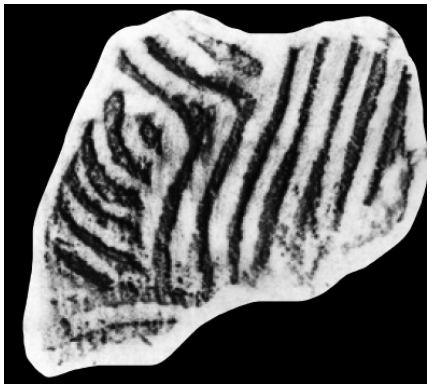
Motif 38

Motif 39



Motif 40





Motif 41

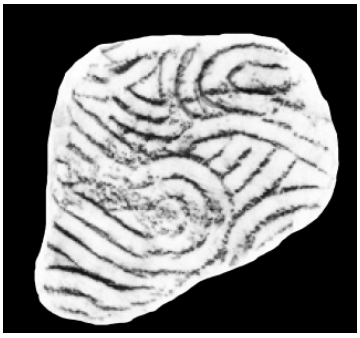
Motif 42

-NONE-

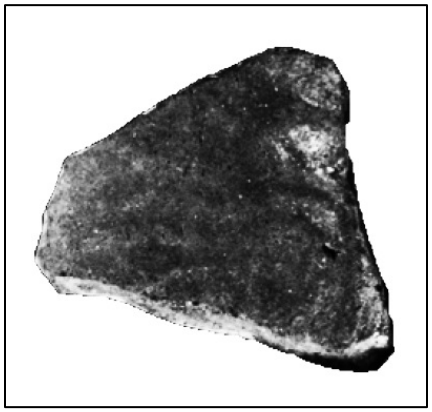
Motif 43

-NONE-

Motif 44



Motif 45



Motif 46

-NONE-

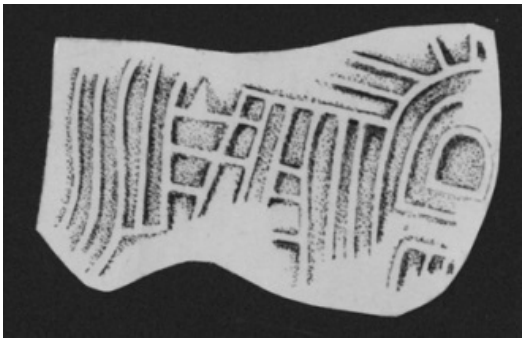
Motif 47

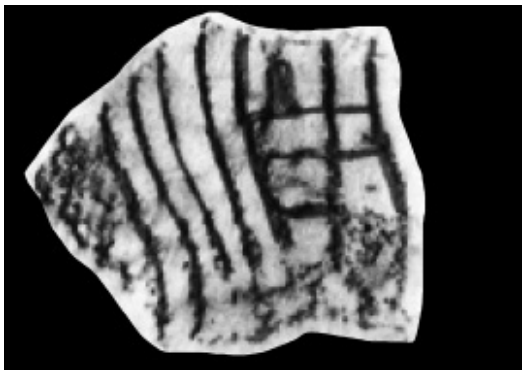
-NONE-

Motif 48

-NONE-

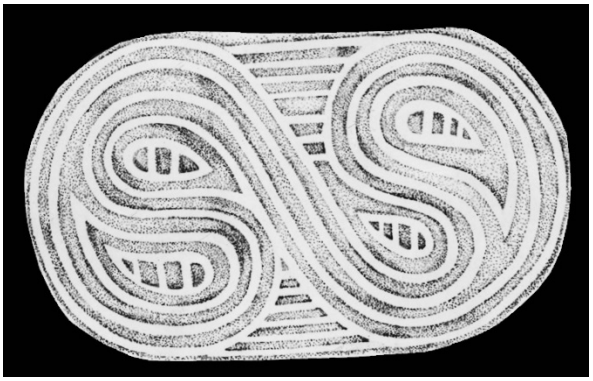
Motif 49

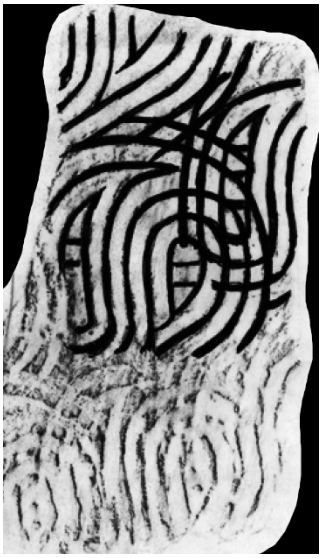




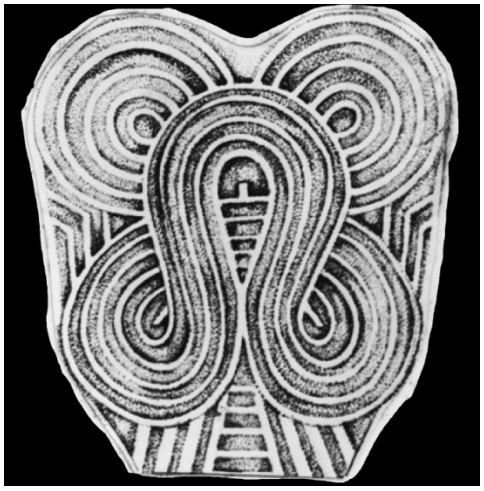
Motif 50

Motif 51





Motif 52



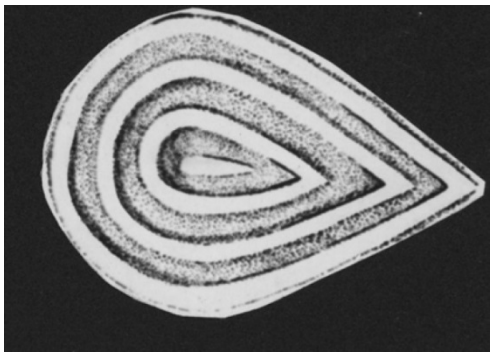
Motif 53

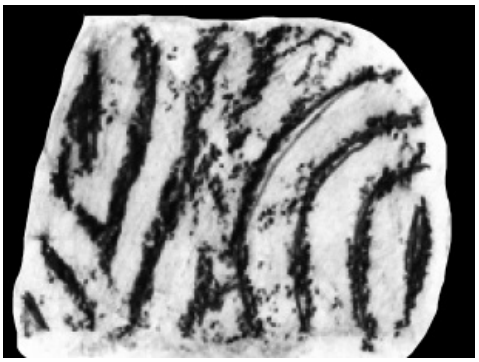
-NONE-

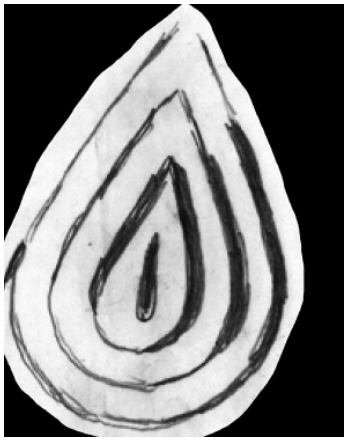
Motif 54

-NONE-

Motif 55







Motif 56

-NONE-

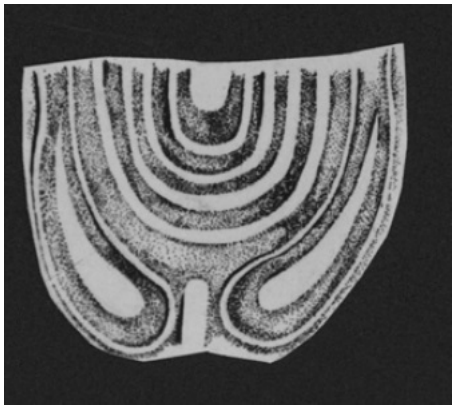
Motif 57

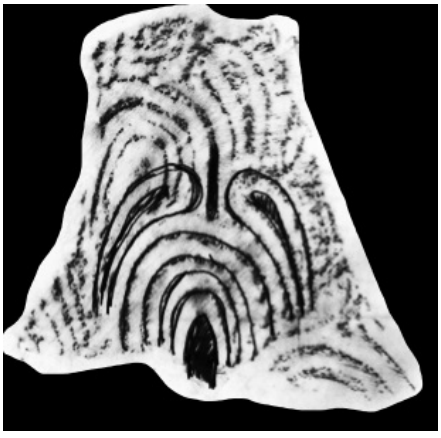
-NONE-

Motif 58

-NONE-

Motif 59





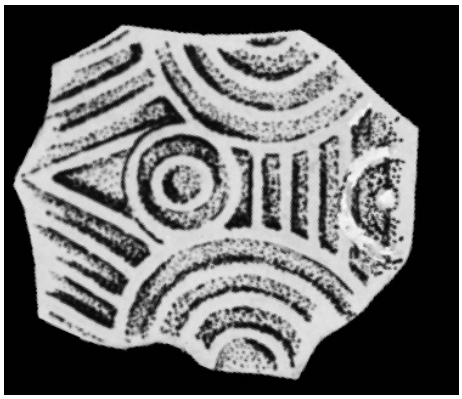
Motif 60

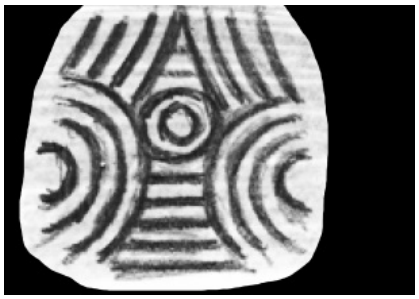
-NONE-

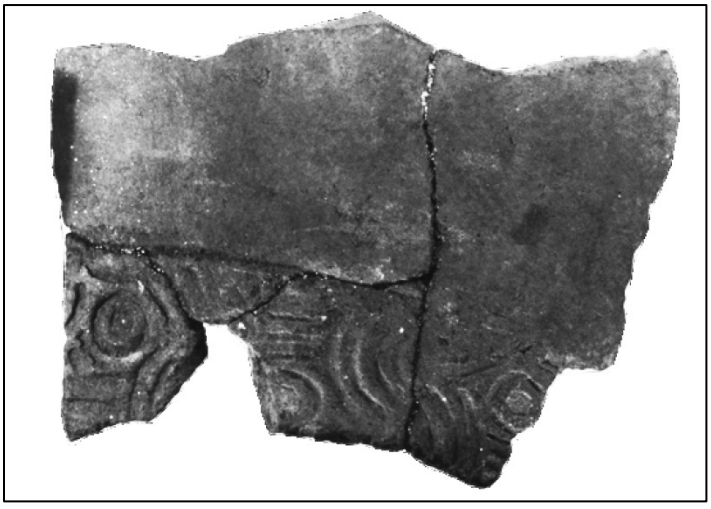
Motif 61

-NONE-

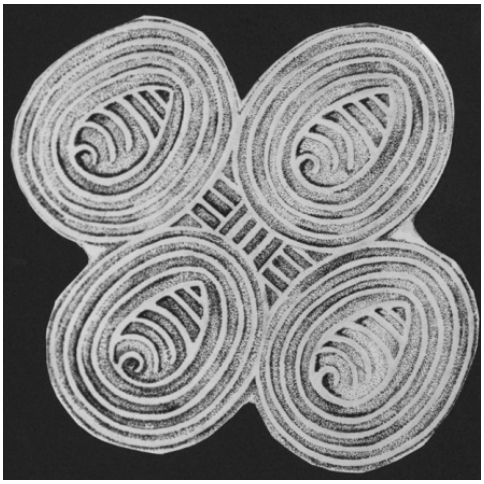
Motif 62

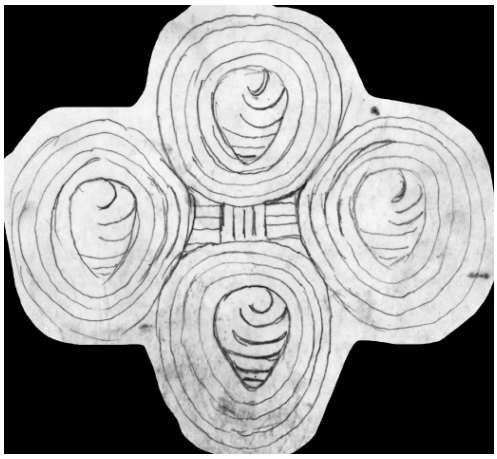




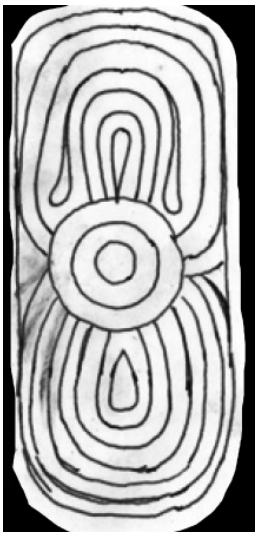


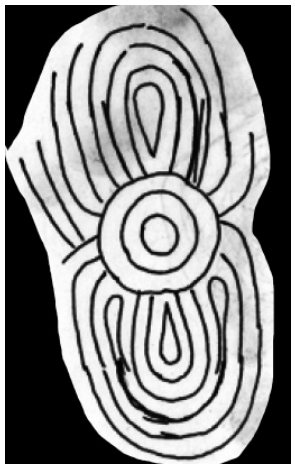
Motif 63



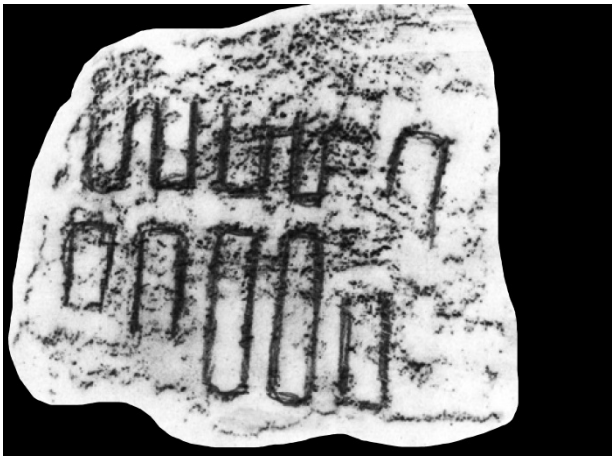


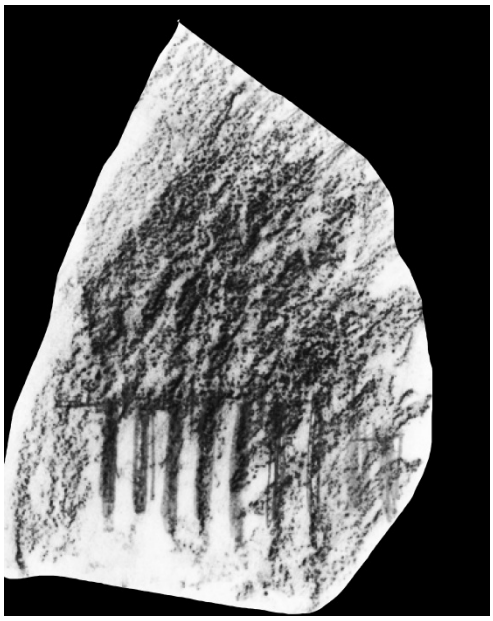
Motif 64



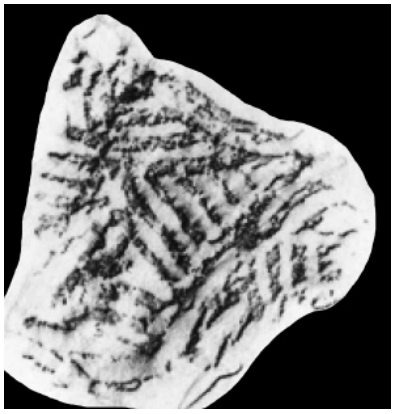


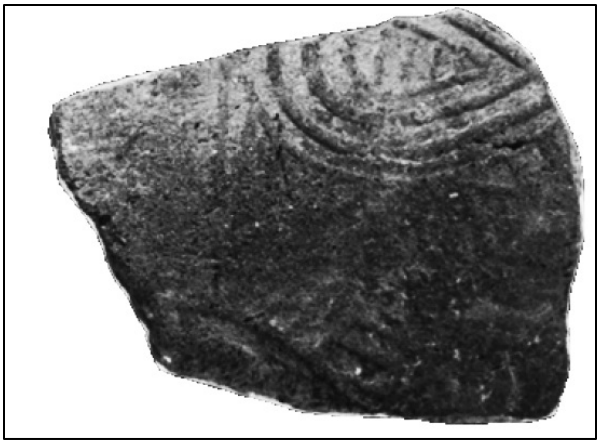
Motif 65



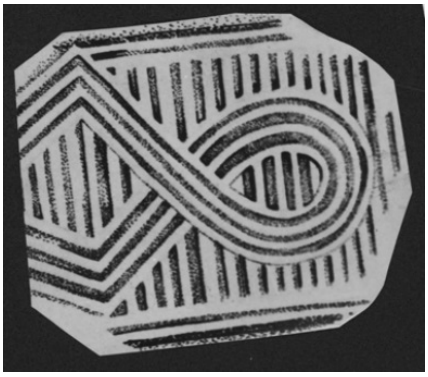


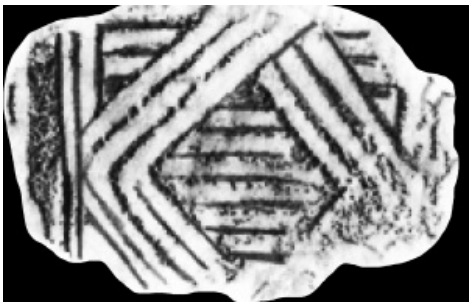
Motif 66

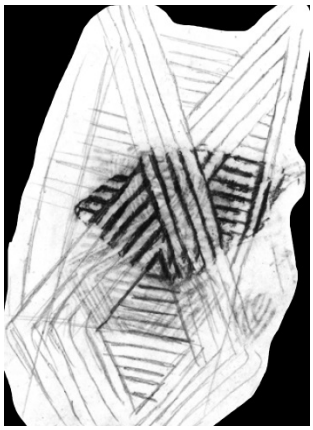


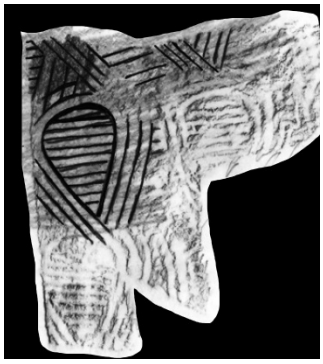


Motif 67





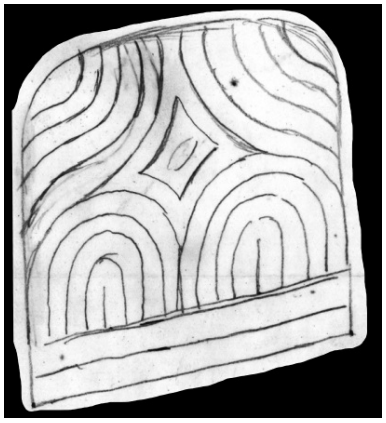




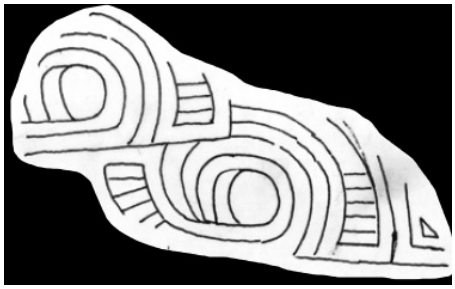
Motif 68

-NONE-

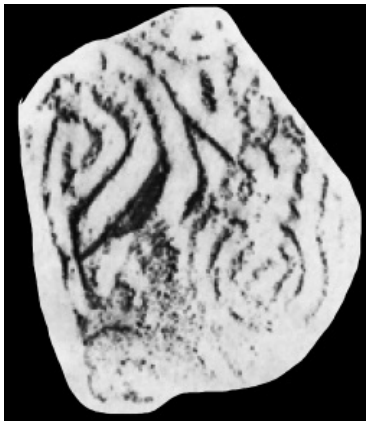
Motif 69

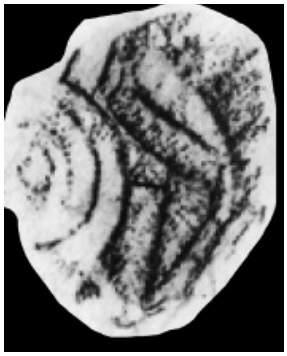


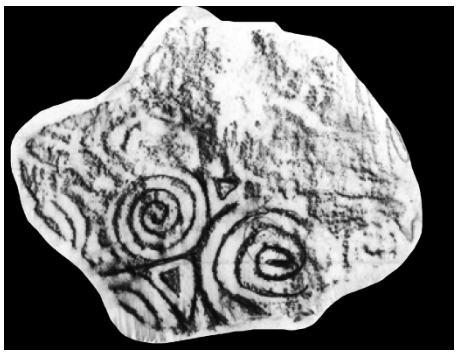
Motif 70

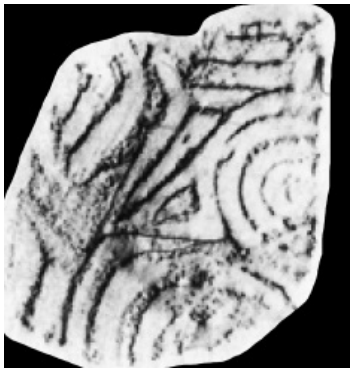


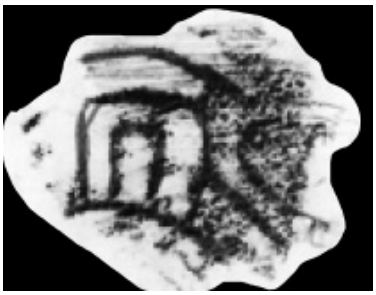
Motif 71



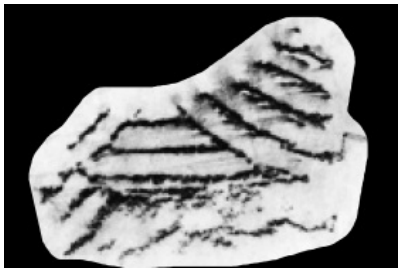


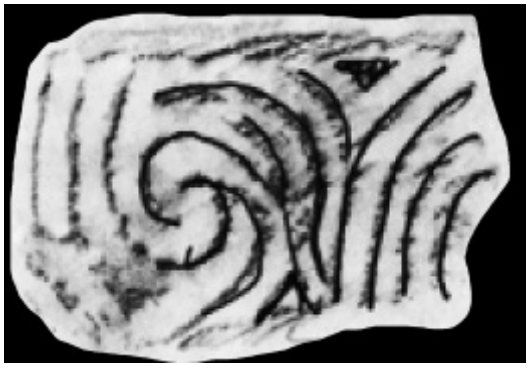


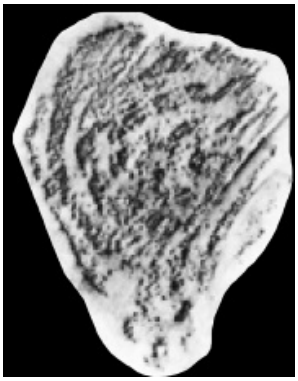


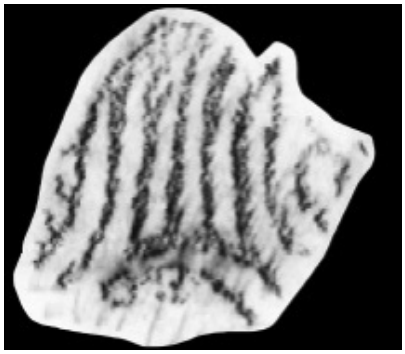


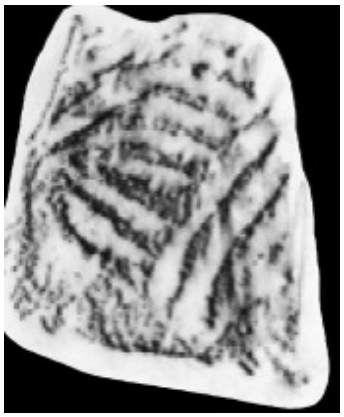
Motif 72

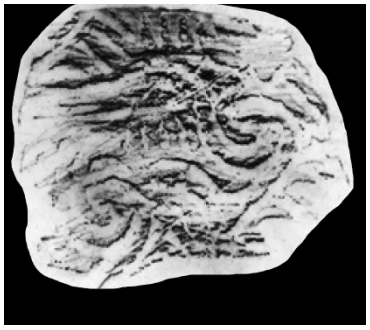


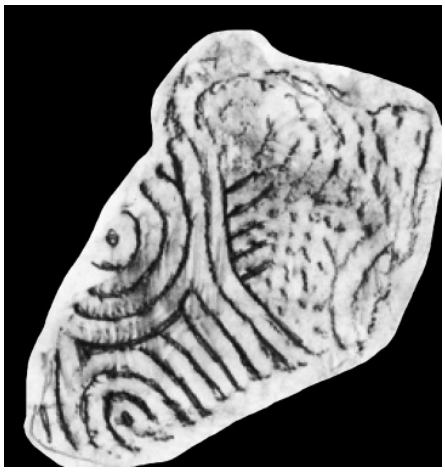




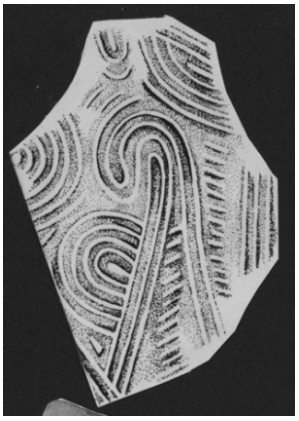


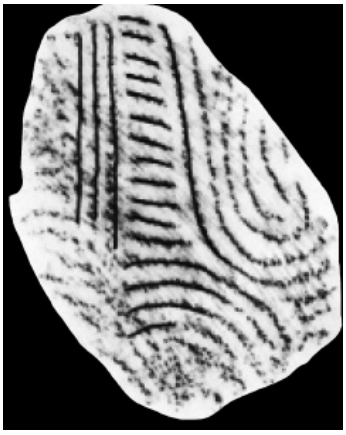




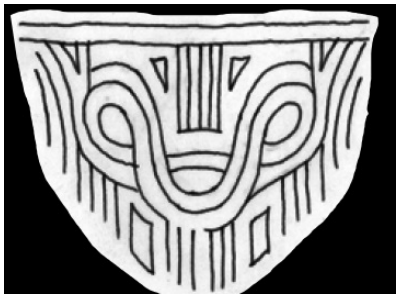


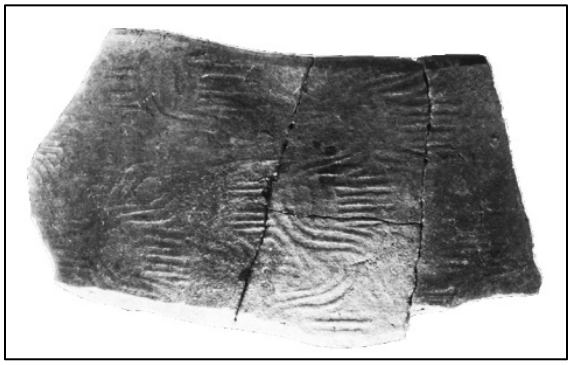
Motif 73



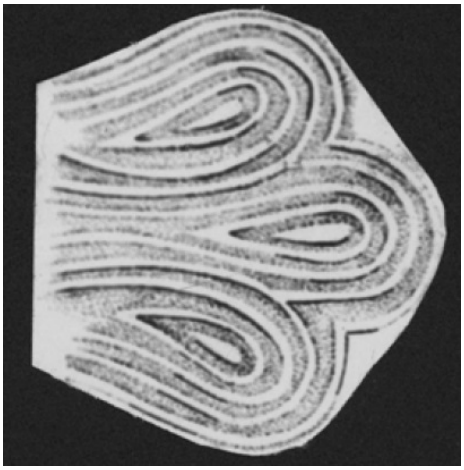


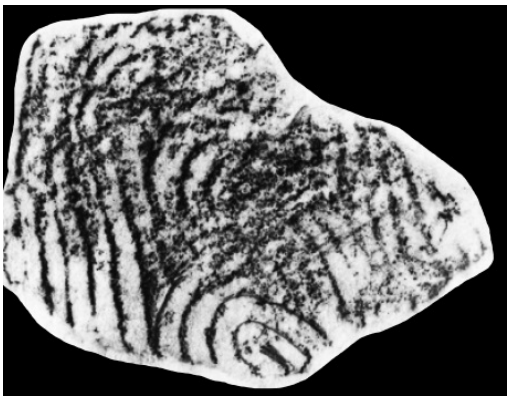
Motif 74



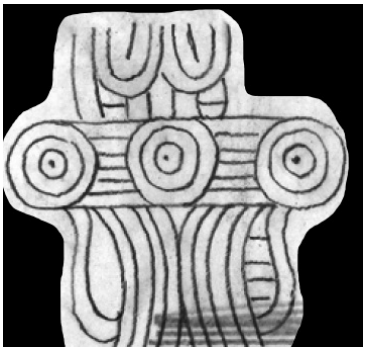


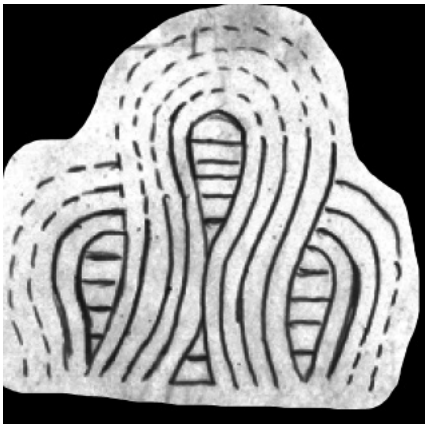
Motif 75



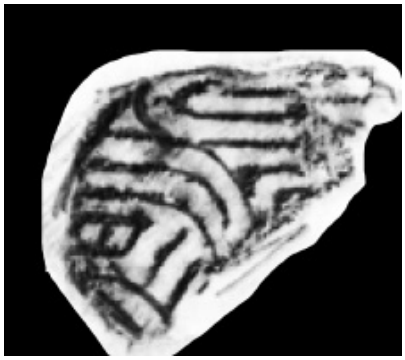


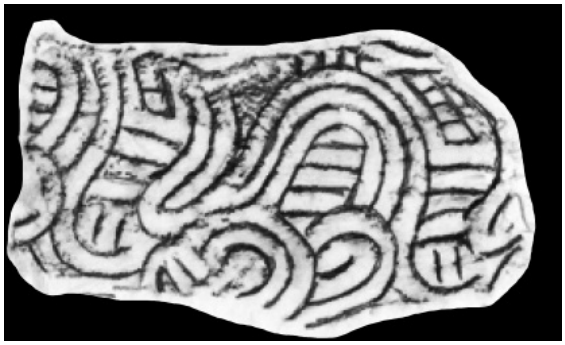
Motif 76

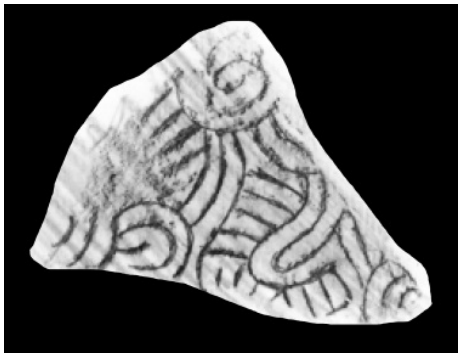


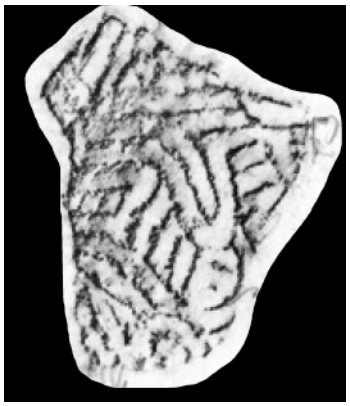


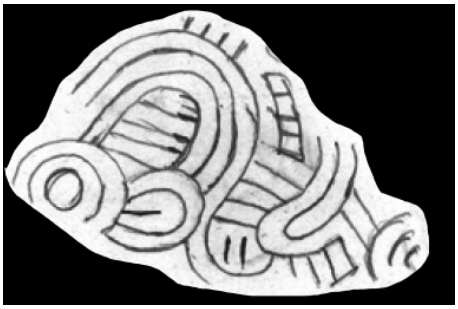
Motif 77



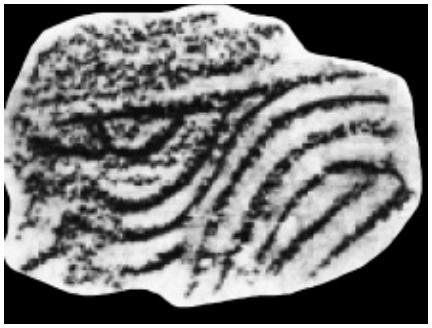


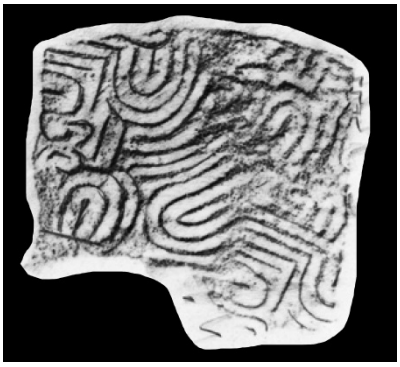


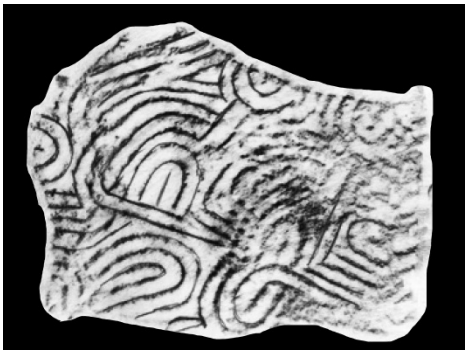


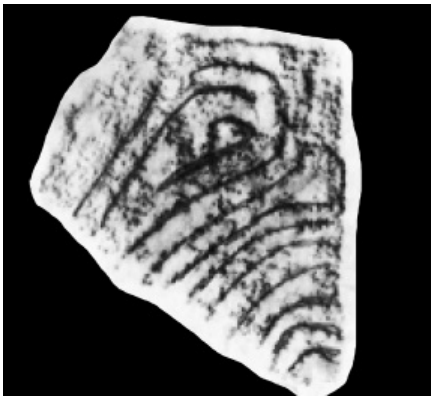


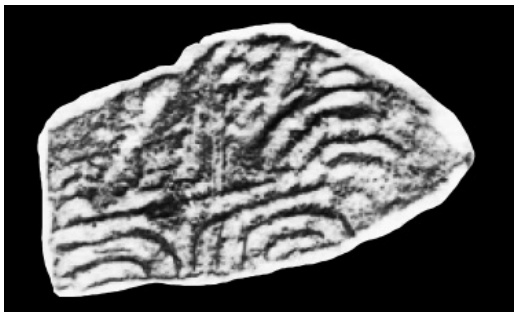
Motif 78



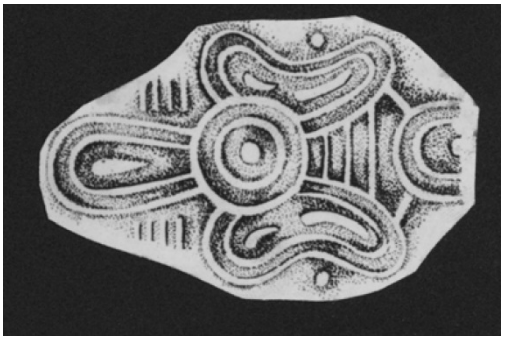


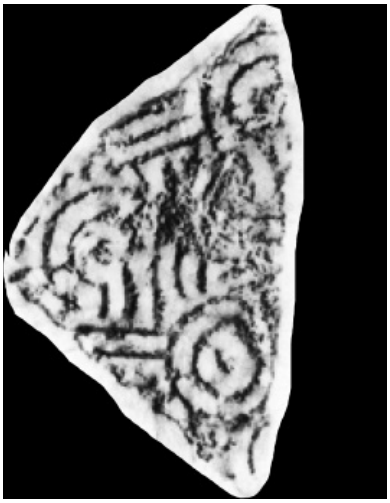


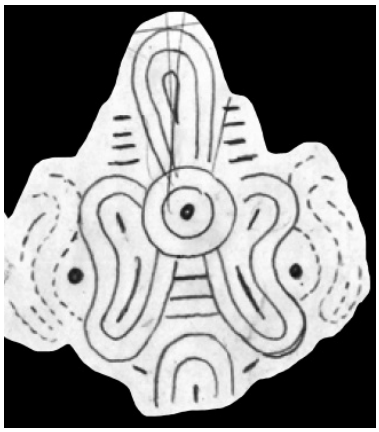


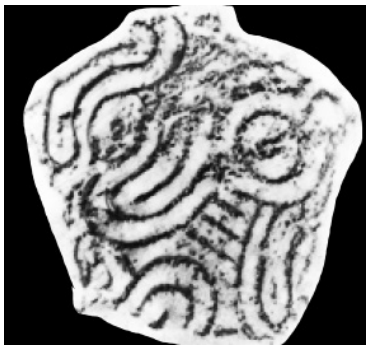


Motif 79





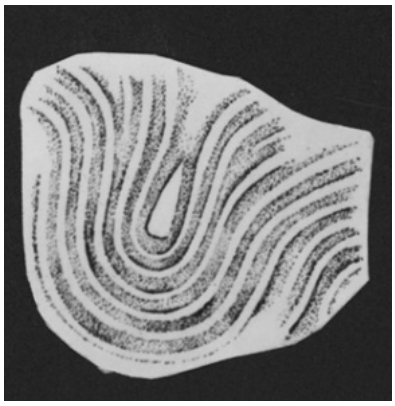


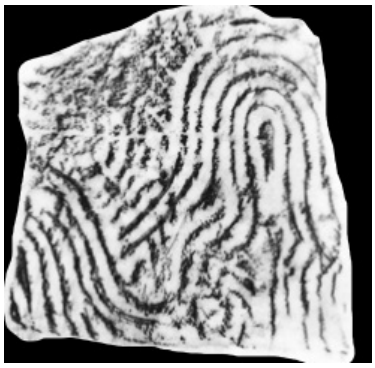


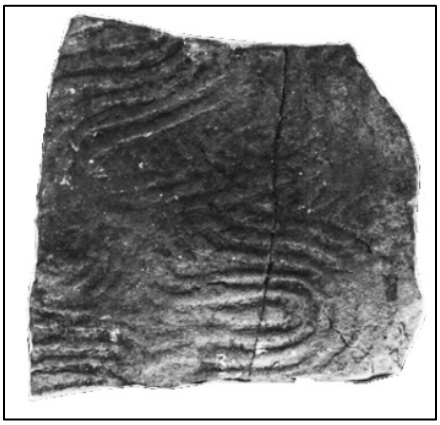
Motif 80

-NONE-

Motif 81



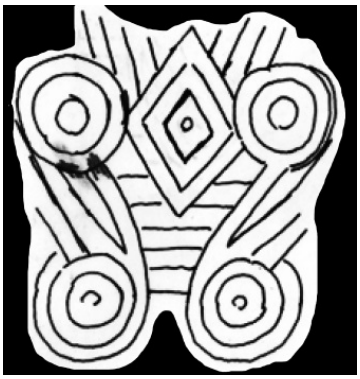


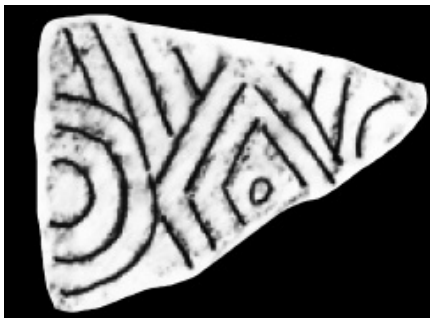


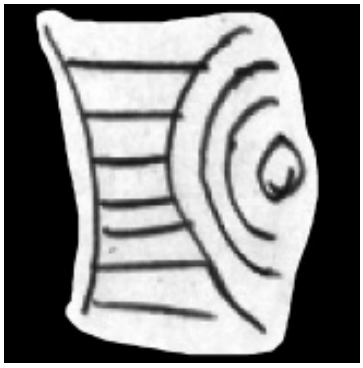
Motif 82

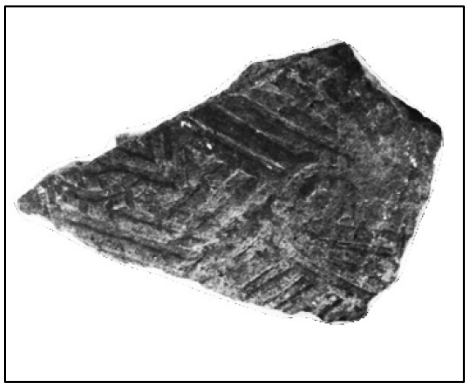
-NONE-

Motif 83

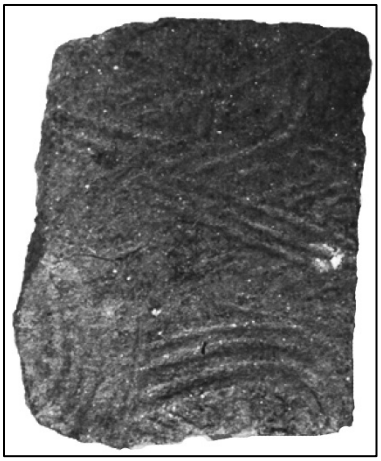








Motif 84

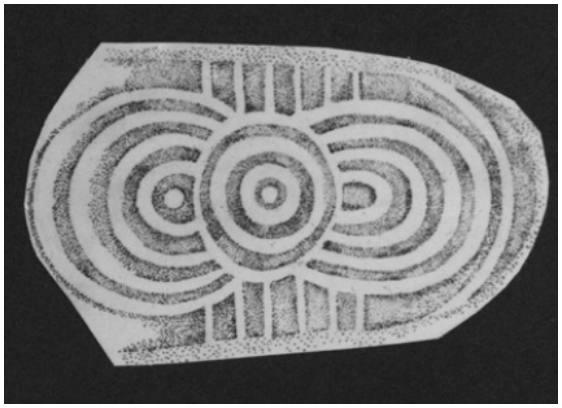


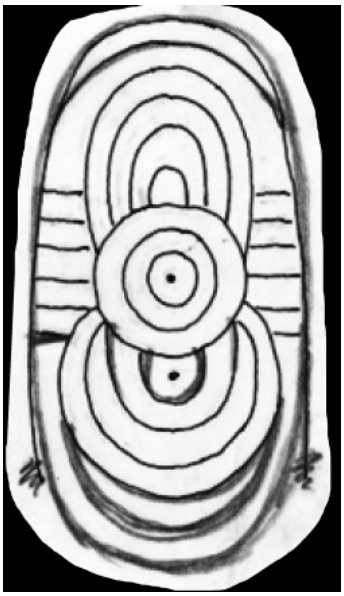
Motif 85

Motif 86

-NONE-

Motif 87



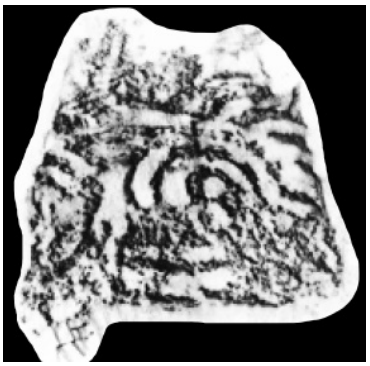


Motif 88

Motif 89

-NONE-

Motif 90

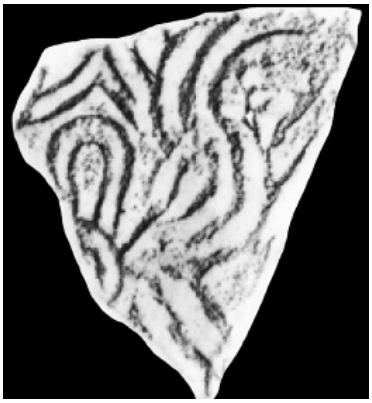


Motif 91

Motif 92

-NONE-

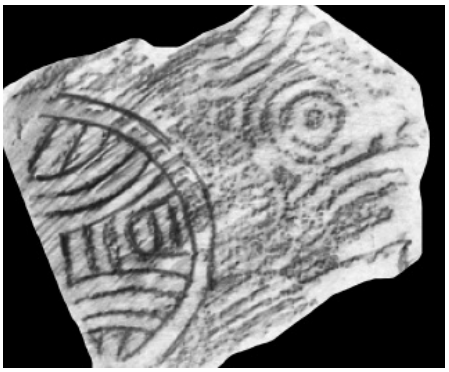
Motif 93

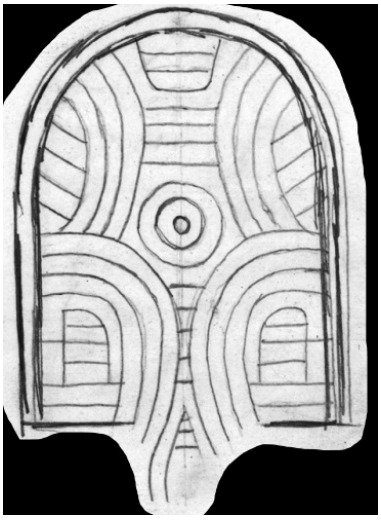


Motif 94

-NONE-

Motif 95

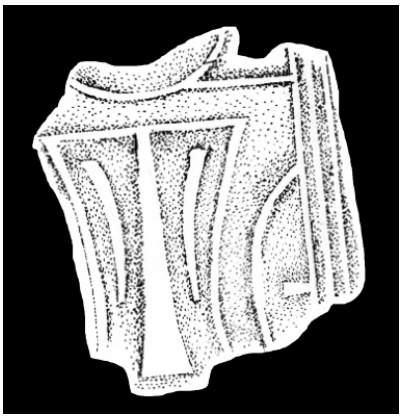


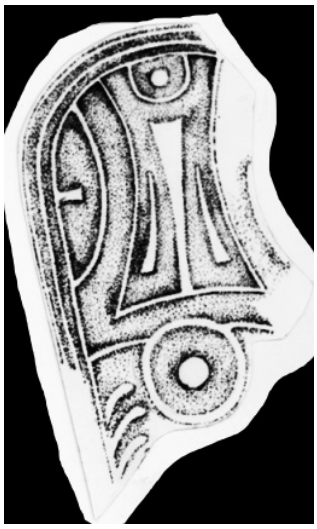


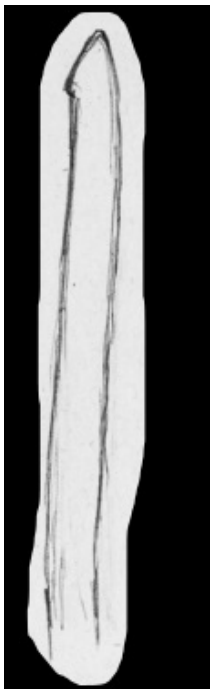
Motif 96

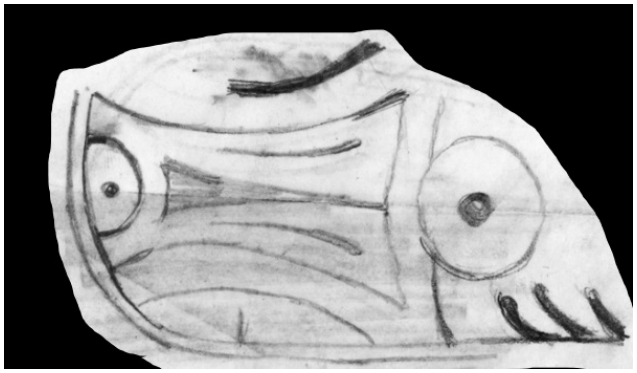
-NONE-

Motif 97

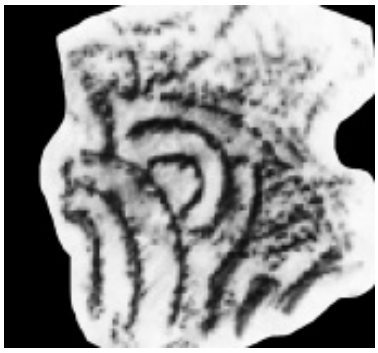








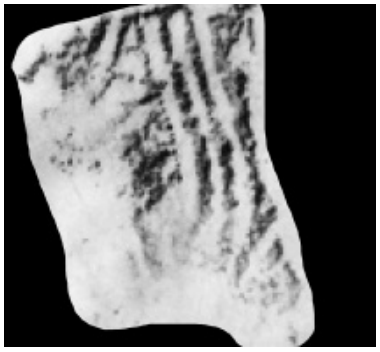
Motif 98

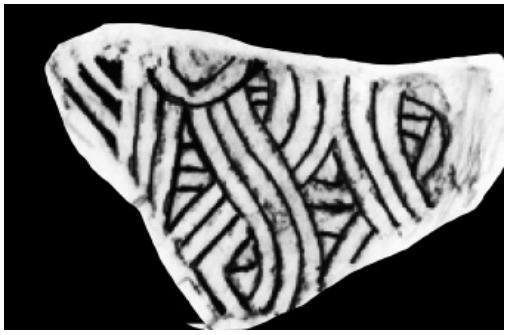


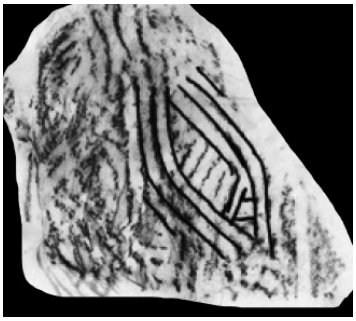
Motif 99

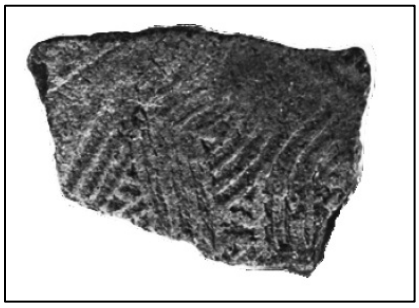
-NONE-

Motif 100

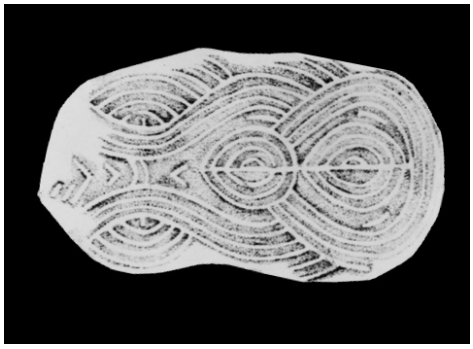


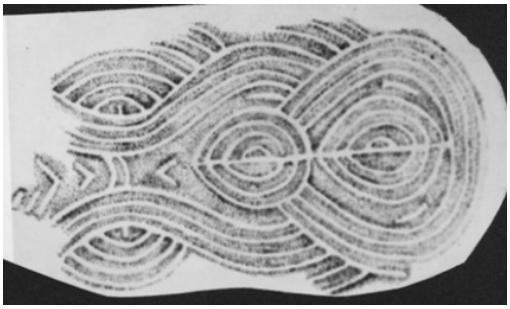


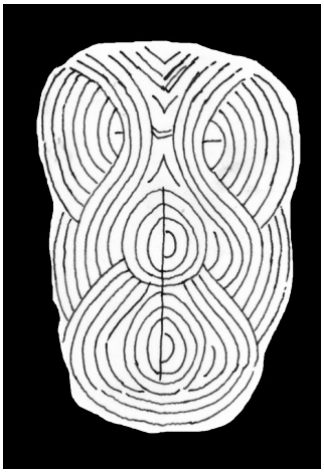


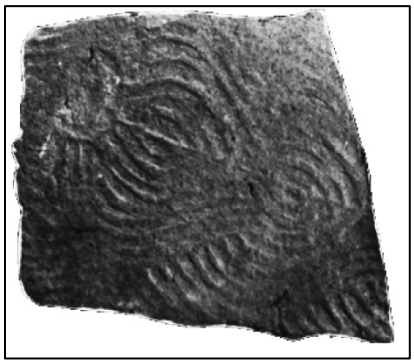


Motif 101





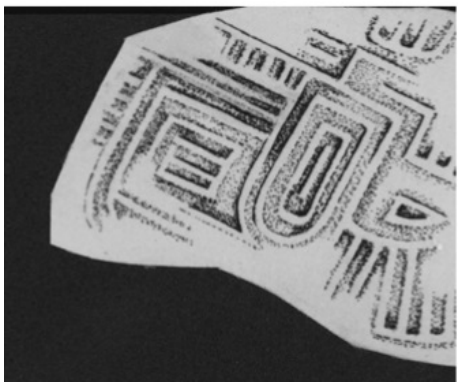


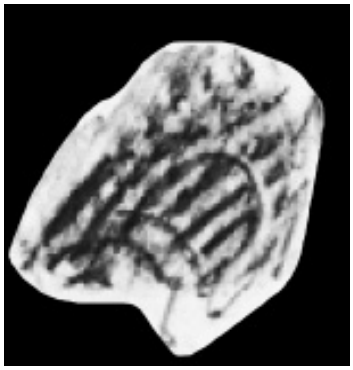


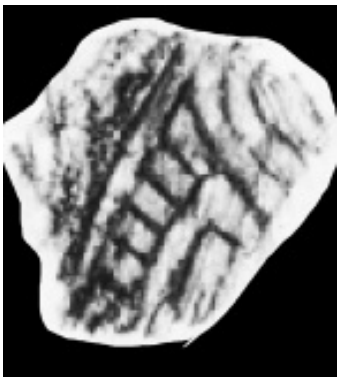
Motif 102

-NONE-

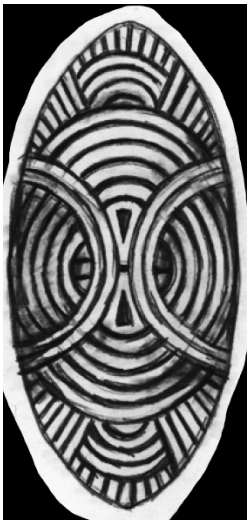
Motif 103

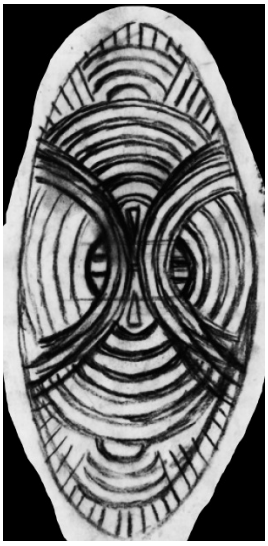






Motif 104

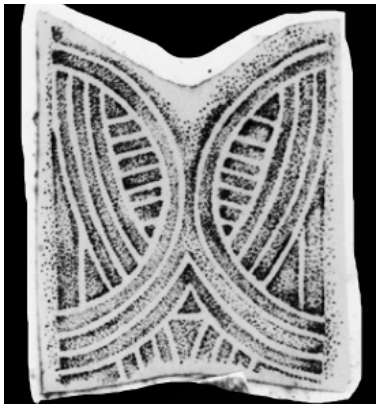




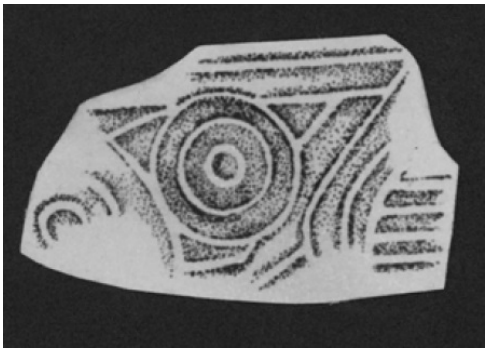
Motif 105

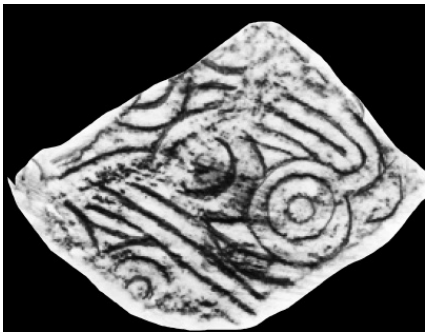
-NONE-

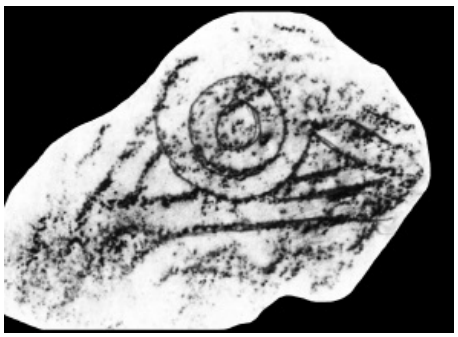
Motif 106



Motif 107



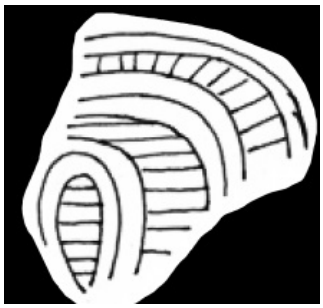




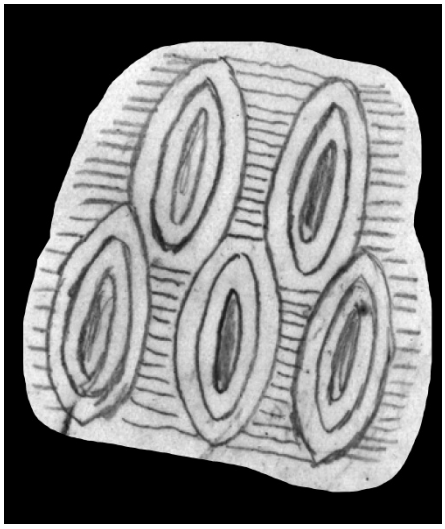
Motif 108

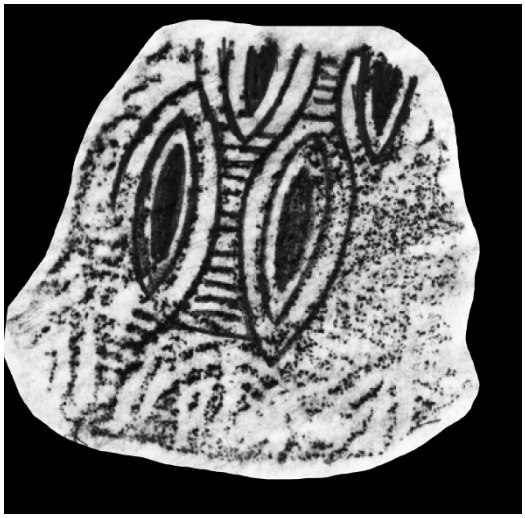
-NONE-

Motif 109

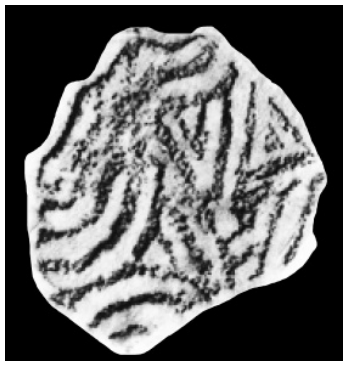


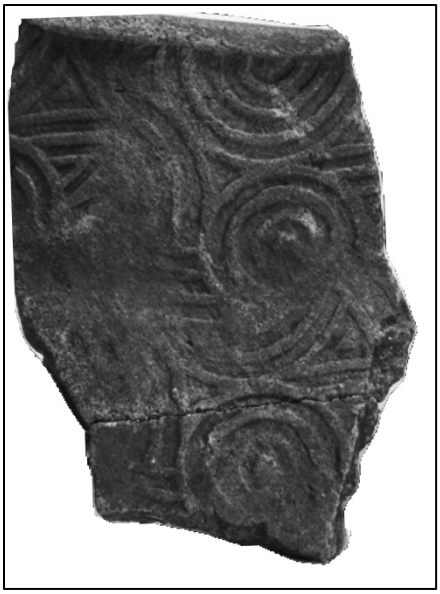
Motif 110





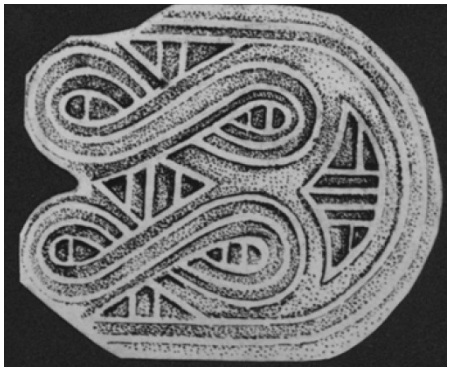
Motif 111





Motif 112

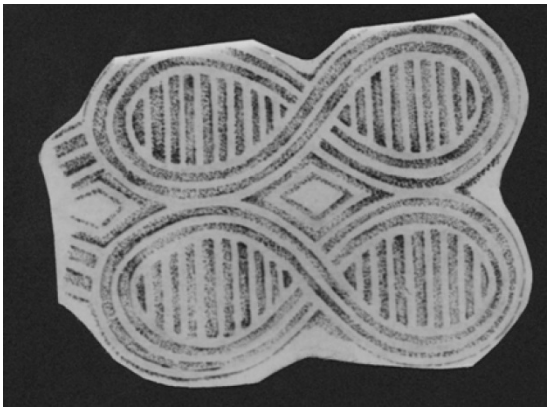
Motif 113

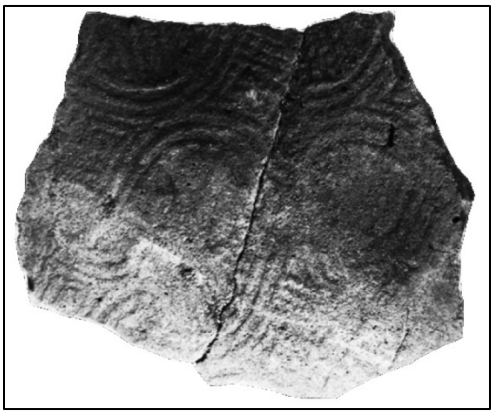


Motif 114

Motif 115

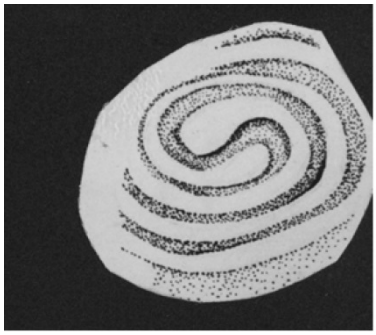
Motif 116

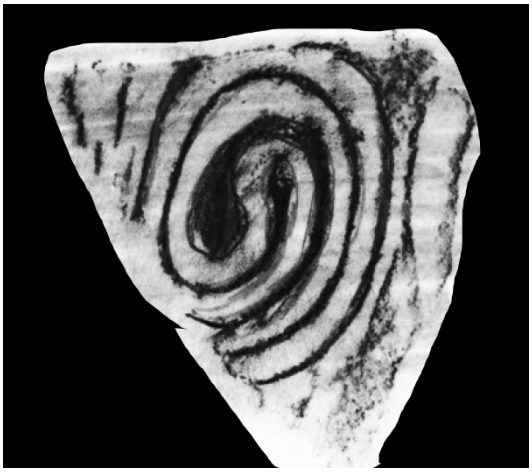




Motif 117

Motif 118





Motif 119

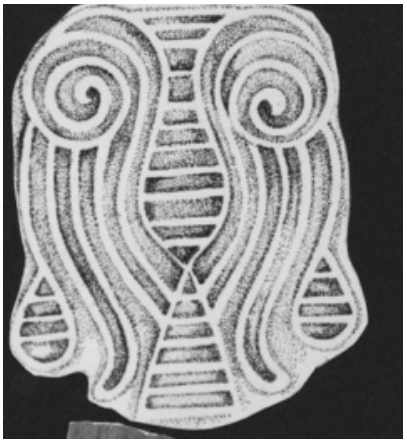
Motif 120

-NONE-

Motif 121

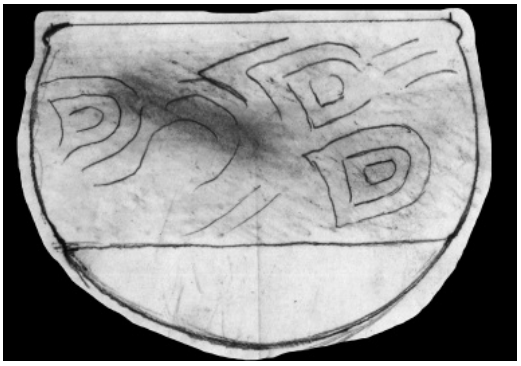
-NONE-

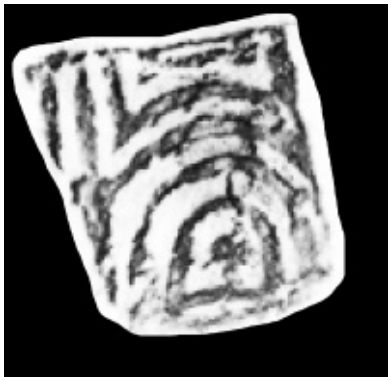
Motif 122

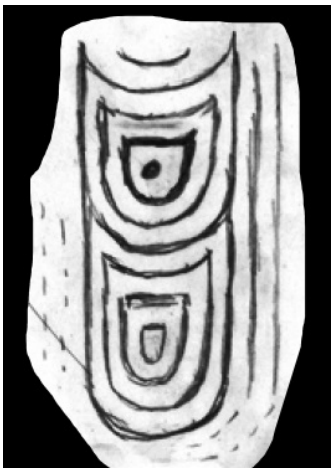


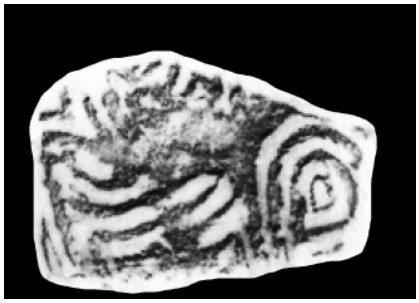
Motif 123

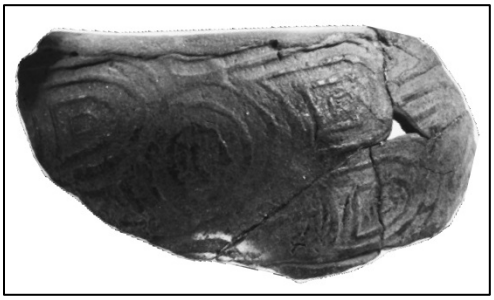
Motif 124

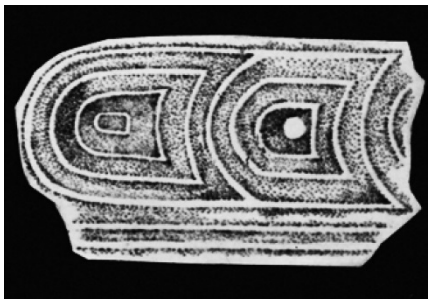




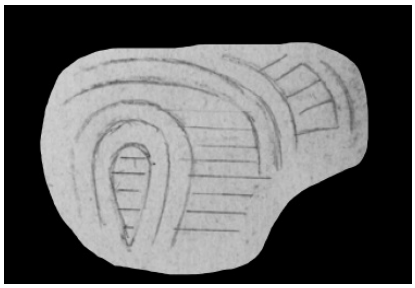


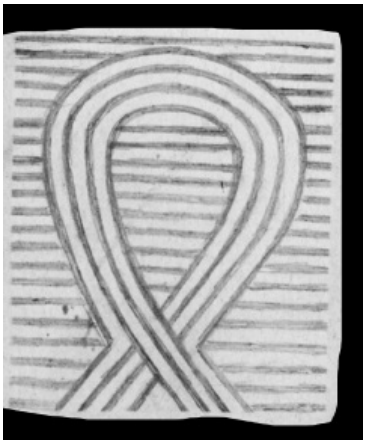


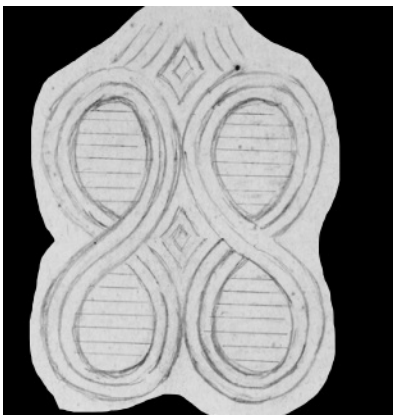


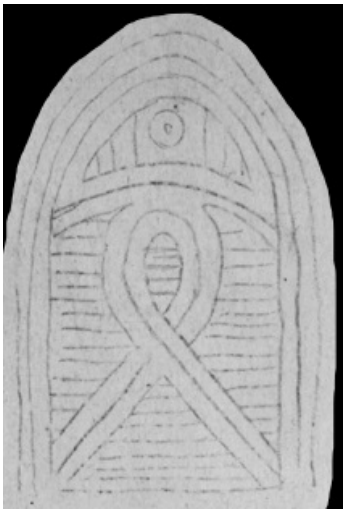


Motif UN1

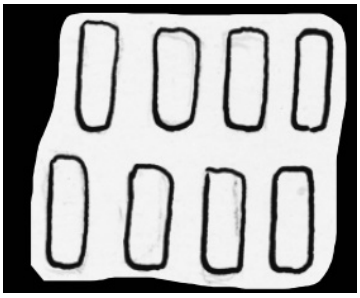


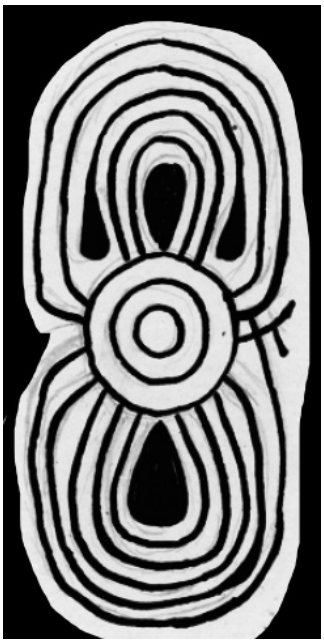


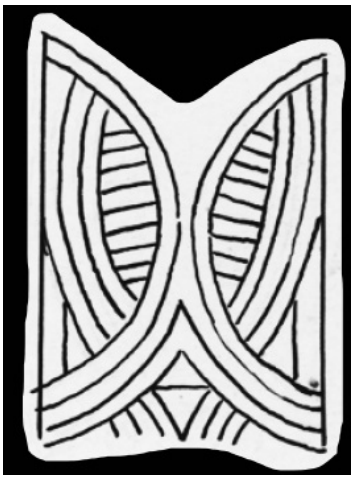




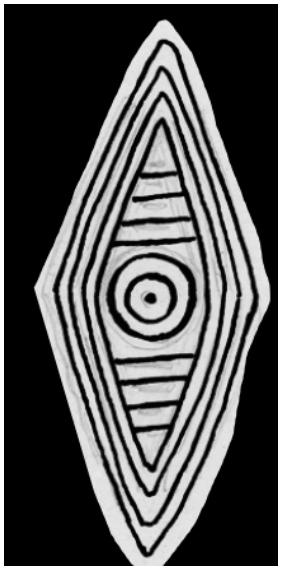
Motif UN2

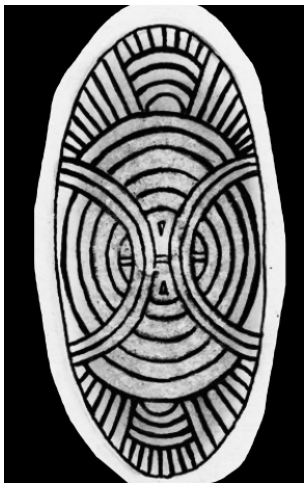




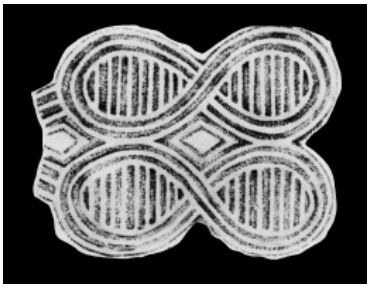


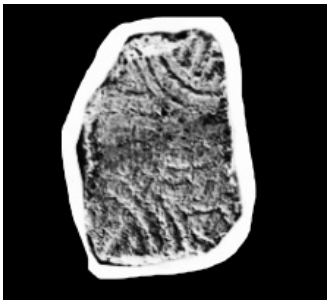
Motif UN3

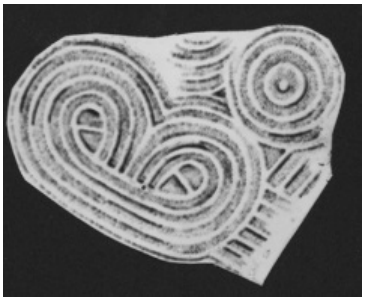


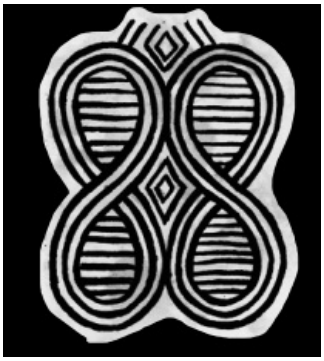


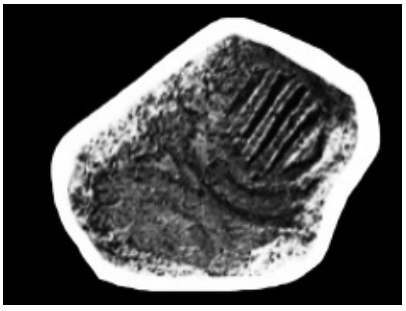
Motif UN4

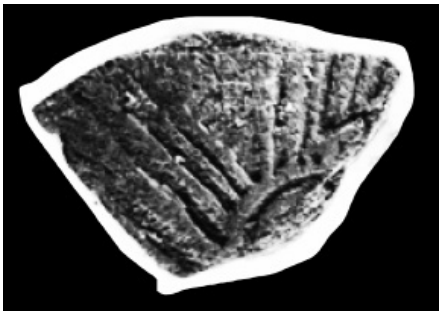


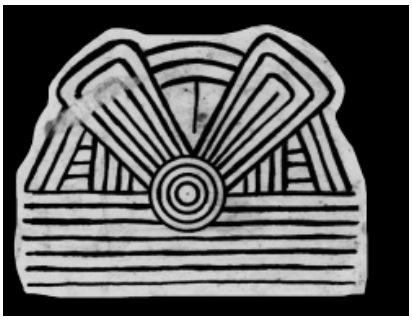


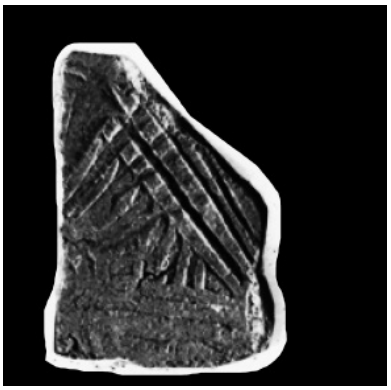


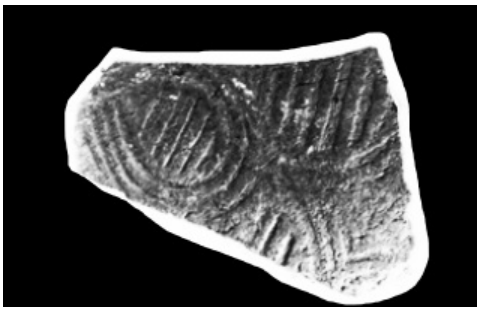


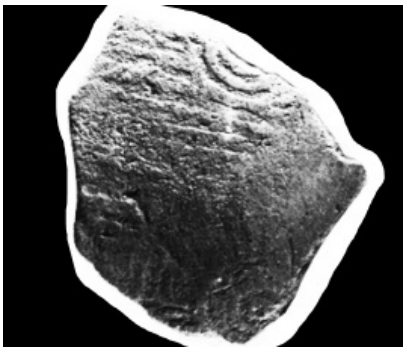


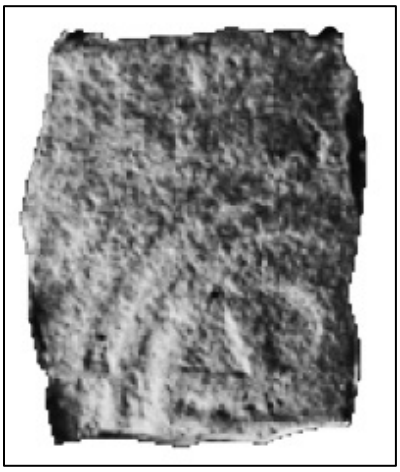


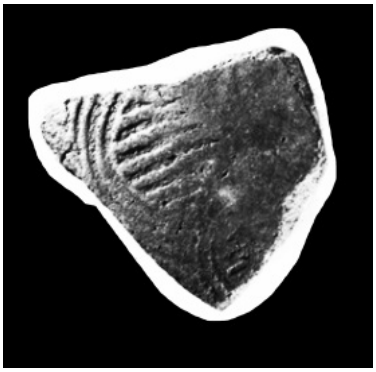




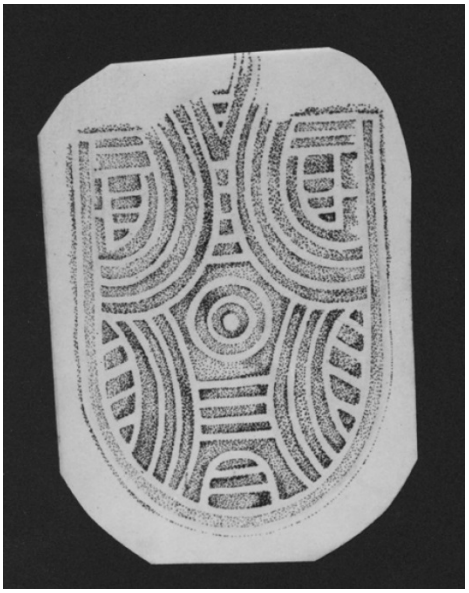


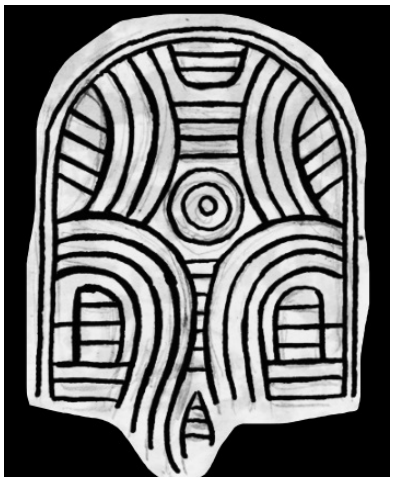






Motif UN5



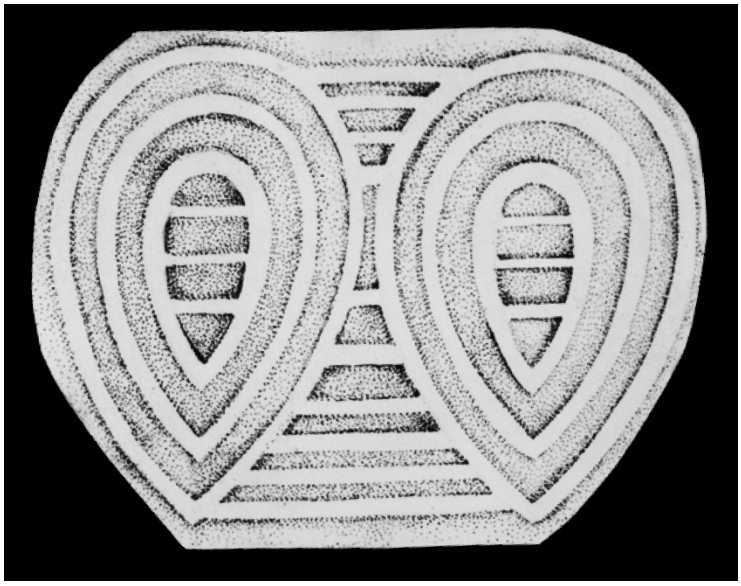


Motif UN6

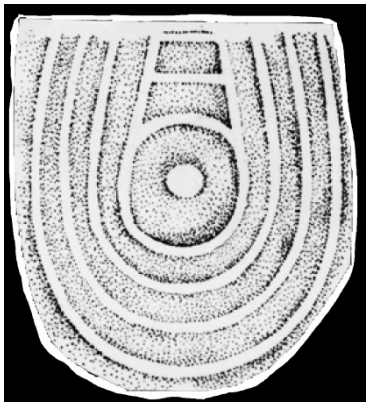
-NONE-

Motif UN7

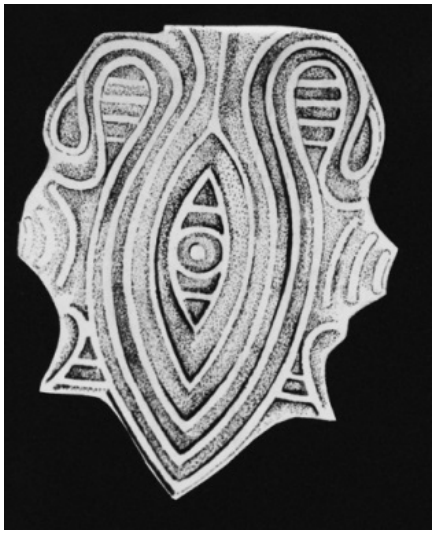
Motif UN8



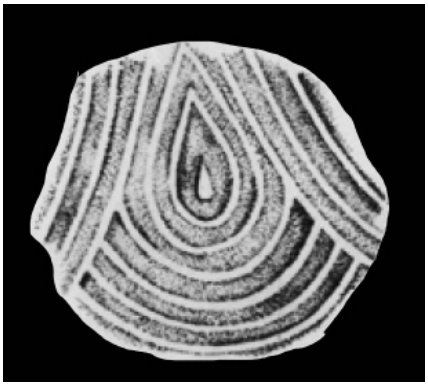
Motif UN9

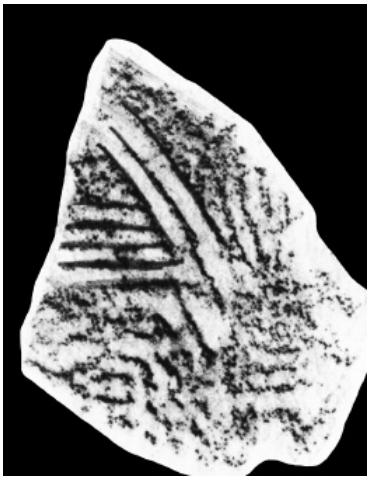


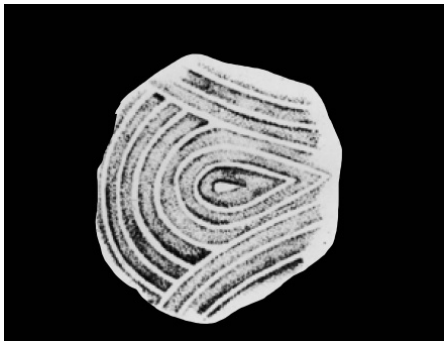
Motif UN10



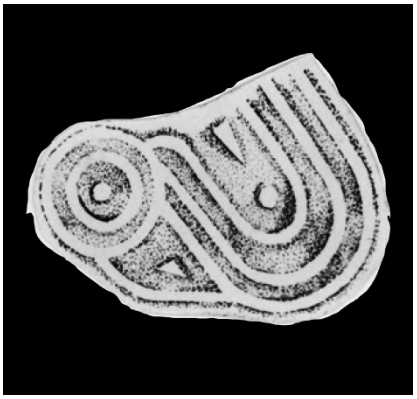
Motif UN11



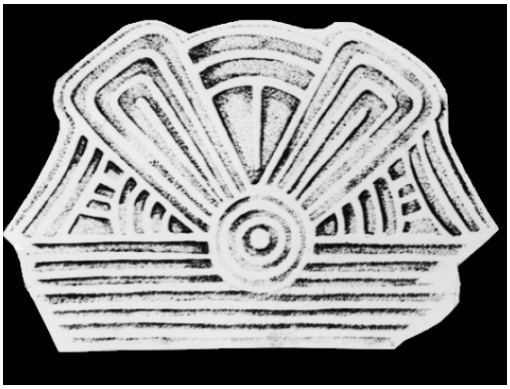


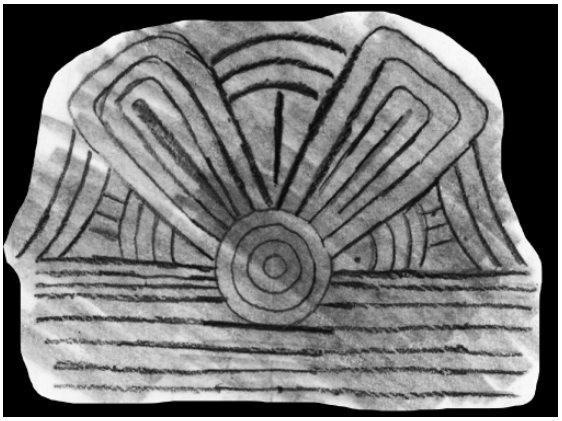


Motif UN12

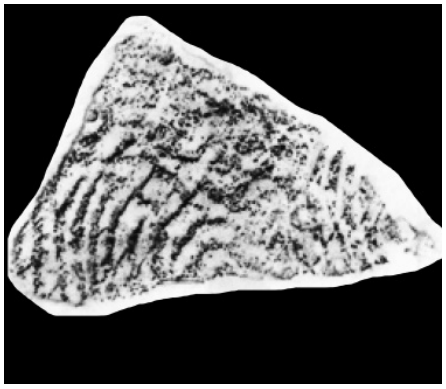


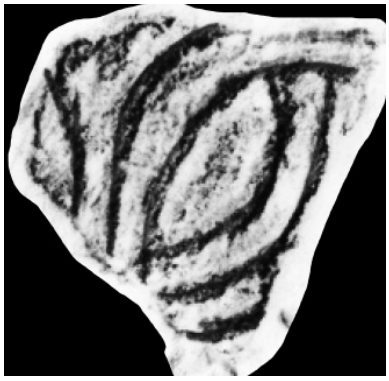
Motif UN13

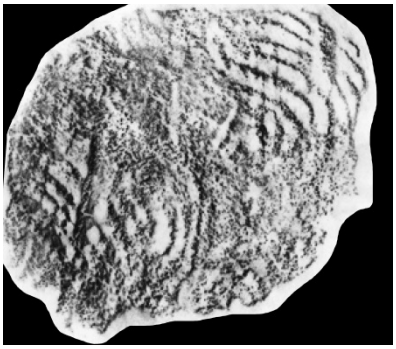


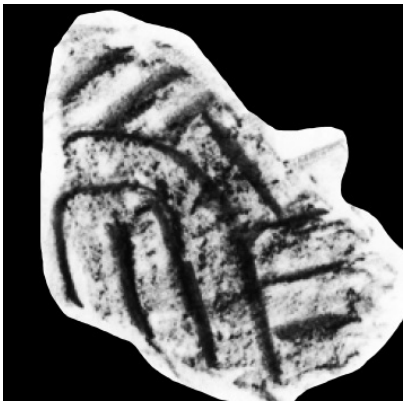


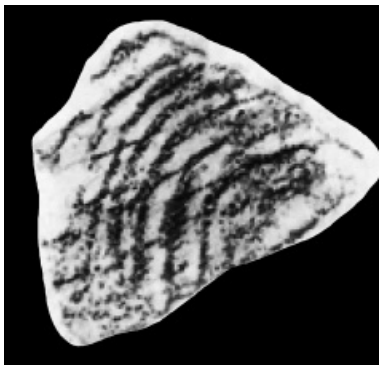
Motif UN14











Appendix 3

Swift Creek Motifs by Level from Fairchilds Landing
NOTE: No Data for Motifs above Number 118.

	Level											
Motif	**A-B**	**B**	**B-C**	**C1**	**C**	**C-D**	**D**	**D2**	**D-E**	**E-F**	**F**	**Totals**
1	0	0	0	0	0	0	0	0	0	0	1	1
2	0	0	0	0	0	0	0	0	0	0	1	1
3	0	0	0	0	0	0	0	0	0	1	0	1
4	0	0	0	0	0	0	0	0	0	1	0	1
5	0	0	0	0	0	0	0	0	0	1	0	1
6	0	0	0	0	0	0	0	0	0	1	0	1
7	0	0	0	0	0	0	0	0	0	1	0	1
8	0	0	0	0	0	0	0	0	0	1	0	1
9	0	0	0	0	0	0	0	0	0	1	0	1
10	0	0	0	0	0	0	0	0	0	2	0	2
11	0	0	0	0	0	0	0	0	0	1	0	1
12	0	0	0	0	1	0	0	0	1	5	0	7
13	0	0	0	0	0	0	0	0	4	0	0	4
14	0	0	0	0	0	0	0	0	1	0	0	1
15	0	0	0	0	0	0	0	0	1	0	0	1
16	0	0	0	0	0	0	0	0	1	0	0	1
17	0	0	0	0	0	0	0	0	1	0	0	1
18	0	1	0	0	0	0	0	0	1	0	0	2
19	0	0	0	0	0	0	0	0	1	0	0	1
20	2	0	0	0	0	0	2	0	2	4	0	10
21	1	0	0	0	2	1	0	0	2	9	0	15
22	1	0	0	0	0	0	3	1	2	5	0	12
23	0	0	0	0	0	0	1	1	0	1	1	4
24	0	0	0	0	0	0	1	0	0	1	0	2
25	0	0	0	0	0	0	3	0	0	4	0	7
26	0	0	0	0	0	0	1	0	0	1	0	2
27	0	0	0	0	0	1	0	0	0	1	0	2
28	0	0	0	0	0	0	0	1	0	0	0	1
29	0	0	0	0	0	0	1	2	3	0	0	6
30	0	0	0	0	0	1	1	0	4	0	0	6
31	0	0	0	0	0	0	1	0	1	0	0	2
32	0	0	0	0	0	3	1	2	2	0	0	8
33	0	0	0	0	0	1	0	0	1	0	0	2
34	1	0	0	0	0	1	2	0	1	0	0	5

	Level											
Motif	**A-B**	**B**	**B-C**	**C1**	**C**	**C-D**	**D**	**D2**	**D-E**	**E-F**	**F**	**Totals**
35	1	0	0	0	1	5	1	0	1	0	0	9
36	0	0	0	0	0	0	1	0	0	0	0	1
37	0	0	0	0	0	0	2	0	0	0	0	2
38	0	0	0	0	0	0	1	0	0	0	0	1
39	0	0	0	0	0	0	1	0	0	0	0	1
40	0	0	0	0	0	0	1	0	0	0	0	1
41	0	0	0	0	0	0	1	0	0	0	0	1
42	0	0	0	0	0	0	2	0	0	0	0	2
43	0	0	0	0	0	0	1	0	0	0	0	1
44	0	0	0	0	0	1	2	0	0	0	0	3
45	0	0	0	0	0	1	1	0	0	0	0	2
46	0	0	0	0	1	0	2	0	0	3	0	6
47	2	0	0	0	6	3	3	0	0	7	0	21
48	0	0	0	1	1	1	2	0	0	1	0	6
49	0	0	0	2	2	6	3	0	0	3	0	16
50	0	0	1	0	4	3	1	1	1	11	0	22
51	0	0	1	0	4	3	0	0	1	1	0	10
52	0	0	1	1	4	0	16	3	1	25	0	51
53	0	0	0	0	0	3	0	0	0	0	0	3
54	0	0	0	0	0	1	0	0	0	0	0	1
55	0	0	0	0	0	1	0	0	0	0	0	1
56	0	0	0	0	0	1	0	0	0	0	0	1
57	0	0	0	0	0	1	0	0	0	0	0	1
58	0	0	0	0	0	1	0	0	0	0	0	1
59	0	0	0	0	0	1	0	0	0	0	0	1
60	0	0	0	0	0	5	0	0	0	0	0	5
61	0	0	0	0	0	1	0	0	0	0	0	1
62	0	0	0	0	0	1	0	0	0	0	0	1
63	0	0	0	1	0	0	0	0	1	0	0	2
64	0	0	0	1	4	10	15	0	0	0	0	30
65	0	0	4	7	7	3	1	0	0	0	0	22
66	0	1	1	1	0	10	0	0	1	0	0	13
67	11	0	0	0	4	0	3	1	2	0	0	20
68	3	15	2	2	10	6	7	1	2	0	0	48
69	7	6	3	6	26	12	11	0	2	0	0	73
70	0	2	0	0	0	0	0	2	0	0	0	4
71	10	1	3	2	42	62	28	1	0	0	0	149

	Level											
Motif	**A-B**	**B**	**B-C**	**C1**	**C**	**C-D**	**D**	**D2**	**D-E**	**E-F**	**F**	**Totals**
72	29	3	6	5	46	18	2	0	0	0	0	109
73	36	6	4	2	11	3	1	0	0	0	0	64
74	1	1	0	0	4	7	1	0	0	0	0	14
75	2	0	0	0	2	1	1	0	0	0	0	6
76	2	4	0	0	3	4	1	0	0	0	0	14
77	9	0	0	0	1	0	1	0	0	0	0	11
78	2	0	0	0	8	8	2	0	0	0	0	20
80	0	0	0	0	1	1	0	0	0	0	0	2
81	0	0	0	1	0	2	0	0	0	0	0	3
82	0	0	0	0	1	2	0	0	0	0	0	3
83	0	0	0	1	1	2	0	0	0	0	0	5
84	0	0	1	0	1	0	0	0	0	0	0	2
85	0	0	0	0	2	0	0	0	0	0	0	2
86	0	0	0	0	1	0	0	0	0	0	0	1
87	0	0	0	0	1	0	0	0	0	0	0	1
88	0	0	0	0	1	0	0	0	0	0	0	1
89	0	0	0	0	1	0	0	0	0	0	0	1
90	0	0	0	0	1	0	0	0	0	0	0	1
91	0	0	0	1	0	0	0	0	0	0	0	1
92	0	0	0	1	0	0	0	0	0	0	0	1
93	0	0	0	3	0	0	0	0	0	0	0	3
94	38	11	2	3	37	2	0	0	1	1	0	95
95	60	7	6	4	44	1	0	0	0	0	0	122
96	5	0	1	0	3	1	0	0	0	0	0	10
97	11	3	1	0	3	1	0	0	0	0	0	19
98	8	2	2	7	32	3	0	0	0	0	0	54
99	1	0	0	0	0	1	0	0	0	0	0	2
100	9	1	1	0	3	0	0	0	0	0	0	14
101	2	1	0	0	1	0	0	0	0	0	0	4
102	7	0	0	0	2	0	1	0	0	0	0	10
103	5	0	0	0	1	0	0	0	0	0	0	6
104	5	2	2	0	9	0	0	0	0	0	0	18
105	1	3	2	2	3	0	0	0	0	0	0	12
106	1	0	0	0	1	0	0	0	0	0	0	2
107	5	0	0	0	1	0	0	0	0	0	0	6
108	3	2	0	0	0	0	0	0	0	0	0	5
109	1	1	0	0	0	0	0	0	0	0	0	2

	Level											
Motif	**A-B**	**B**	**B-C**	**C1**	**C**	**C-D**	**D**	**D2**	**D-E**	**E-F**	**F**	**Totals**
110	1	0	0	0	0	0	0	0	0	0	0	1
111	1	0	0	0	0	0	0	0	0	0	0	1
112	2	0	0	0	0	0	0	0	0	0	0	2
113	1	0	0	0	0	0	0	0	0	0	0	1
114	3	0	0	0	0	0	0	0	0	0	0	3
115	3	0	0	0	0	0	0	0	0	0	0	3
116	13	0	0	0	0	0	0	0	0	0	0	13
117	1	0	0	0	0	0	0	0	0	0	0	1
118	1	0	0	0	0	0	0	0	0	0	0	1
Total	310	73	45	54	351	201	131	17	43	93	3	1319

Appendix 4

Relationships of Complicated Stamped Motif Numbers between Arabic and Roman Identifiers

Arabic	Roman	Roman Equivalent	No Large Card	Notes
1	LXX	70		
2	LXIX	69		
3	LXVII	67		
4	CXLIII	143	X	
5	LXXII	72		
6	CXLII	142	X	
7	CIX	109	X	
8	CX	110		
9	CXLXI	151?		Ambiguous and Bad Roman (See Arabic 120)
10	LII	52		
11	XLV	45		
12	LX	60		
13	L	50		
14	CXII	112	X	
15	CXIII	113	X	
16	CXVI	116	X	
17	CXVIII	118	X	
18	CXIX	119	X	
19	LXXVIII	78		
20	LXXI	71		
21	C	100		
22	LXV	65	X	
23	LXIV	64	X	
24	CXLIV	144	X	
25	XXVIII	28	X	
26	XCII	92		
27	CXXXVI	136	X	
28	LXXIV	74		
29	XXXI	31		
30	XLIX	49		
31	LI	51	X	
32	CXV	115	X	
33	CXI	106		Missing from Betty Smith Figure 12

Arabic	Roman	Roman Equivalent	No Large Card	Notes
34	LXXIX	79		
35	XXIII	23		
36	CXXVIII	128	X	Ambiguous in Data at Present Time
37	LXXIII	73		
38	LXXVII	77		
39	CXLV	145		
40	CXX	120		
41	CXXI	121	X	
42	CXXII	122	X	
43	CXXIV	124	X	
44	XLVIII	48		
45	CXXIII	123		
46	CXLI	141	X	
47	CI	101	X	
48	CII	102	X	
49	XLIV	44		
50	LXIII	63		Good example of one Bettye redrew correctly
51	LIX	59		
52	XLIII	43		
53	CXXXI	131	X	
54	CXXVI-B	126B	X	
55	CXXXII	132		
56	CXXXIV	134	X	
57	CXXXV	135	X	
58	CXXXVII	137	X	
59	LIV	54		
60	LVIII	58	X	
61	CXLVI	146	X	
62	CXXV	125		
63	LVI	56		
64	XVII	17		
65	XVI	16		
66	LIII	53		
67	XLI	41		
68	XII	12	X	
69	XXXIII	33		

Arabic	Roman	Roman Equivalent	No Large Card	Notes
70	LXXXVI	86		
71	VI	6		
72	IX	9		
73	XX	20		
74	XXV	25		
75	XCIII	93		
76	XXXIV	34		
77	XLVI	46		
78	XV	15		
79	LV	55		
80	CXXVI	126	X	
81	CXXXIII	133		
82	XXIX	29	X	
83	XIX	19		
84	XXI	21		
85	XXXVIII	38		
86	LXI	61	X	
87	XVIII	18		
88	XXXVII	37		
89	CXLVIII	148	X	
90	XCVII	97		
91	LXXX	80		
92	XC	90	X	
93	XCIV	94		
94	IV	4	X	
95	VIII	8		
96	XXXVI	36	X	
97	CVII	107		
98	XLII	42		
99	CXXVIII	128	X	Ambiguous in Data at Present Time
100	XXII	22		
101	XXIV	24		
102	XXXV	35	X	
103	XXXIX	39		
104	VII	7		
105	X	10	X	

Arabic	Roman	Roman Equivalent	No Large Card	Notes
106	XIII	13		
107	XXXII	32		
108	XLVII	47	X	
109	XL	40		
110	I	1		
111	CIV	104	X	
112	LXXVI	76		
113	CIII	103		
114	XXVI	26		
115	XXVII	27		
116	II	2		
117	LXXXVII	87		
118	CXL	140		
119	CXLIX	149		
120	CXLXI	151?		Ambiguous and Bad Roman (See Arabic 9)
121	CXLX	150?	X	Bad Roman Numeral
122	XCI	91		
123	LXXXI	81		
124	XCVI	96		
125				No Information
126				No Information
127	XCV	95	X	
	III	3		No Arabic Number
	V	5	X	No Information
	XI	11	X	No Information
	XIV	14	X	No Information
	XXX	30	X	No Information
	LVII	57	X	No Information
	LXII	62	X	No Information
	LXVI	66	X	No Information
	LXVIII	68	X	No Information
	LXXV	75		No Arabic Number
	LXXXII	82	X	No Information
	LXXXIII	83	X	No Information
	LXXXIV	84	X	No Information
	LXXXV	85	X	No Information

Arabic	Roman	Roman Equivalent	No Large Card	Notes
	LXXXVIII	88	X	No Information
	LXXXIX	89		No Arabic Number
	XCVIII	98	X	No Information
	XCIX	99	X	No Information
	CV	105	X	Discarded, No Arabic Number
	CVIII	108	X	Discarded, No Arabic Number
	CXI	111	X	No Arabic Number
	CXIV	114	X	No Information
	CXVII	117	X	No Information
	CXXVII	127	X	Discarded, No Arabic Number
	CXXIX	129	X	No Information
	CXXX	130	X	No Information
	CXXXVIII	138	X	No Information
	CXXXIX	139		Discarded, No Arabic Number
	CXL	140	X	No Information
	CXLVII	147	X	No Information

Appendix 5.

Hares Landing Occupations by Period and Location

	Wakulla			Cummings					Weeden Island				Burial Mound			
	Area A	Area B	Area C	Area D	Area E Midden	Area E Feature 1	Area E Feature 2	Area E Surface	Area F	Area G	Area H	Area H Test Pit	Mound Surface	Pottery in Fill	Moore's Vessels	Total
Lake Jackson Plain	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Wakulla Check Stamped	15	15	42	0	1	0	2	0	0	0	0	0	1	1	x?	77
Plain	6	10	14	63	58	10	46	16	64	60	36	163	12	4	1	563
Projecting Lip	1	0	0	2	2	0	4	1	1	2	0	0	0	0	0	13
Unmodified Rim	0	0	0	9	4	0	2	3	1	2	4	5	1	0	0	31
Thickened Rim	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0	5
Rim with Incised Line	0	0	0	0	4	0	1	1	0	1	0	0	0	0	0	7
Carrabelle Incised	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Keith Incised	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
Weeden Island Incised (Zoned)	0	0	0	2	1	0	0	1	0	0	0	0	0	0	2	6
Incised on Interior	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4
Carrabelle Punctated	0	0	0	2	3	0	2	3	0	1	1	0	0	0	1	13
Weeden Island Punctated	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
Plain Red	0	0	0	0	0	0	0	0	2	1	3	4	0	1	1	12
Cord Marked	0	0	0	0	0	0	0	0	5	1	0	2	0	1	0	9
Net Marked	0	0	0	0	0	0	0	0	2	0	2	4	0	1	1	10
Folded Rim on Plain	0	0	0	0	0	0	0	0	5	3	6	16	0	0	0	30
Folded Rim on Decorated	0	0	0	0	0	0	0	0	x	x	x	x	x	x	?	
Tucker Ridge Pinched	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Late Swift Creek Complicated Stamped	0	0	0	0	0	0	1	0	40	99	33	93	7	1	x	274
Motif I	0	0	0	0	0	0	0	0	1	3	16	57	2	0	0	79
Motif II	0	0	0	0	0	0	0	0	1	5	4	6	1	0	0	17
Motif III	0	0	0	0	0	0	0	0	0	0	3	20	0	0	0	23
Motif IV	0	0	0	0	0	0	0	0	5	4	1	1	0	0	0	11
Motif VI	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	3
Wedge Shaped Rim on Plain	0	0	0	0	0	0	0	0	0	0	2	3	0	1	0	6
Motif V	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Motif VII	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Motif VIII	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3
Motif IX	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Motif X	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1

	Wakulla			Cummings					Weeden Island				Burial Mound			
	Area A	Area B	Area C	Area D	Area E Midden	Area E Feature 1	Area E Feature 2	Area E Surface	Area F	Area G	Area H	Area H Test Pit	Mound Surface	Pottery in Fill	Moore's Vessels	Total
Mound Field Complicated Stamped	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Motif XI	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7
Motif XII	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4
Motif XIII	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Motif XIV	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Motif XV	0	0	0	0	0	0	0	0	1	18	0	0	0	0	0	19
Motif XVI	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Motif XVII	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Human Effigy Vessel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Animal Effigy Vessel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Mortuary Openwork Vessel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Total	22	25	56	84	77	10	61	26	137	221	112	375	24	10	14	1254

Notes: x means presence; It is not at all clear that the motif numbers in this table relate to all the other motifs presented above;