SITE FUNCTION AND OCCUPATIONAL PATTERNS AT COLVARD II (31AH266)

by
Amber L. Cross

Honors Thesis
Appalachian State University
Submitted to the Department of Anthropology
in partial fulfillment of the requirements for the degree of

Bachelor of Science

May 11, 2020

Approved by:

Larry R. Kimball

Larry R. Kimball, Ph.D., Thesis Director

Thomas R. Whyte

Thomas R. Whyte, Ph.D., Second Reader

Keith C. Seramur

Keith C. Seramur., Third Reader

Timothy J. Smith, Ph.D., Department Chair and Honors Director

Jeff Vahlbusch, Ph.D., Dean, The Honors College

Table of Contents

Abstract

This paper examines the occupational patterns and site formation processes at Colvard II (31AH266). Colvard II is a low-density site located in Ashe County in nothwestern North Carolina, on the T-2 of the south bank of the South Fork New River. The site has been repeatedly occupied throughout the Paleoamerican, Archaic, and Woodland periods. Artifact analyses, focused on lithic debitage raw material sourcing, lithic tool types and use, and ceramic types, reveal more information about occupation patterns at Colvard II. The results of these analyses suggest that the site was occupied repeatedly by mobile people, but Colvard II occupations lasted longer than overnight hunting camps or other short-term occupations.

The Colvard II (31AH266) site is located in Ashe County in northwestern North Carolina, along the South Fork of the New River. Previous investigations have revealed evidence of multiple episodes of human occupation throughout the Paleoamerican, Archaic, and Woodland periods. This research is meant expand on the current interpretations of the site and to address the following questions: (1) What were the occupation patterns at Colvard II, and what were its formation processes? (2) What were the site functions? (3) What can low-density sites such as Colvard II tell us about Paleoamerican occupations of the Appalachian Summit?

Site Background

Natural Setting

The Colvard II site is located in the Appalachian Summit. The term "Appalachian Summit" was first used by Kroeber (1939:95) to refer to both a culture and natural area (followed by Keel 1976:1 and Purrington 1983:89) for the highest elevations of the Blue Ridge physiographic province (Fenneman 1938). When considering all aspects of the natural environment, most archaeologists now call this the Southern Appalachians. These subdued mountains are at a late stage of erosion, and their original height and steepness have been rounded with less steep valleys. The Grandfather Mountain Window, the mantle of decayed bedrock, is described as a "major upwarp within the Blue Ridge belt that exposes younger and exotic rocks that underlie the Blue Ridge belt" (NCCGS 1998:45). Colvard II is local to the Wilson Creek Gneiss, a light grey biotite-quartz-feldspar rock with a quartz monzonitic composition with various rock types gneiss, schist, and amphibolite (NCGS 1988:13).

Colvard II is located on the T-2 terrace of the floodplain of the South Fork of the New River in eastern Ashe County, on fine sandy loam (Brewer 1985). The current vegetation of the

Appalachian Summit is classified as the oak-chestnut forest region (Braun 1950). Elevation, topography, drainage, soils, and microclimates contribute to significant local variation, though (Purrington 1983:93). Keel (1976:7-12) and Purrington (1983:93-96) provide detailed discussions of how these variations created different patterns of plant and animal foods for the native inhabitants of the Appalachian Summit.

Previous Archaeological Investigations

Archaeologists from Appalachian State University have conducted many of the previous archaeological investigations in northwestern North Carolina (Ayers et al. 1980; Purrington 1983; and Whyte see below). Important sites such as the Ward site (Senior 1981; Whyte 2003), Katie Griffith (Whyte 2003), Church Rockshelter No. 1 (Whyte 2013), Stillhouse Hollow Cave (Whyte 2015), and Birckhead (Whyte and Kimball 2017) have been investigated. The North Carolina Office of State Archaeology conducted archaeological surveys along the New River basin in North Carolina prior to the construction of a dam on the New River (Robertson and Robertson 1978). This construction project was ultimately abandoned, but as a result of these surveys a total of 163 sites were located, 116 of which are in Ashe County, North Carolina. Four Paleoamerican fluted points were also recovered, which demonstrates that the basin was occupied by native peoples during the final stages of the Pleistocene. NCDOT and private contractors (such as Lautenheiser et al. 1995) have conducted additional culture resource surveys as well, but none of these investigations went beyond the survey stage.

Field schools at the Colvard II (31AH266) site were undertaken by Thomas Whyte in 2009 and Larry Kimball in 2010, and these investigations produced the assemblages analyzed for this thesis. Later, Keith Seramur (of Seramur and Associates) and Jesse Dean (2012) conducted

geophysical investigations on multiple terraces at the Colvard II location, and the findings from the T-2 are utilized below.

During the 2009 investigations by Whyte, 35 shovel test pits (40 x 40 cm units) were excavated to determine the locations of artifact clusters on the site (Figure 2) (Whyte 2010:5). Based on the locations of artifact concentrations, five clusters of 1x1m units were excavated (Figure 4). Excavation Block A included units 1N33W, 1N32W, 0N33W, and 0N32W. Block B included units 0N16W and 1S16W. Block C included units 19S21W, 19S22W, 19S23W, 20S21W, 20S22W, 20S23W, and 21S22W. Block D included units 17S28E, 17S29E, 18S28E, 18S29E, 19S28E, and 19S29E. Block E includes one unit, 10S30E (Whyte 2009 field notes). Units were excavated through the plowzone, into the Ab and B horizons, where present, in 10 cm arbitrary levels (Whyte 2009). These Blocks correlated to the concentrations of positive shovel test pits. In most units, the documented stratigraphy from 0-50 cm B.S. was plowzone (PZ) overlying B-horizon. This was not the case in the units within Blocks A and B, though. In these units, an intact buried A-horizon (Ab), containing more artifacts than the PZ, was observed.

These investigations yielded temporally diagnostic artifacts which indicate repeated occupations during the Paleoamerican, Early to Late Archaic, and Early to Late Woodland periods. Possible post molds were found at the base of the plowzone in Block A but did not continue into Stratum Ab (Whyte 2010:16).

Figure 1. Location of the Colvard II site (31AH266) on the south bank of the South Fork of the New River in Ashe County, North Carolina (from Whyte 2010:Figure 1).

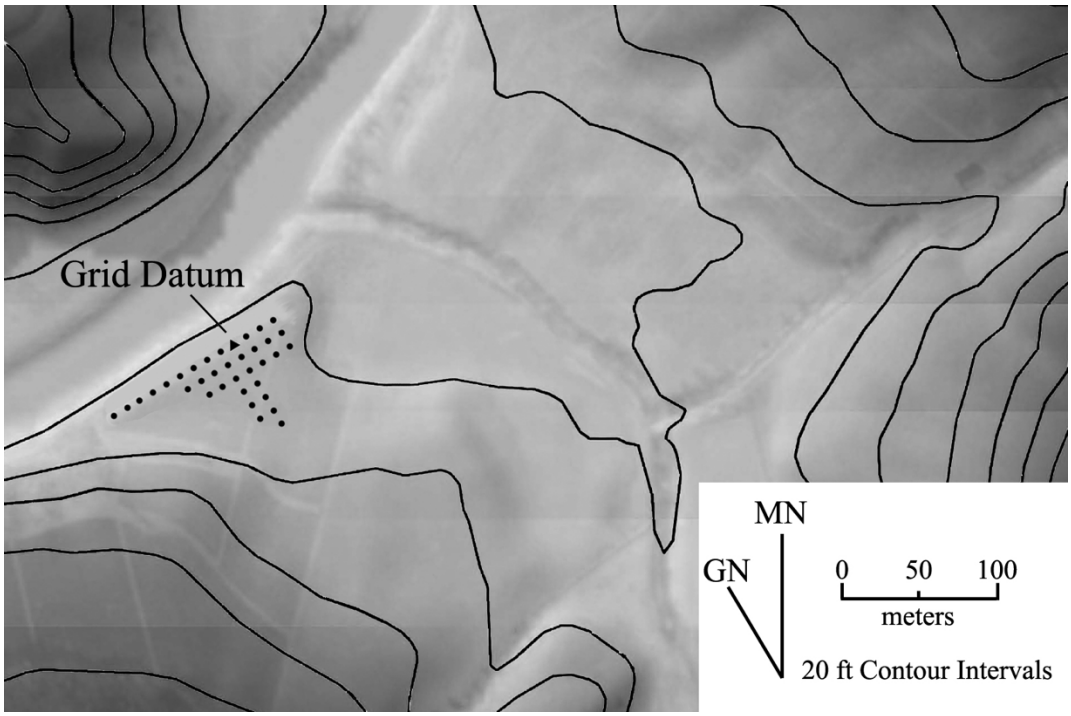

Figure 2. Shovel test pits excavated during the 2009 Appalachian State University field school at Colvard II (from Whyte 2010:Figure 4).

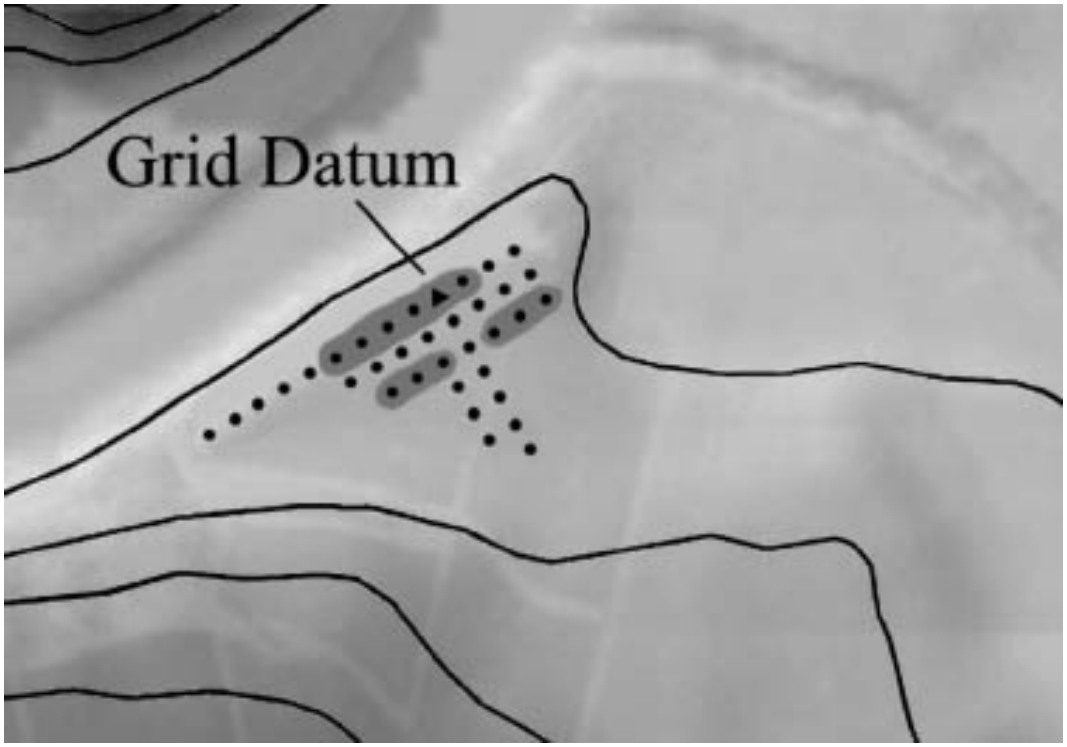

Figure 3. Test pits that exhibited artifact concentrations are darkened. These areas became the locations of larger blocks of 1x1m excavation units (from Whyte 2010:Figure 5).

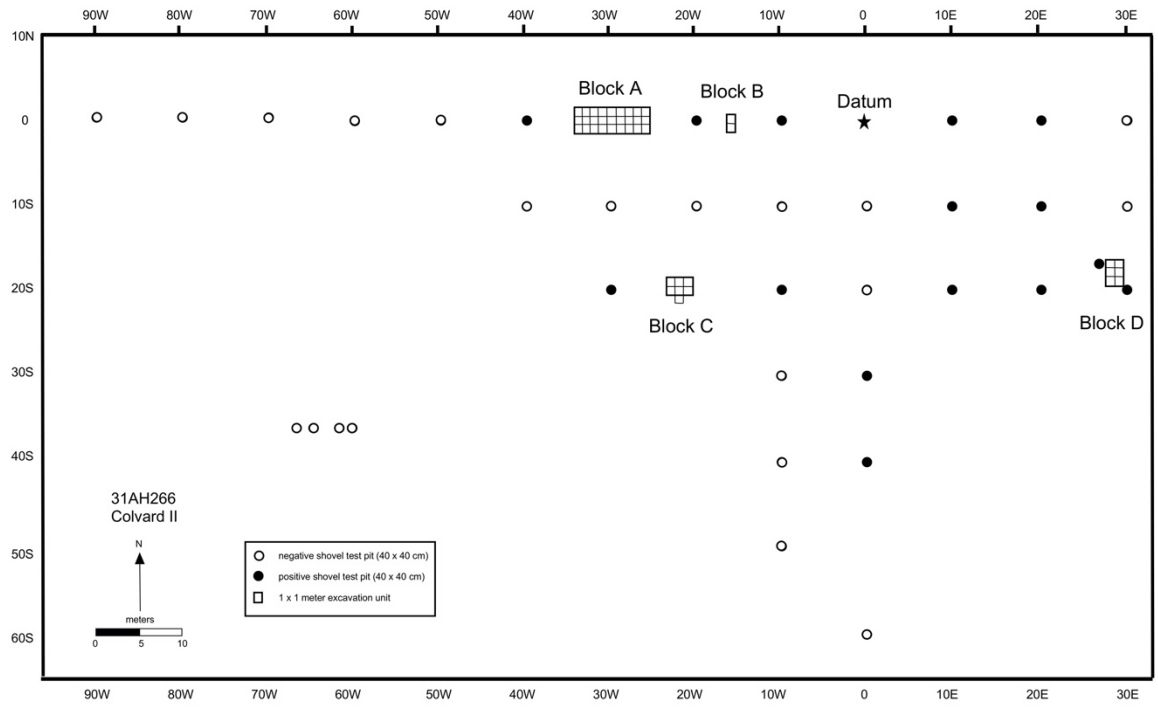

Figure 4. Map of all units excavated at Colvard II from the 2009 and 2010 field seasons.

The following year, Kimball led the 2010 Appalachian State University field school at the Colvard II site. These investigations focused around the four units excavated in Block A during the 2009 field school, expanding Block A to a 3 x 9 meter area (Figure 4). These new units were excavated through the plowzone and the Ab stratum. Twenty-seven units (units 1N 31-34W, 0N 30-34W, and 1S 28-34W) were excavated into Stratum E, with one unit (1N33W) excavated into stratum B to the top of a zone of large river boulders (Figure 5). As Stratum E was excavated, artifacts were piece-plotted due to suspicions that this stratum represented a living surface (Kimball field notes 2010). The 2010 investigations yielded similar diagnostic artifacts to those excavated in 2009 and provided a better understanding of the temporal components in Block A specifically. Temporally diagnostic artifacts recovered reinforce the 2009 findings. Block A lacks Paleoamerican diagnostics, though, and only includes components

attributable to the Early to Late Archaic and the Early to Late Woodland. Four features were also identified in Block A, including two rock hearths and two charcoal concentrations, all of which were located within Strata Ab and E (Figures 15-18).

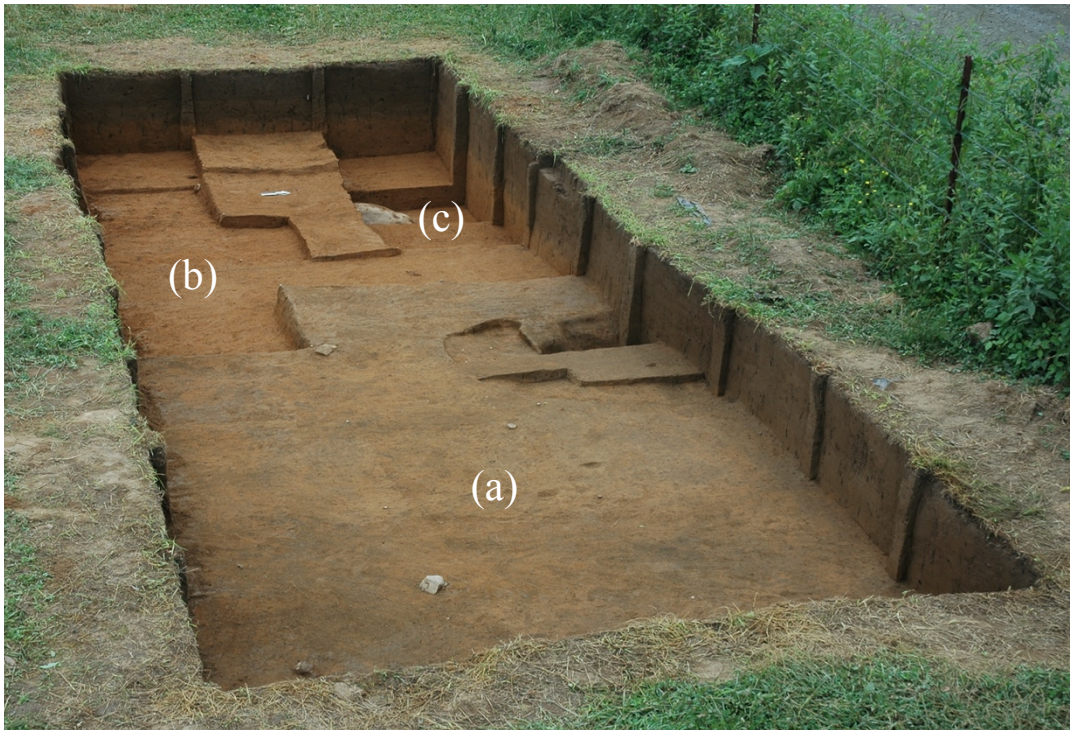

Figure 5. Block A excavations to (a) base of Stratum Ab, (b) Stratum E, and (c) Stratum B.

Site Formation

Colvard II is located on the T-2 of the south bank of the South Fork of the New River (Whyte 2010:2). Based on both archaeological and geophysical (Dean 2012) investigations at the site, four distinct strata, each associated with different time periods, have been recognized at Colvard II. These include a plowzone, (Stratum PZ), a buried A-horizon (Stratum Ab), E-horizon (Stratum E), and B-horizon (Stratum B). The plowzone and Strata B and E correspond to the soil horizons described by Dean (2012: Figure 25): Ap, Bw1, and B/C, respectively. According

to Dean (2012:Figure 25), Ap is located at a depth of 0 to roughly 30 centimeters below the surface (B.S.), Bw1 is roughly 30 to 120 centimeters B.S., while B/C is 155 to 180 centimeters B.S. During the 2010 investigations, the soil profile of the north wall of unit 1N33W showed that Stratum PZ is 0 to 30 centimeters B.S., Stratum Ab is 30 to 46 centimeters B.S., Stratum E is 46 to 65 centimeters B.S., and Stratum E is 65 to 90 centimeters B.S. (Kimball 2010). Strata PZ, Ab, and E consist of medium sand and medium-fine silty sand, while stratum B is composed of only medium sand. These soil types are typical for the South Fork New River and resulted from overbank and flood deposits that have occurred over time (Dean 2012: Table 3). The Munsell colors of each stratum range from 10YR3/3-dark brown (PZ), to 10YR4/4-dark yellowish-brown (Stratum Ab), to 10YR5/8-yellow brown (Strata E and B) (Kimball 2010). Temporal markers excavated in each stratum reveal information regarding the time periods during which periods of occupation occurred on the surface of each stratum (Table 1). Stratum Ab seems to correlate to the Early to Late Woodland period, while stratum E has yielded artifacts associated with the Middle to Late Archaic as well as the Middle to Late Woodland periods. Stratum B did not yield any temporally diagnostic artifacts, but information about that stratum is somewhat limited as it was only excavated in one unit on the site. Seramur and Widener observed a spike in magnetic susceptibility values for stratum B in their analysis of Block A sediments, and this may indicate a stable land surface at that time (Kimball personal communication, 2020 from Seramur personal communication, 2010). Despite this, we can infer that stratum B is associated with some parts of the Archaic period based on the patterns seen in the other strata. The plowzone includes artifacts from various time periods, but the historical processes that have occurred at the site likely contributed to this occurrence. The plowzone, and any archaeological contexts within it, has been disturbed by plowing, tree farming, and flood scouring (Whyte 2010:1).

The distribution of diagnostic artifacts across the PZ, Ab, and E strata and between excavation blocks suggests two observations. First, the presence of Paleoamerican (Clovis Fluted point, Paleoamerican side scrapers), Early Archaic (Kirk Corner Notched points), Middle Archaic (Morrow Mountain and Guilford points), Late Archaic (Appalachian stemmed points and a steatite sherd), Early Woodland (Swannanoa ceramics and points), Middle Woodland (Connestee points and ceramics), and Late Woodland (Uwharrie ceramics) temporal markers within the plowzone of the back edge of the T-2 indicates this area of the site may have been a fairly stable landform. Second, the front edge of the T-2, in Block A, Stratum Ab mostly included temporal markers from the Middle Woodland (Connestee ceramics and points) and one Late Woodland Jack's Reef Corner Notched point was also included in that stratum. The E-horizon included diagnostic tools from the Late Archaic (Appalachian Stemmed and point preform) and early Middle Archaic (Kirk Stemmed point), as well as a Pigeon Side Notched point and ten Connestee sherds.

Figure 6. Keith Seramur and Dirk Widener examining the profiles of the north walls of units 1N33W and 1N32W in Block A.

Table 1. Temporal markers found in each stratum at Colvard II from both field seasons.

Stratum	*Paleo-American*	*Early Archaic*	*Middle Archaic*	*Late Archaic*	*Early Woodland*	*Middle Woodland*	*Late Woodland*	*Total*
PZ	3	1	2	2	2	7	6	23
Ab	0	0	0	0	7	13	7	27
E	0	0	1	1	0	13	0	15
B	0	0	0	0	0	0	0	0
Total	3	1	3	3	9	33	13	65

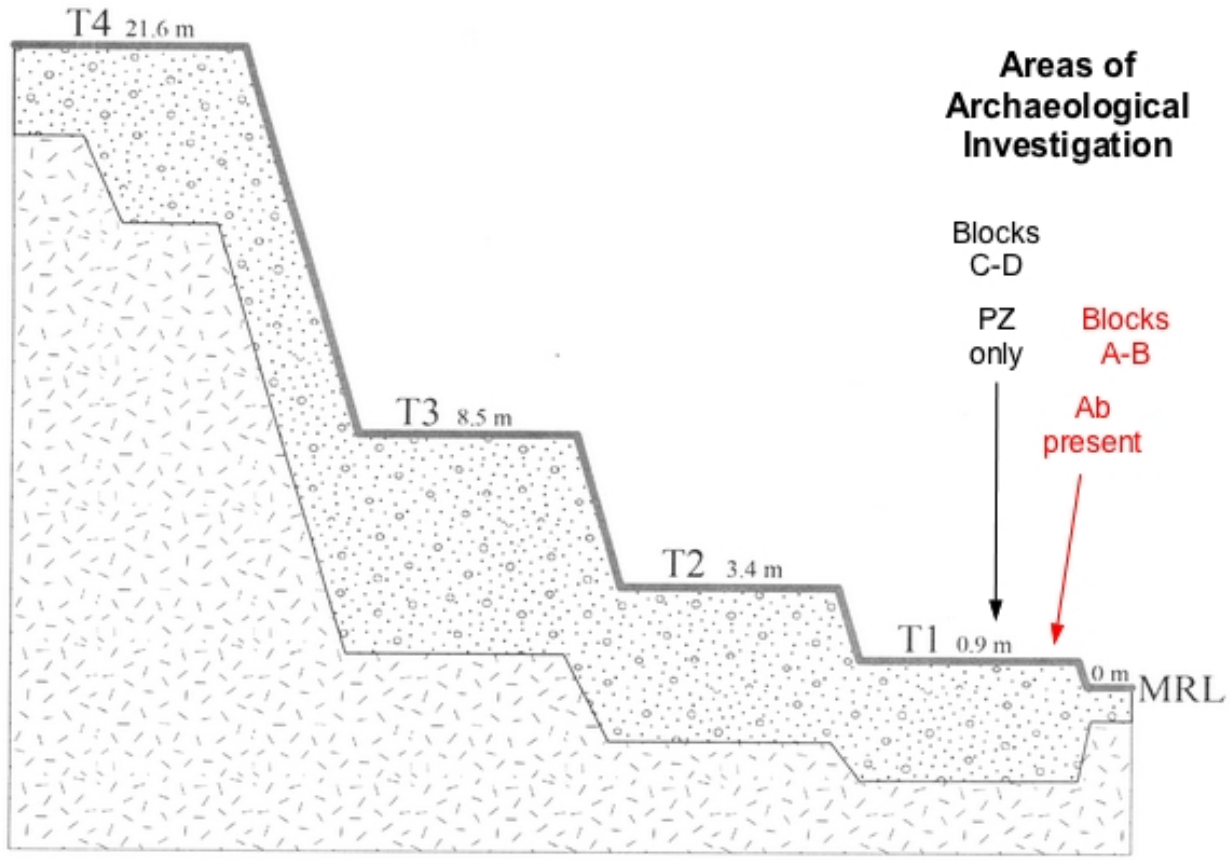

Figure 27 A subsurface profile based on observed depths-to-bedrock on each of the four stream terraces along the SFNR in Ashe County, NC.

Figure 7. A model of this tentative site formation as modified from Dean 2012:Figure 27).

Analysis

Ceramics

The ceramics recovered during the 2010 field season were analyzed using the same method as Whyte (2010) for the analysis of ceramic sherds recovered during the 2009 field school at Colvard II. The portion, size, temper, and both interior and exterior surface treatments of each sherd were considered, and special attention was paid to any diagnostic sherds. Forty-four temporally diagnostic sherds, dating from the Early to Middle Woodland periods, were found and analyzed following the 2009 and 2010 field investigations (Table 2). Swannanoa

(Keel 1976:260-266), Connestee (Keel 1976:247-255), and Uwharrie (Coe 1952) series ceramics were all represented in the assemblage (Figure 8).

Most of the sherds were found in the PZ and Stratum Ab, although a few Middle Woodland sherds were also found in stratum B within Blocks C-D. The plowzone and Stratum Ab of Block A both contained Early to Middle Woodland sherds, while stratum B here lacked any ceramic sherds. Although only a small sample of Stratum B was exposed and sampled, this absence of ceramic sherds supports the interpretation of Stratum B being associated with an Archaic occupation, perhaps the Early to Late Archaic since early pottery is first observed in the Early Woodland period in the Southern Appalachians.

Table 2. Number of diagnostic sherds, dated from the Early to Late Woodland periods, found in each stratum throughout the site.

Stratum	*Early Woodland*	*Middle Woodland*	*Late Woodland*	*Total*
PZ	2	4	6	12
Ab	6	10	5	21
E	0	10	1	11
B	0	0	0	0
Total	8	24	12	44

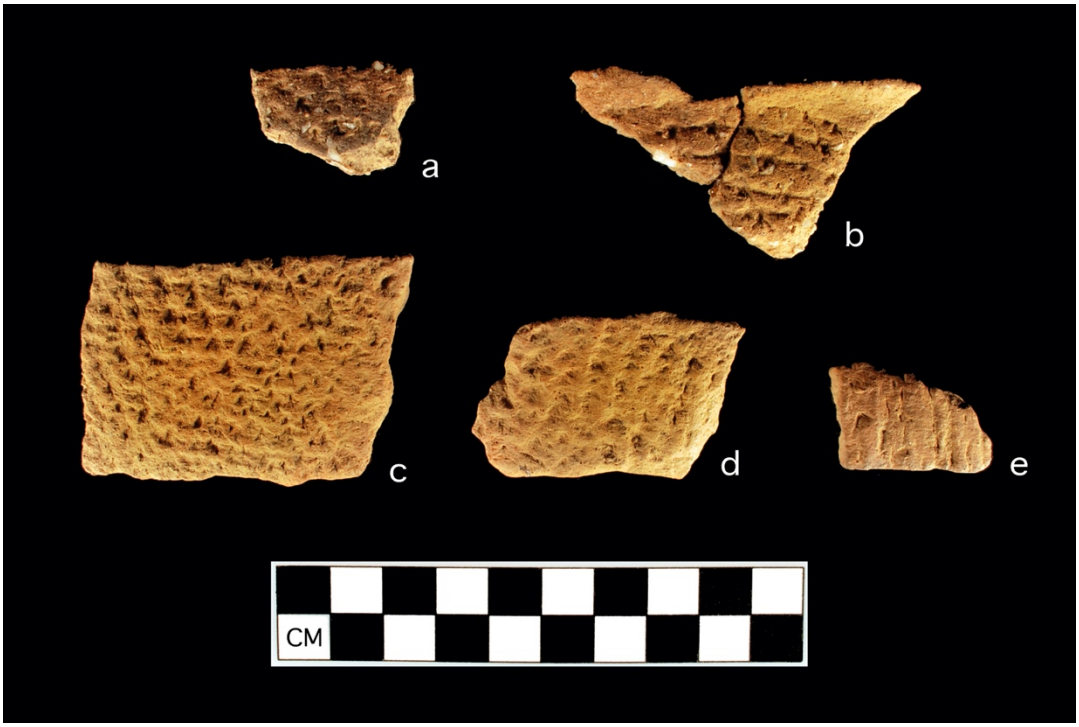

Figure 8. Examples of pottery from the 2009 field season at Colvard II, including: (a-d) Uwharrie pottery and (e) Swannanoa pottery (from Whyte 2010:Figure 12).

Stone Tools

In total, 124 flaked stone tools and ground stone tools (Table 3) were recovered at Colvard II, and these artifacts are useful in determining what kinds of activities occurred at the site as well as contribute to our understanding of when occupations occurred over time. Most of the stone tools were found in strata PZ and Ab, but each stratum did include some examples of stone tools (Table 3). Diagnostic projectile points recovered date to the Early to Late Archaic (Figure 9g-k), Early to Late Woodland (Figure 9a-f), and possibly the Paleoamerican period (Figure 9l). Two Paleoamerican scraper tools, one made of Piedmont metadacite (Figure 7f) and one made of southeastern Kentucky Newman chert (Figure 7g), were also found. It may be of interest that all three of these Paleoamerican tools were found in the plowzone, but towards the

rear of the terrace in Blocks C-D (Table 1). This could be due to historical disturbances such as plowing and tree farming (Whyte 2010:1), but the presence of Paleoamerican components in the plowzone yet not the other strata could also be an indication that the tools were scavenged from elsewhere in more recent times and then redeposited on this site (Whyte 2014).

Table 3. Counts of each stone tool type excavated at Colvard II during the 2009 and 2010 field seasons.

Stratum	*Proj. Pts*	*Preforms, Proj. Pt. Fragments*	*Ground-stone Tools*	*Scrapers*	*Drills*	*Blades*	*Retouched Flakes*	*Utilized Flakes*	*Total*
PZ	8	5	7	2	2	0	2	4	30
Ab	5	5	5	1	0	4	17	34	71
E	3	1	4	1	1	1	2	7	20
B	0	0	2	0	0	0	1	0	3
Total	16	11	18	4	3	5	22	45	124

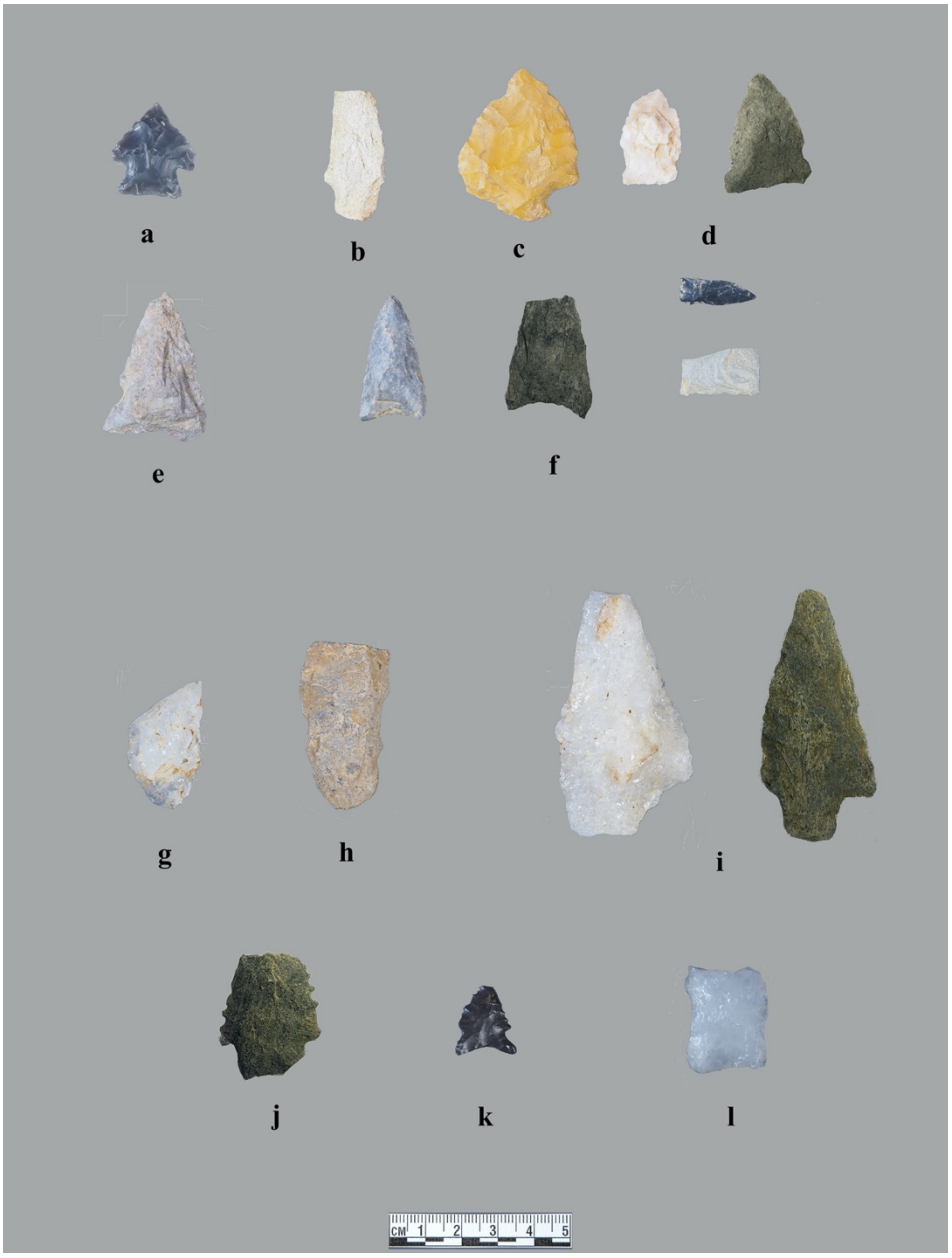

Figure 9. Woodland, Archaic, and Paleoamerican points: (a) Jack's Reef Corner Notched; (b) Bradley Spike; (c) Middle Woodland Corner Removed (Lowe Flared Base?); (d) Pigeon Side Notched; (e) Transylvania Triangular; (f) Connestee Triangular; (g) Morrow Mountain II; (h) Guilford; (i) Appalachian Stemmed Knife; (j) Kirk Stemmed; (k) Kirk Corner Notched; and (l) possible Clovis Fluted.

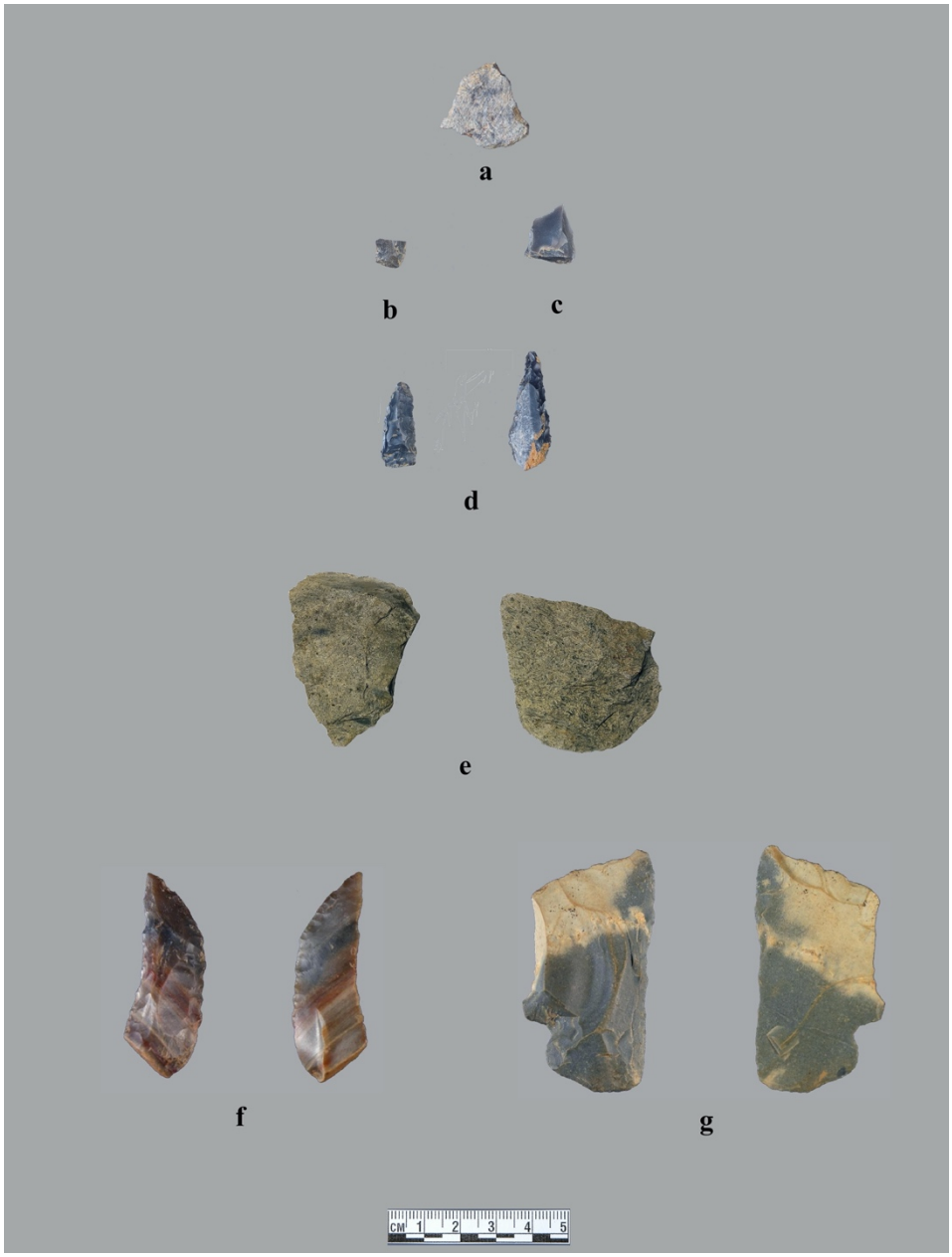

Figure 10. Tools: (a) steatite sherd; (b) drill fragment (proximal); (c) utilized bipolar flake/utilized blade core rejuvenation flake; (d) drills; (e) point preform fragments; (f) double concave-convex side scraper; (g) straight side scraper.

Tool Function

Dr. Larry Kimball (personal communication, 2020) has undertaken high-power Keely Method (Keeley 1980; Kimball 1989) microwear analysis of six tools from Colvard II (Figure 11). Three Middle Woodland tools (an ad hoc piercer on a blade core rejuvenation flake and two drills) and three Paleoamerican tools (two side scrapers and a probable proximal Clovis Fluted point fragment) have been analyzed. Two of the three Paleoamerican artifacts found in the plowzone exhibit signs of modification and reuse. The Clovis point base fragment shows signs of edge grinding and was later rejuvenated and given a burin-like edge (Figure 13). The metadacite double concave-convex side scraper shows evidence of hafting and was used originally used for dry hide-scraping but was later reused for sawing antler (Figure 12a). The straight side scraper was also used for dry-hide scraping (Figure 12b). Two drills, one from the plowzone and one from Stratum E, both exhibit evidence of dry hide boring (Figure 11b-c). Additionally, one utilized blade core flake shows signs of rejuvenation and use in fresh hide piercing, as well as hafting (Figure 11a).

The information provided by these microwear analyses help to provide a more comprehensive understanding of site function and show that, in addition to hunting, projectile points and knives were used in butchery. Both activities seem to have occurred at the site, as well as hide preparation in dry conditions, which Keeley (1982) argues is an important indicator of site duration and function. This further adds to our understanding of Middle Woodland occupation and the preliminary processes of hideworking. The presence of these tools, along with a diverse debitage assemblage and the presence of cooking vessel fragments, suggest that the site function of Colvard II in the Middle Woodland period was more complicated and occupied longer than a short-term or overnight hunting camp.

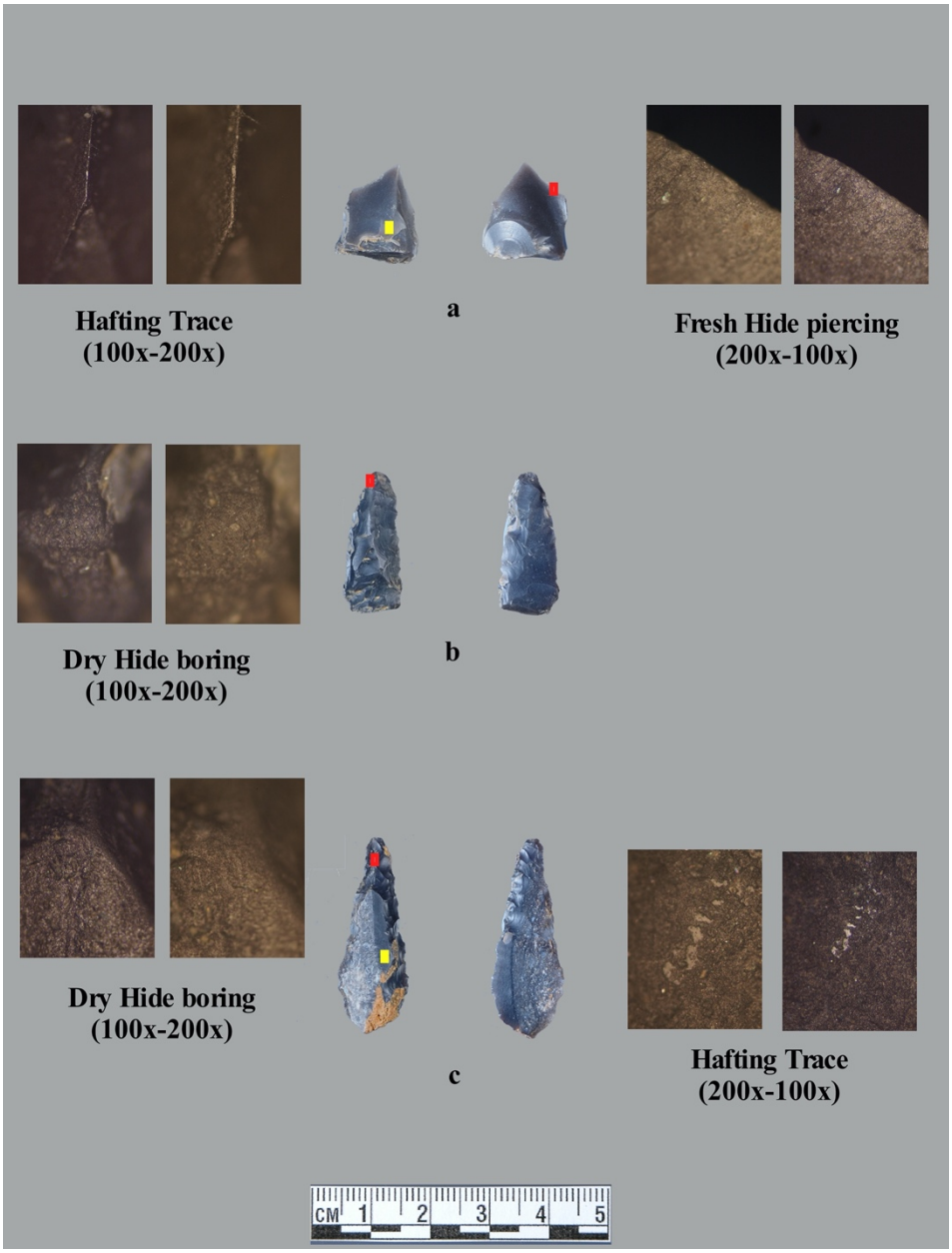

Figure 11. Microwear Analysis of ad hoc piercer and drills: (a) utilized blade core rejuvenation flake 1N31W-Stratum Ab: hafted & fresh hide piercing; (b) drill 1S30W-Stratum E-1: hafted & dry hide boring; (c) drill 20S23W-Plowzone: hafted & dry hide boring.

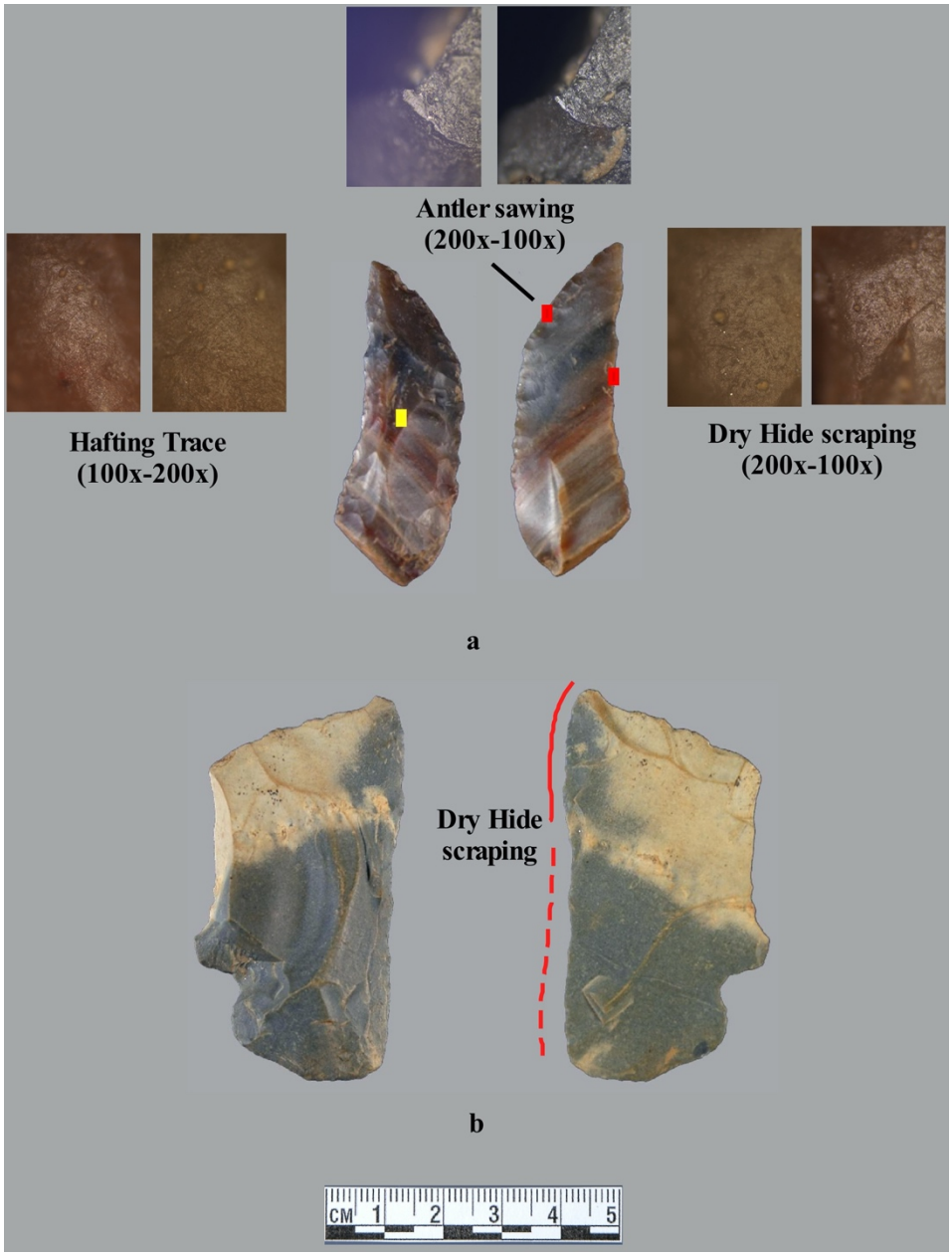

Figure 12. Microwear Analysis of Probable Paleoamerican tools: (a) double concave-convex side scraper 20S21W-Plowzone: hafted & dry hide scraping & (secondary use) antler sawing; (b) straight side scraper 19S21W-Plowzone: dry hide scraping.

Figure 13. Microwear Analysis of Probable Clovis Fluted point 10S20E-Plowzone: TT-1 edge grinding; TT-2 fluting; TT-3 burin-like blows to create an obtuse edge; UT-4 used – material indeterminate.

Lithic Procurement Patterns for Stone Tools and Debitage

The raw materials of all lithic debitage and stone tools found at Colvard II were examined in order to determine patterns of mobility based on the provenance of the lithic sources. The lithic raw materials were grouped based on the source distance and direction of the source from Colvard II (Kimball personal communication, 2020). Six source groupings were established: local (crystal and vein quartz, quartzite, metasandstone), local Mt. Rogers (Mt. Rogers rhyolite probably from Helton Creek gravels in northern Ashe County – the western-most source area on Figure 14 [Whyte personal communication, 2020]), near local-Valley and Ridge (Knox chert, chert, jasper, chalcedony), exotic-southeastern Kentucky (Newman chert, exotic black chert), and exotic-Carolina piedmont (Piedmont rhyolite, metadacite) (Figure 14).

The analysis of lithic assemblage composition with regard to a site's distance and direction from lithic raw material sources have been used for some time (Binford 1980, 1983; Kimball 1989,1992) to argue for both scale and direction of foraging activities from a site, as well as a group's movements within their larger settlement system. In this analysis, the prevalence of different lithic sources was correlated with temporally diagnostic artifacts in each stratum in order to better understand settlement-subsistence patterns over the different occupations at Colvard II (Tables 4a-4b).

The majority of tools (Table 4b) were Middle Woodland (n=16), and all lithic sources were represented except for the Piedmont. In rank order this represents Valley and Ridge (43.8%) and Mt. Rogers (37.5%), southeastern Kentucky (12.5%), and local (6.3%). The three Paleoamerican tools, though, are made from lithic materials that come from three very different areas: Piedmont metadacite, southeastern Kentucky Newman chert, and very high quality local quartz, possibly even crystal quartz.

Lithic raw materials available locally (especially Mt. Rogers rhyolite and quartz) were well represented in all assemblages (Table 4). This is assumed to represent an embedded procurement strategy during different foraging episodes from Colvard II. Near-local Valley and Ridge cherts were very abundant in the PZ and Stratum Ab (Figure 15), which probably represents Woodland occupations, especially Middle Woodland Connestee occupations (Table 4). Knox chert is a preferred raw material at this time, though, so it is unclear whether this represents foraging into the Valley and Ridge province or exchange (or both). At the same time, exotic Piedmont rhyolites are represented in all contexts (Table 4), particularly Strata Ab and E (Figure 16). This argues for either some long distance forays there or a "founding effect" whereby people brought tools from the east as they relocated to the Appalachian Summit. There is even less debitage from the exotic southeastern Kentucky Newman chert source, which is significant because it could signal another "founding effect" of transhumance from the west to Colvard II. The two Paleoamerican side scrapers are perhaps very significant as they are made of these latter two exotic lithic materials from different directions (Piedmont rhyolite and Kentucky Newman chert). This suggests that Paleoamerican mobility was much greater than that of later foraging peoples. It is important to note that at least some of the tools discarded at Colvard II were made elsewhere, and the debitage of these exotic materials may be due to the repair, modification, and reuse of these old tools.

In Block A specifically, the higher frequencies of all material types suggest a more intensive period of occupations occurred throughout the Woodland, associated with Stratum Ab (Figure 15), than from the Middle Archaic into the Woodland period, associated with Stratum E (Figure 16). In both strata, though, there are concentrations of exotic Piedmont rhyolite near Feature 1 in Stratum A (Figure 15d) and Feature 7 in Stratum E (Figure 16d). This may suggest

that these areas were the locations at which tools made from that exotic Piedmont rhyolite were maintained, and this practice continued over time. A similar pattern can be seen with Valley and Ridge materials, although concentrations of these materials exist closer to Features 2 and 3 in Stratum Ab (Figure 15c) and Feature 6 in Stratum E (Figure 16c). Mt. Rogers rhyolite is concentrated near all three features in Stratum Ab (Figure 15b) and Feature 6 in Stratum E (Figure 16b). As with the Piedmont materials, this may indicate that tools of these materials were maintained and worked on to a greater degree at these areas of the site, and these materials continued to be used, albeit to a greater extent, from the Middle Archaic into and throughout the Woodland period.

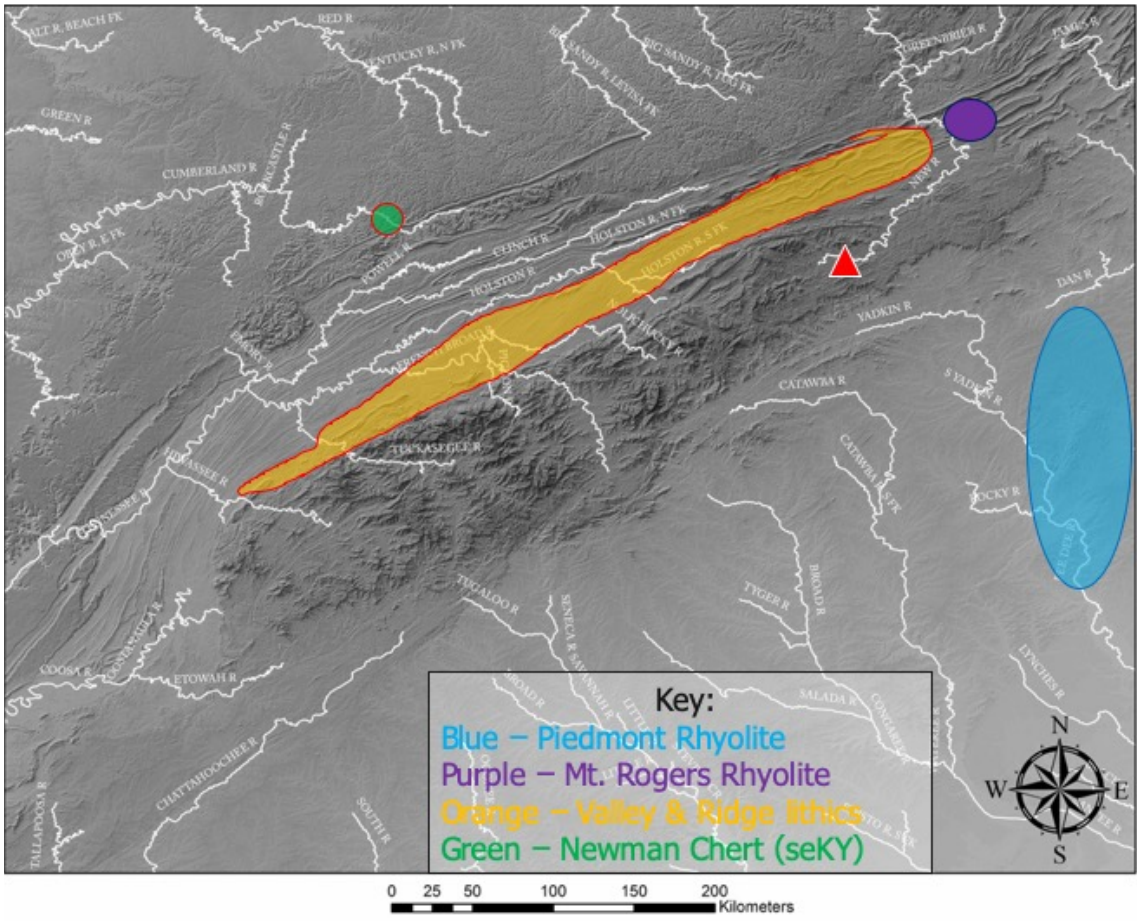

Figure 14. Map highlighting the source areas of several lithic raw materials.

Table 4a. Frequencies of debitage flakes associated with each raw material source group.

Stratum & Assoc. Time Period(s)	*Local*	*Mt. Rogers*	*Valley & Ridge*	*Piedmont*	*Southeastern Kentucky*	*Total*
PZ, Paleo-LWood	219	451	252	51	2	975
Ab, EWood-LWood	161	520	457	74	1	1213
E, MArchaic-MWood	33	265	68	86	0	452
B, Archaic	1	18	5	7	0	31
Total	414	1254	782	218	3	2671

Table 4b. Stone tools by raw material source group and temporal unit (n=30).

	Local	*Mt. Rogers*	*Valley & Ridge*	*Piedmont*	*Southeastern Kentucky*	*Total*
Paleoamerican	1	0	0	1	1	3
Early Archaic	0	0	1	0	0	1
Middle Archaic	1	2	0	0	0	3
Late Archaic	1	1	0	0	0	2
Early Woodland	0	1	1	0	0	2
Middle Woodland	1	6	7	0	2	16
Late Woodland	0	1	2	0	0	3
Total	4	11	11	1	3	30

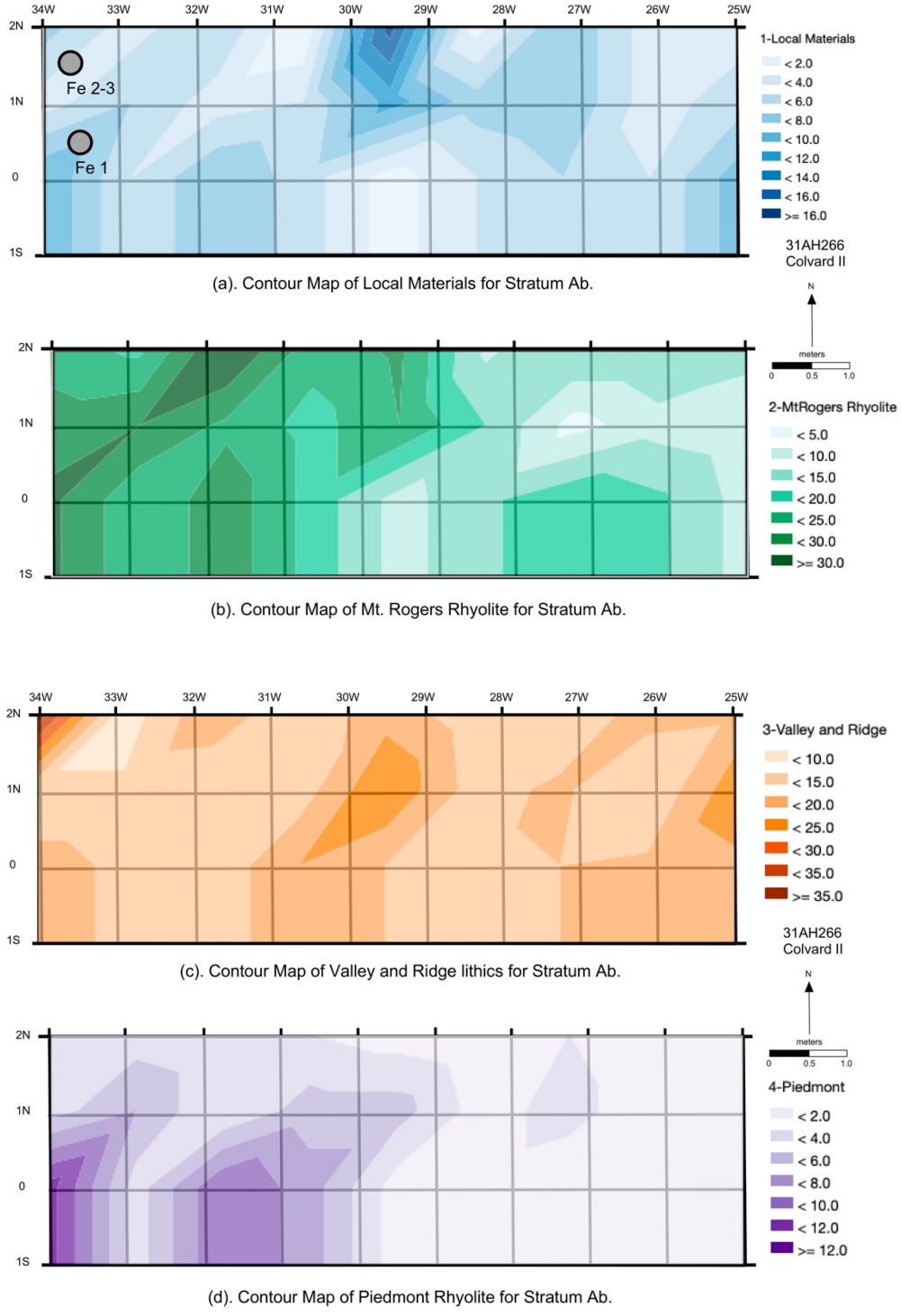

Figure 15. Distribution of lithic raw material source types in Block A, Stratum Ab: (a) Local, (b) Mt. Rogers, (c) Valley and Ridge, and (d) Piedmont.

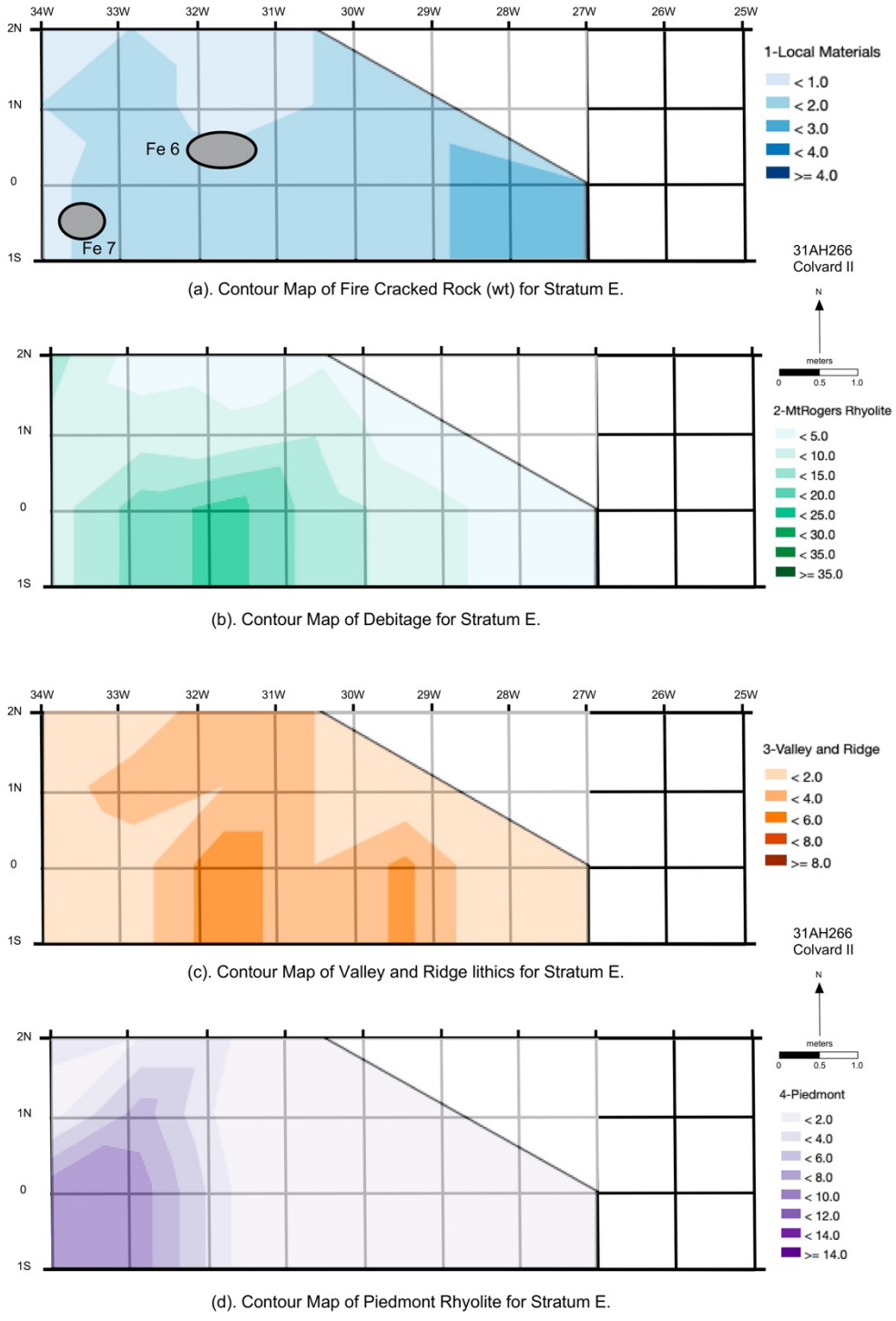

Figure 16. Distribution of lithic raw material source types in Block A, Stratum E: (a) Local, (b) Mt. Rogers, (c) Valley and Ridge, and (d) Piedmont.

Features

Five features, located in Block A, will be considered in relation to artifact concentrations. The units in Block A yielded the highest number of artifacts out of all the excavation blocks. It should be noted, though, that Block A consists of twenty-seven excavation units and a greater number of contexts were excavated in Block A than in the other excavation blocks. Two of the features in Block A are located in stratum Ab, while the other two are located in stratum E. All five features were found in the western portion of Block A. Feature 1 is located in unit 0N34W in Stratum Ab and has been interpreted as a surface fired hearth (Figure 16). Features 2 and 3 are located near Feature 1, in unit 1N34W in Stratum Ab (Figure 17). Feature 3 is also a surface fired hearth and Feature 2 is a charcoal concentration found along with Feature 3. Features 6 and 7 are located in Stratum E. Feature 6 is mostly located in unit 0N32W but extends into unit 0N33W (Figure 19). Feature 7 is located in unit 1S34W (Figure 20). Both of the features in Stratum E have been interpreted as rock hearths.

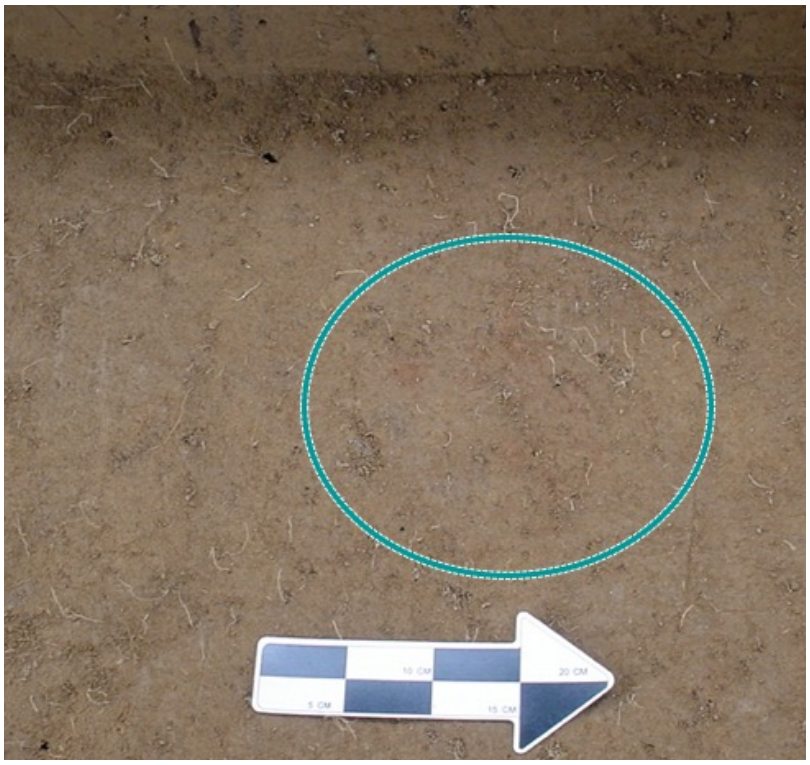

Figure 17. Feature 1, located in unit 0N34W stratum Ab.

Figure 18. Features in unit 1N34W stratum Ab: (a) Feature 2, charcoal concentration; (b) Feature 3, surface fired clay hearth.

Figure 19. Feature 6, rock hearth, located in units 0N32W and 0N33W, stratum E.

Figure 20. *Feature 7, rock hearth, located in unit 1S34W, stratum E.*

A distributional analysis of the artifacts found in Strata Ab and E in relation to the features in each unit reveal several patterns. In Stratum Ab, higher concentrations of lithic debitage, stone tools, and ceramic sherds are seen in the vicinity of Features 1, 2, and 3 (Figure 21b-d). There are also concentrations of debitage and stone tools in the middle of the block in Stratum Ab, roughly three meters to the east of the features (Figure 21b-c). There is also a concentration of debitage in Stratum E near Features 6 and 7 (Figure 22b). A concentration of stone tools was also observed in the vicinity of these features but was closer to Feature 6 (Figure 22c). The sherd concentration in Stratum E is in almost the same location as the sherd concentration seen in Stratum Ab (Figures 21d, 22d). In Stratum E, the sherds seem to be associated with Feature 7 more so than with Feature 6. There is a small concentration of fire-cracked rock near Feature 6, but for the most part the fire-cracked-rock concentrations are not located near the features and there is no clear association between them (Figure 22a). In both strata, the associations between features and debitage seem to be most significant, although the associations between the features and stone tool concentrations is also noteworthy.

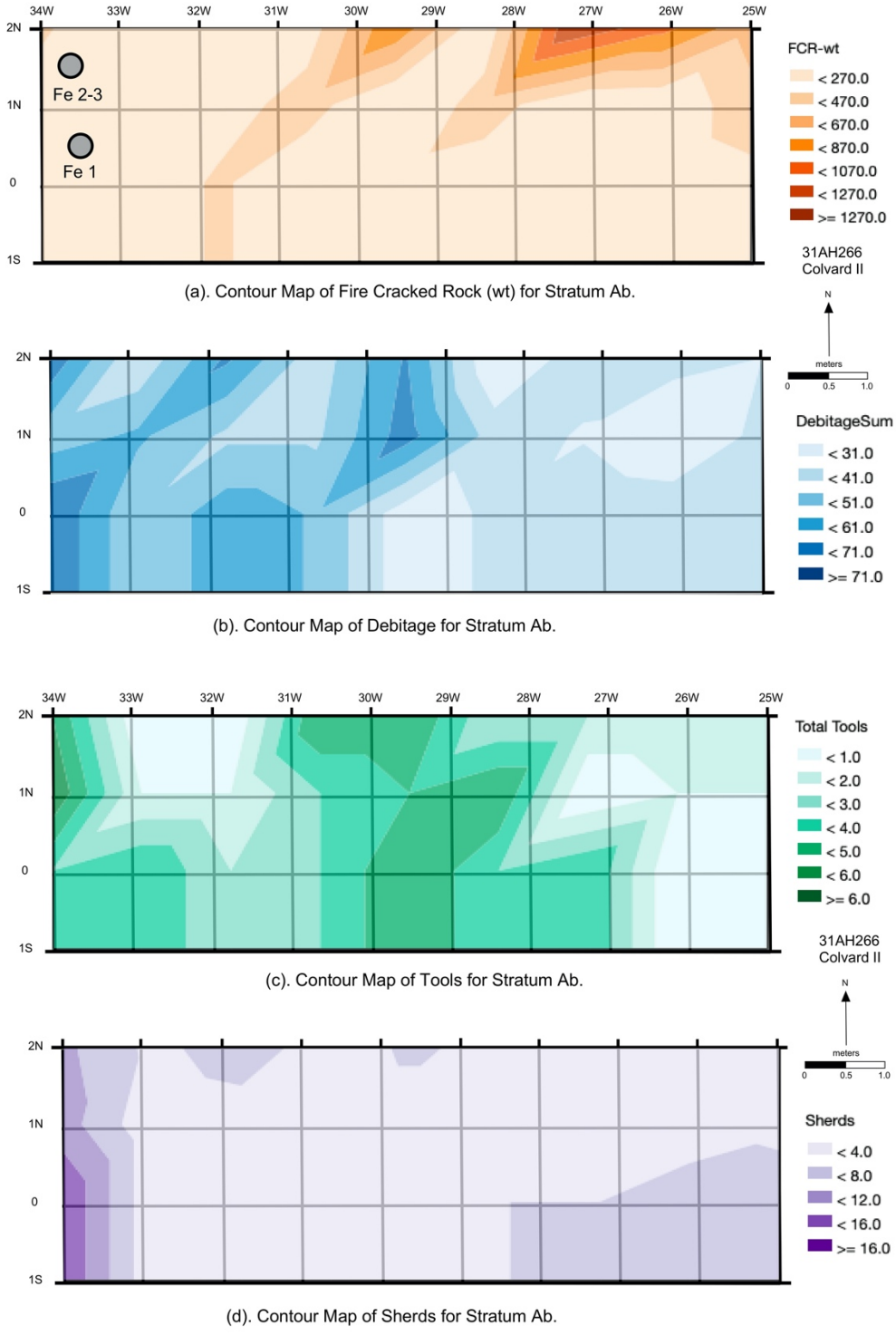

Figure 21. Artifact distributions in stratum Ab in relation to the locations of Features 1, 2, and 3: (a) fire-cracked rock distribution; (b) debitage distribution; (c) stone tool distribution; (d) ceramic sherd distribtuion.

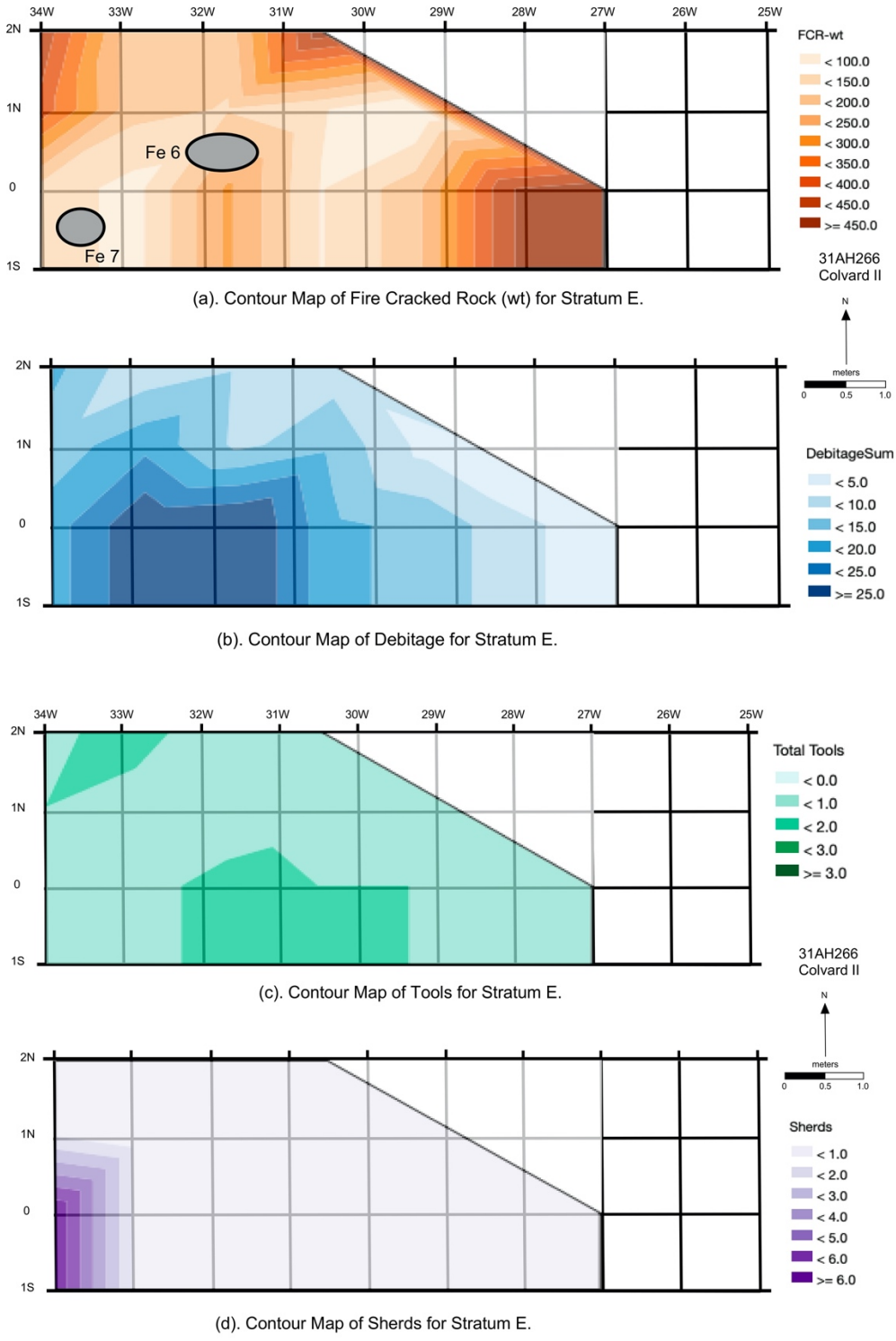

Figure 22. Artifact distributions in stratum E in relation to the locations of Features 6 and 7: (a) fire-cracked rock distribution; (b) debitage distribution; (c) stone tool distribution; (d) ceramic sherd distribtuion.

Results

History of Site Occupations

Colvard II was occupied repeatedly between ~11,000 B.C. until A.D. 1400. Different temporal periods can be assigned so each sub-plowzone stratum. Stratum B seems to be associated with the Archaic period, while Stratum E includes components from the Middle Archaic and into the Middle Woodland period, and Stratum Ab is associated with the Woodland period (Table 1). Based on the number and types of temporal markers found in Strata Ab and E, the Middle Woodland period seems to have been the most intensive period of occupation at the site. Middle Woodland components comprise roughly half of those found in Stratum Ab and represent well over the majority of temporal markers in Stratum E. Fewer artifacts from the Archaic, Early, and Late Woodland periods have been found in those strata. The plowzone contains evidence of a mix of temporal components.

Temporal patterns at Colvard II can be better understood when the location of temporal markers on the T-2 terrace itself are also taken into consideration. Paleoamerican components are only found in Blocks C and D and one shovel test pit, all of which are located towards the middle of the terrace and farther from the river than the other excavation units (Figure 4). Block B includes Early to Late Woodland components in Stratum Ab, while the plowzone only includes a Late Woodland component. In Block A, however, Stratum Ab includes mostly Early Woodland artifacts, but Middle to Late Woodland components are represented as well. The plowzone includes Middle to Late Woodland components. With Strata E and B taken into consideration as well, somewhat more specific time periods can be identified in each stratum. As is the case with other areas of the site, Strata E and B contain more evidence of Middle Archaic. Block A also yielded the highest number of artifacts, possibly because it was the most extensively excavated

block. Even when only considering plowzone contexts, as all units across the site were excavated through the plowzone, Block A still provided the most artifacts. The area seems to have been the most intensively occupied over time throughout the site, but new patterns could potentially emerge if the areas near Blocks B-E are investigated further.

Raw Material Sourcing

Analysis of the lithic raw materials represented in the debitage assemblage at Colvard II indicates that a majority of nonlocal materials were brought to and worked on the site from the Carolina Piedmont, southeastern Kentucky, Mt. Rogers, and the Valley and Ridge of the Southern Appalachians (Table 4). Local raw materials were also abundant, though. These patterns suggest that people travelling to Colvard II would have had to either stop at some of these other locations on the way there, or they were interacting and trading with other people that had already been there. The Southern Appalachians were not occupied year-round until around A.D. 900, well into the Late Woodland period (Whyte 2003). Prior to that time, there was a greater deal of mobility, especially seasonal mobility for hunter-gatherers in the Paleoamerican through Late Archaic periods (Whyte 2010:16).

Materials from southeastern Kentucky and the Carolina Piedmont are fewer compared to the materials from other areas, but the presence of these exotic materials is very important in terms of where the occupants may have come from. This also indicates that the scale of mobility for Paleoamerican peoples was very great. More can be learned by considering the occurrence of the other raw materials and source locations associated with this site. Mt. Rogers rhyolite was consistently used in greater quantities than the near-non local Valley and Ridge materials (Table 4). Valley and Ridge materials are also seen in greater quantities than local materials (Table 4).

This data suggests that the people who came to Colvard II remained mobile throughout the time the site is known to have been used. The lack of evidence of more permanent structures or other indications of more sedentary lifestyles at the site further support that interpretation. Perhaps further investigations at the site could add more support to this interpretation. New investigations could also provide more data and information regarding materials from southeastern Kentucky and the Carolina Piedmont, and the frequencies at which they occur in other areas of the site.

Interpretations

Site Function

Based on the tool types and functions, as well as the types of features and associated artifacts, Colvard II seems to have been used as a field camp where hunting, foraging, and occupational activities occurred. The specific function of the site and activities that occurred there could have changed over time, but also may have been used for multiple purposes during some episodes of occupation. This field camp likely would have been associated with a residential base camp, as defined by Binford (1980:7). The presence of ceramic cooking vessels may signal the presence of women and family groups on the site, but this can only be argued for the Woodland occupations. During these Woodland occupations, there may not have been a separate residential camp associated with the field camp. Rather, the site seems to have functioned as both and the activities associated with each would have been occurring at the same overall site at the same time based on the types of Woodland artifacts recovered at the site (Kimball 1996:Table 8.6). The projectile points found at the site might suggest the site was used as a hunting camp. The debitage and tool concentrations near the features in Block A could reflect other activities that occurred at the site, such as tool maintenance. The locations where

artifacts end up can be helpful in determining what kinds of activities occurred there (Binford 1983:252). The hearth features in Block A seem to be locations where people would gather while working on tool maintenance, which may explain the higher frequencies of debitage near those areas. Hide processing activities may also have occurred at this site, as various tools found here were found to have been used for that purpose after microwear analysis (Figures 11-12). Based on the evidence at hand, site activities at Colvard II may have functioned as those expected at a field camp, at which tasks groups could maintain themselves while temporarily away from residential base camps (Binford 1980:12). The presence of tools such as projectile points, hunting tools, and utilized and retouched flakes, cutting tools, suggests that hunting and some butchery activities occurred at the site (Kimball 1996:Tables 8.5-8.6). Multiple activities could have occurred at the same site, and the site's function probably changed at different points in time when each period of occupation occurred.

The number of artifacts found at Colvard II over the course of two field seasons may indicate that this site is a lithic scatter. Sites such as these are frequently dismissed but can be informative about mobile groups (Cain 2012:207). Low density lithic scatter sites are often associated with mobile groups and short-term occupations (Peacock 2008:83). Repeated short-term occupations could increase the artifact density at a site if the same area was returned to multiple times (Peacock 2008:83). In Block A, a change in artifact densities can be seen from stratum E to Ab. Stratum Ab in Block exhibits a higher density of artifacts, which may be attributable to a greater number of occupations that occurred there. If this is the case, Colvard II would have been occupied more frequently throughout the Early to Late Woodland periods. The site may have been used for similar purposes from the Middle Archaic into the Woodland period, based on the similarities between feature types and artifact concentrations in Strata Ab and E in

Block A. Certain types of sites, such as retooling stations or overnight camps, tend to exhibit lower artifact densities as they are used for a fairly short periods at a time before people move one (Peacock 2008:86). Similarly, a hunting camp or similar station occupied for short periods would likely also have a fairly low artifact density as is seen at Colvard II.

Tool Scavenging and Reuse

Some evidence of tool reuse has been found at Colvard II from microwear analysis. Two Paleoamerican artifacts, a vein quartz Fluted Clovis fragment and a metadacite scraper, exhibited evidence of modification and secondary use (Figures 11-13). Based on the patination on each tool, the scraper seems to have been reused by the same people who initially made the tool. The patination on the point fragment are less conclusive, though. Differential weathering and varied degrees of patinas on a single tool can be indicative of modification and reuse (Whyte 2014), however, such patinas are difficult to observe and differentiate on vein quartz. The presence of these Paleoamerican components in the plowzone is noteworthy, though, as clusters such as this in higher strata may also be indicative of tool reuse (Whyte 2019:11).

Conclusions and Areas of Future Research

Further research and archaeological investigations at Colvard II will provide a better understanding of mobility patterns and site functions, as well as provide new data that could further validate or perhaps alter the interpretations outlined in this paper herein. For example, new units could be excavated to the east or west of Blocks A-B and C-D would be a good first step. Besides increasing the size of lithic and ceramic assemblages from Colvard II, this would help to provide a better understanding of what kinds of temporal components are represented in

both areas, and whether any Paleoamerican components are found beyond Block C. Larger assemblages could also provide more information regarding mobility and patterns of raw material utilization. Larger samples of the long distant southeastern Kentucky and Carolina Piedmont lithics could provide a better understanding of how those areas fit in to the mobility patterns of the groups that travelled to and passed through this site. Although carbonized plant remains are present at the site, a concerted effort to obtain archaeobotanical samples would enhance arguments of seasonality and site function. Given the interesting results of geoarchaeological work at the Colvard locality to date (Dean 2012) and the possibility to compare it to the limited excavations at the Birckhead site (Whyte and Kimball 2017) upstream (where a Clovis point was recovered); further geoarchaeological research would no doubt enhance our understanding of the Paleoamerican occupation in this area of the Appalachian Summit.

Acknowledgements. I would like to thank the 2009 and 2010 ASU Archeology Field Schools for their work at the Colvard II site. I would like to thank Dr. Thomas Whyte and Mr. Keith Seramur for their expertise, help, and support with this project. Finally, I would like to thank my thesis advisor and mentor Dr. Larry Kimball, who made this project possible. He was tremendously helpful in the organization of this project, analyzing data, creating figures and tables, and going above and beyond to ensure I would be able to continue my work on this project even during a turbulent semester. I am very grateful for his teaching, advice, and guidance throughout this project and throughout my time at Appalachian State.

Appendix A

Ceramic Artifact Inventory

Colvard II (31AH366)

2009 & 2010 Field Seasons

Block	Unit	Stratum	Portion	Temper	Exterior	Interior	Size
A	0N 26W	2-Ab	body	sand&quartz	indet.	smoothed	4-5cm
A	0N 26W	2-Ab	indet.	sand&quartz	indet.	indet.	1-2cm
A	0N 26W	2-Ab	body	sand&quartz	indet.	indet.	1-2cm
A	0N 27W	2-Ab	body	sand&quartz	indet.	smoothed	2-3cm
A	0N 29W	1-PZ	body	sand	indet.	smoothed	2-3cm
A	0N 30W	2-Ab	rim	sand	indet.	indet.	1-2cm
A	0N 31W	1-PZ	body	sand	indet.	indet.	<1cm
A	0N 31W	2-Ab	body	sand	indet.	indet.	1-2cm
A	0N 32W	1-PZ	indet.	sand&quartz	indet.	indet.	1-2cm
A	0N 32W	2-Ab	body	sand&quartz	cord	smoothed	3-4cm
A	0N 32W	2-Ab	body	sand	indet.	smoothed	3-4cm
A	0N 33W	1-PZ	body/base	sand&quartz	indet.	smoothed	4-5cm
A	0N 33W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	0N 34W	2-Ab	rim	sand	plain	smoothed	2-3cm
A	0N 34W	2-Ab	rim	sand	cord	smoothed	4-5cm
A	0N 34W	2-Ab	rim	sand	indet.	indet.	1-2cm
A	0N 34W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	0N 34W	2-Ab	body	sand	indet.	indet.	1-2cm
A	0N 34W	2-Ab	rim	sand	indet.	indet.	1-2cm
A	0N 34W	2-Ab	body	sand	cord	indet.	1-2cm
A	0N 34W	2-Ab	body	sand	indet.	smoothed	1-2cm
A	0N 34W	2-Ab	body	sand&quartz	cord	indet.	1-2cm
A	0N 34W	2-Ab	body	sand	indet.	indet.	1-2cm
A	0N 34W	3-E	rim	sand&quartz	net	smoothed	4-5cm
A	1N 26W	1-PZ	body	sand	indet.	smoothed	2-3cm
A	1N 26W	1-PZ	body	sand	indet.	smoothed	2-3cm
A	1N 26W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1N 27W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1N 27W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1N 27W	2-Ab	body	sand	cord	smoothed	2-3cm
A	1N 28W	1-PZ	body	sand	indet.	indet.	1-2cm
A	1N 28W	2-Ab	body	sand	indet.	smoothed	4-5cm
A	1N 29W	2-Ab	indet.	sand	indet.	indet.	1-2cm
A	1N 30W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1N 30W	2-Ab	body	sand	indet.	indet.	2-3cm
A	1N 30W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1N 30W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1N 30W	2-Ab	base	sand	indet.	indet.	2-3cm
A	1N 31W	2-Ab	rim	sand	cord	smoothed	3-4cm
A	1N 31W	2-Ab	body	sand	indet.	smoothed	1-2cm

A	1N 32W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1N 32W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1N 32W	2-Ab	body	sand	indet.	indet.	2-3cm
A	1N 32W	2-Ab	body	sand	indet.	indet.	2-3cm
A	1N 32W	2-Ab	body	sand	indet.	indet.	2-3cm
A	1N 32W	2-Ab	body	sand	indet.	indet.	3-4cm
A	1N 33W	1-PZ	body	sand&quartz	indet.	smoothed	2-3cm
A	1N 33W	1-PZ	rim	sand	indet.	smoothed	2-3cm
A	1N 33W	2-Ab	body	sand	indet.	smoothed	3-4cm
A	1N 33W	2-Ab	body	sand	indet.	smoothed	3-4cm
A	1N 33W	2-Ab	body	sand	indet.	indet.	2-3cm
A	1N 34W	2-Ab	rim	sand	indet.	indet.	3-4cm
A	1N 34W	2-Ab	rim	sand	indet.	smoothed	2-3cm
A	1N 34W	2-Ab	body	sand	indet.	smoothed	1-2cm
A	1N 34W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1N 34W	2-Ab	body	sand&phylite	indet.	indet.	1-2cm
A	1N 34W	2-Ab	rim	sand	indet.	indet.	1-2cm
A	1N 34W	2-Ab	body	sand	indet.	smoothed	1-2cm
A	1N 34W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1N 34W	2-Ab	body	sand	indet.	smoothed	3-4cm
A	1N 34W	3-E	body	sand	indet.	smoothed	2-3cm
A	1S 26W	1-PZ	body	sand&quartz	net	smoothed	5-6cm
A	1S 26W	2-Ab	rim	sand&quartz	cord	indet.	3-4cm
A	1S 26W	2-Ab	indet.	sand	indet.	indet.	2-3cm
A	1S 26W	2-Ab	body	sand	indet.	smoothed	1-2cm
A	1S 26W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1S 26W	2-Ab	rim	sand	indet.	smoothed	1-2cm
A	1S 26W	2-Ab	indet.	sand&quartz	indet.	indet.	1-2cm
A	1S 27W	2-Ab	body	sand&quartz	indet.	smoothed	2-3cm
A	1S 27W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1S 27W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1S 27W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1S 27W	2-Ab	body	sand	indet.	smoothed	1-2cm
A	1S 27W	2-Ab	base	sand	indet.	indet.	2-3cm
A	1S 27W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1S 28W	2-Ab	body	sand	indet.	smoothed	1-2cm
A	1S 28W	2-Ab	rim	sand	indet.	smoothed	2-3cm
A	1S 28W	2-Ab	rim	sand	indet.	smoothed	3-4cm
A	1S 28W	2-Ab	body	sand	indet.	indet.	3-4cm
A	1S 29W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1S 29W	2-Ab	body	sand	indet.	smoothed	2-3cm

A	1S 29W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1S 29W	2-Ab	body	sand	indet.	smoothed	3-4cm
A	1S 30W	1-PZ	rim	sand	indet.	indet.	1-2cm
A	1S 30W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1S 30W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1S 30W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1S 31W	2-Ab	rim	sand	net	indet.	1-2cm
A	1S 31W	2-Ab	rim	sand&quartz	indet.	smoothed	2-3cm
A	1S 31W	2-Ab	indet.	sand	indet.	indet.	1-2cm
A	1S 31W	2-Ab	rim	sand	indet.	smoothed	1-2cm
A	1S 32W	2-Ab	rim	sand	indet.	indet.	2-3cm
A	1S 33W	2-Ab	body	sand	cord	indet.	1-2cm
A	1S 34W	1-PZ	rim	sand	cord	smoothed	4-5cm
A	1S 34W	2-Ab	rim	sand	indet.	smoothed	3-4cm
A	1S 34W	2-Ab	rim	sand	cord	smoothed	4-5cm
A	1S 34W	2-Ab	rim	sand	indet.	indet.	1-2cm
A	1S 34W	2-Ab	rim	sand	indet.	smoothed	1-2cm
A	1S 34W	2-Ab	body	sand	indet.	smoothed	2-3cm
A	1S 34W	2-Ab	body	sand	cord	smoothed	3-4cm
A	1S 34W	2-Ab	rim	sand	indet.	smoothed	2-3cm
A	1S 34W	2-Ab	body	sand	indet.	smoothed	1-2cm
A	1S 34W	2-Ab	rim	sand	indet.	smoothed	2-3cm
A	1S 34W	2-Ab	body	sand	cord	smoothed	1-2cm
A	1S 34W	2-Ab	rim	sand	indet.	smoothed	2-3cm
A	1S 34W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1S 34W	2-Ab	indet.	sand	indet.	indet.	1-2cm
A	1S 34W	2-Ab	body	sand	cord	indet.	1-2cm
A	1S 34W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1S 34W	2-Ab	body	sand	indet.	indet.	1-2cm
A	1S 34W	3-E	rim	sand	indet.	smoothed	2-3cm
A	1S 34W	3-E	rim	sand	cord	indet.	2-3cm
A	1S 34W	3-E	body	sand	cord	scraped	2-3cm
A	1S 34W	3-E	rim	sand	indet.	smoothed	2-3cm
A	1S 34W	3-E	indet.	sand	indet.	indet.	1-2cm
A	1S 34W	3-E	rim	sand	indet.	smoothed	1-2cm
A	1S 34W	3-E	rim	sand	cord	smoothed	3-4cm
A	1S 34W	3-E	rim	sand	cord	smoothed	2-3cm
A	1S 34W	3-E	rim	sand	cord	smoothed	1-2cm
A	1S 34W	3-E	rim	sand	cord	smoothed	2-3cm
A	1S 34W	3-E	body	sand	cord	smoothed	3-4cm
A	1S 34W	3-E	body	sand	indet.	indet.	1-2cm

A	1S 34W	3-E	rim	sand&quartz	cord	smoothed	2-3cm
A	1S 34W	3-E	body	sand	cord	smoothed	2-3cm
B	0N 16W	2-Ab	body	sand	net	smoothed	7-8cm
B	0N 16W	2-Ab	body	sand&quartz	indet.	indet.	3-4cm
B	0N 16W	2-Ab	body	sand&quartz	fabric	scraped	2-3cm
B	0N 16W	2-Ab	body	sand&quartz	indet.	indet.	1-2cm
B	0N 16W	2-Ab	body	sand&quartz	fabric	indet.	1-2cm
B	0N 16W	2-Ab	indet.	sand&quartz	indet.	indet.	1-2cm
B	0N 16W	2-Ab	indet.	sand&quartz	indet.	indet.	2-3cm
B	1S 16W	1-PZ	body	sand&quartz	indet.	smoothed	4-5cm
B	1S 16W	1-PZ	body	sand&quartz	net	smoothed	3-4cm
B	1S 16W	2-Ab	rim	sand&quartz	net	smoothed	4-5cm
B	1S 16W	2-Ab	body	sand	net	smoothed	5-6cm
B	1S 16W	2-Ab	rim	sand&quartz	net	smoothed	3-4cm
B	1S 16W	2-Ab	body	sand&quartz	indet.	smoothed	2-3cm
B	1S 16W	2-Ab	body	sand&quartz	fabric	smoothed	2-3cm
B	1S 16W	2-Ab	indet.	sand	indet.	indet.	1-2cm
C	19S 21W	1-PZ	body	sand&amphib	indet.	indet.	1-2cm
C	19S 21W	1-PZ	indet.	sand&quartz	indet.	indet.	1-2cm
C	19S 22W	1-PZ	indet.	sand&quartz	indet.	indet.	2-3cm
C	19S 22W	1-PZ	indet.	sand&quartz	indet.	indet.	2-3cm
C	19S 22W	1-PZ	indet.	sand&quartz	indet.	indet.	1-2cm
C	19S 23W	1-PZ	indet.	sand	indet.	indet.	2-3cm
C	20S 21W	1-PZ	body	sand&quartz	net	smoothed	2-3cm
C	20S 21W	1-PZ	indet.	sand&quartz	indet.	indet.	1-2cm
C	20S 21W	1-PZ	indet.	sand&quartz	indet.	indet.	1-2cm
C	20S 21W	1-PZ	indet.	mica&sand	indet.	indet.	1-2cm
C	20S 22W	1-PZ	body	sand	indet.	indet.	2-3cm
C	20S 22W	1-PZ	body	sand	indet.	indet.	1-2cm
C	20S 22W	1-PZ	body	mica&sand	cord	smoothed	3-4cm
C	20S 23W	1-PZ	indet.	sand&quartz	indet.	indet.	1-2cm
C	21S 22W	1-PZ	body	sand	indet.	indet.	2-3cm
C	21S 22W	1-PZ	body	sand&quartz	indet.	indet.	1-2cm
C	21S 22W	1-PZ	body	sand	indet.	indet.	2-3cm
D	17S 28E	1-PZ	body	sand&quartz	indet.	indet.	1-2cm
D	18S 28E	1-PZ	indet.	sand&quartz	indet.	indet.	<1cm
D	18S 29E	1-PZ	body	sand&quartz	indet.	indet.	2-3cm
D	18S 29E	1-PZ	body	sand&quartz	indet.	indet.	1-2cm
D	18S 29E	1-PZ	indet.	sand&quartz	indet.	indet.	1-2cm
E	10S 30E	1-PZ	body	sand&quartz	net	smoothed	2-3cm
E	10S 30E	1-PZ	body	sand	indet.	indet.	2-3cm

E	10S 30E	1-PZ	body	sand&quartz	cord	indet.	2-3cm
E	10S 30E	1-PZ	body	sand&quartz	indet.	indet.	2-3cm
E	10S 30E	1-PZ	body	sand&quartz	indet.	indet.	2-3cm
E	10S 30E	1-PZ	body	sand&quartz	indet.	indet.	1-2cm
E	10S 30E	1-PZ	body	sand&quartz	cord	indet.	1-2cm
E	10S 30E	1-PZ	indet.	sand&quartz	indet.	indet.	1-2cm
E	10S 30E	1-PZ	indet.	limestone	indet.	indet.	1-2cm
STP	0N 20W	1-PZ	indet.	sand&quartz	indet.	indet.	1-2cm
STP	0N 30E	1-PZ	body	sand&quartz	indet.	indet.	1-2cm
STP	0N 30W	1-PZ	indet.	sand&quartz	indet.	indet.	<1cm
STP	10S 10E	1-PZ	body/base	sand	net	smoothed	3-4cm
STP	10S 10E	1-PZ	body	sand&quartz	indet.	scraped	2-3cm
STP	20S 10E	1-PZ	body	sand	indet.	smoothed	2-3cm
STP	20S 20E	1-PZ	body	mica&sand	cord	smoothed	1-2cm
STP	20S 30W	1-PZ	body	sand&quartz	indet.	indet.	2-3cm
STP	20S 30W	1-PZ	body	sand&amphib	indet.	smoothed	2-3cm
STP	30S 0	1-PZ	indet.	mica&sand	indet.	indet.	1-2cm
STP	40S 0	1-PZ	body	sand&quartz	net	smoothed	2-3cm

Appendix B

Stone Tool Artifact Inventory

Colvard II (31AH266)

2009 & 2010 Field Seasons

Block	Unit	Stratum	Proj Pts	Preforms PPtFrags	Ground Stone Tools	Scrapers	Drills	Blades	Ret Flakes	Utiliz Flakes	Total
A	0N 26W	2-Ab	0	0	1	0	0	0	0	0	1
A	0N 27W	1-PZ	0	0	0	0	0	0	0	1	1
A	0N 27W	2-Ab	0	0	0	0	0	1	0	0	1
A	0N 28W	1-PZ	0	0	0	0	0	0	1	0	1
A	0N 29W	2-Ab	0	0	2	0	0	0	3	0	5
A	0N 30W	2-Ab	0	0	0	0	0	0	0	4	4
A	0N 31W	2-Ab	0	0	0	0	0	0	0	3	3
A	0N 31W	3-E	0	1	0	0	0	0	0	0	1
A	0N 32W	2-Ab	1	0	0	0	0	0	0	0	1
A	0N 33W	2-Ab	1	0	0	0	0	0	0	0	1
A	0N 33W	3-E	1	0	0	0	0	0	0	0	1
A	0N 34W	1-PZ	0	0	0	0	0	0	0	1	1
A	0N 34W	2-Ab	0	1	0	0	0	0	3	0	4
A	0N 34W	3-E	1	0	0	0	0	0	0	0	1
A	1N 26W	2-Ab	0	0	0	0	0	0	2	0	2
A	1N 27W	1-PZ	0	0	0	0	0	0	1	0	1
A	1N 27W	2-Ab	0	0	0	0	0	0	1	1	2
A	1N 28W	2-Ab	0	0	0	0	0	1	0	1	2
A	1N 29W	2-Ab	0	0	0	0	0	0	2	1	3
A	1N 30W	1-PZ	0	0	0	0	0	0	0	1	1
A	1N 30W	2-Ab	1	1	0	0	0	1	1	1	5
A	1N 31W	1-PZ	0	0	0	0	0	0	0	1	1
A	1N 31W	2-Ab	0	0	0	1	0	0	3	1	5
A	1N 31W	3-E	1	0	0	0	0	0	0	0	1
A	1N 32W	1-PZ	1	0	0	0	0	0	0	0	1
A	1N 32W	3-E	0	0	1	0	0	0	0	0	1
A	1N 33W	3-E	0	0	0	0	0	0	0	2	2
A	1N 33W	3-E	0	0	0	0	0	1	0	0	1
A	1N 33W	4-B	0	0	1	0	0	0	1	0	2
A	1N 33W	4-B	0	0	1	0	0	0	0	0	1
A	1N 34W	2-Ab	0	0	0	0	0	1	1	3	5
A	1N 34W	3-E	0	0	0	1	0	0	0	1	2
A	1S 27W	2-Ab	0	0	0	0	0	0	0	1	1
A	1S 28W	2-Ab	1	2	0	0	0	0	0	1	4
A	1S 29W	2-Ab	0	0	0	0	0	0	0	3	3
A	1S 30W	1-PZ	0	0	1	0	0	0	0	0	1
A	1S 30W	2-Ab	1	0	1	0	0	0	0	3	5
A	1S 30W	3-E	0	0	0	0	1	0	0	0	1
A	1S 30W	3-E	0	0	0	0	0	0	0	1	1

A	1S 31W	2-Ab	0	0	0	0	0	0	0	3	3
A	1S 31W	3-E	0	0	0	0	0	0	0	1	1
A	1S 31W	3-E	0	0	0	0	0	0	0	1	1
A	1S 32W	2-Ab	0	0	1	0	0	0	0	4	5
A	1S 32W	3-E	0	0	3	0	0	0	0	0	3
A	1S 33W	1-PZ	0	0	1	0	0	0	0	0	1
A	1S 33W	2-Ab	0	1	0	0	0	0	1	2	4
A	1S 33W	3-E	0	0	0	0	0	0	1	1	2
A	1S 34W	2-Ab	0	0	0	0	0	0	0	2	2
A	1S 34W	3-E	0	0	0	0	0	0	1	0	1
B	1S 16W	1-PZ	0	1	0	0	0	0	0	0	1
C	19S 21W	1-PZ	1	0	0	1	0	0	0	0	2
C	20S 21W	1-PZ	0	1	0	1	0	0	0	0	2
C	20S 22W	1-PZ	1	0	0	0	0	0	0	0	1
C	20S 22W	1-PZ	0	0	0	0	1	0	0	0	1
C	20S 22W	1-PZ	1	0	0	0	0	0	0	0	1
C	20S 23W	1-PZ	0	0	0	0	1	0	0	0	1
C	20S 23W	1-PZ	0	0	1	0	0	0	0	0	1
C	21S 22W	1-PZ	0	1	0	0	0	0	0	0	1
D	17S 28E	1-PZ	1	1	0	0	0	0	0	0	2
D	17S 29E	1-PZ	1	0	0	0	0	0	0	0	1
D	18S 28E	1-PZ	0	0	1	0	0	0	0	0	1
D	18S 29E	1-PZ	0	0	1	0	0	0	0	0	1
D	19S 28E	1-PZ	0	0	1	0	0	0	0	0	1
E	10S 30E	1-PZ	0	0	1	0	0	0	0	0	1
STP	10S 20E	1-PZ	0	1	0	0	0	0	0	0	1
STP	20S 20W	1-PZ	1	0	0	0	0	0	0	0	1
STP	20S 30W	1-PZ	1	0	0	0	0	0	0	0	1

Appendix C

Lithic Debitage Inventory

Colvard II (31AH266)

2009 & 2010 Field Seasons

Block	Unit	Stratum	VQtz	CQtz	KnoxC	Chert	Jasp	Chal	Qtzite	MetaS	MetaD	Pied Rhy	Band Chert	Total
A	0N 26W	1-PZ	1	0	2	0	0	1	1	0	0	1	0	8
A	0N 26W	2-Ab	4	1	20	0	0	0	3	0	0	0	0	34
A	0N 27W	1-PZ	4	0	4	1	0	0	0	0	0	1	0	16
A	0N 27W	2-Ab	2	1	10	0	0	0	0	0	0	0	0	21
A	0N 28W	1-PZ	6	2	5	0	1	0	1	0	0	0	0	22
A	0N 28W	2-Ab	5	3	16	0	0	0	0	0	0	3	0	30
A	0N 29W	1-PZ	2	1	3	0	0	0	4	0	0	1	0	15
A	0N 29W	2-Ab	2	5	11	0	0	1	0	0	0	1	1	36
A	0N 30W	1-PZ	0	0	4	0	0	0	0	0	0	1	0	10
A	0N 30W	2-Ab	7	4	15	0	0	0	9	0	0	5	1	66
A	0N 30W	3-E	1	0	0	0	0	0	0	0	0	1	0	3
A	0N 31W	1-PZ	0	0	5	0	0	0	2	0	0	3	2	22
A	0N 31W	2-Ab	3	1	11	0	0	0	0	0	0	5	1	39
A	0N 31W	3-E	1	0	2	0	0	0	0	0	0	1	1	15
A	0N 31W	3-E	1	0	0	0	0	0	0	0	0	2	1	12
A	0N 32W	1-PZ	1	0	3	0	0	1	1	0	0	0	0	13
A	0N 32W	2-Ab	3	0	10	0	0	0	0	0	2	0	0	39
A	0N 32W	3-E	0	0	0	0	0	0	0	0	0	0	0	9
A	0N 32W	3-E	1	0	0	0	0	0	0	0	0	1	0	3
A	0N 32W	3-E	1	0	0	0	0	0	0	0	2	0	0	6
A	0N 32W	3-E	0	0	1	0	0	0	3	0	0	0	4	17
A	0N 33W	1-PZ	1	1	4	0	0	0	1	0	0	0	0	16
A	0N 33W	2-Ab	3	3	8	0	0	0	3	0	6	0	0	53
A	0N 33W	3-E	2	0	1	0	0	1	2	0	0	13	2	35
A	0N 33W	3-E	0	1	0	0	0	0	0	0	0	1	0	2
A	0N 34W	1-PZ	4	0	4	1	0	0	0	0	0	0	0	18
A	0N 34W	2-Ab	3	0	10	0	0	0	0	0	0	3	1	45
A	0N 34W	3-E	1	0	0	0	1	0	0	0	0	1	0	12
A	1N 26W	1-PZ	0	0	4	0	0	0	0	0	0	1	0	7
A	1N 26W	2-Ab	3	0	16	0	0	0	0	0	0	0	0	31
A	1N 27W	1-PZ	1	0	5	0	0	0	1	0	0	0	0	9
A	1N 27W	2-Ab	2	1	10	0	0	0	7	0	0	0	0	35
A	1N 28W	1-PZ	3	0	2	0	0	0	1	0	0	0	1	15
A	1N 28W	2-Ab	7	1	11	0	0	0	0	0	0	2	0	36
A	1N 29W	1-PZ	2	0	4	0	0	0	0	0	0	0	0	8
A	1N 29W	2-Ab	1	0	8	0	1	0	3	0	0	0	0	22
A	1N 30W	1-PZ	0	0	3	0	0	0	0	0	0	1	0	12
A	1N 30W	2-Ab	14	3	15	0	0	0	2	0	0	1	1	62
A	1N 31W	1-PZ	1	0	4	0	0	0	4	0	0	0	2	19
A	1N 31W	2-Ab	0	0	10	0	0	0	1	0	0	2	0	35

A	1N 31W	3-E	2	0	1	0	0	0	0	0	0	1	1	12
A	1N 31W	3-E	0	0	0	0	0	0	0	0	0	0	2	3
A	1N 32W	1-PZ	2	1	4	0	0	1	0	0	0	0	0	15
A	1N 32W	2-Ab	4	2	17	0	0	2	0	0	2	0	0	63
A	1N 32W	3-E	0	0	3	0	0	0	0	0	0	2	3	11
A	1N 32W	3-E	0	1	1	0	0	0	1	0	0	1	1	9
A	1N 32W	3-E	1	0	0	0	0	0	0	0	0	4	2	12
A	1N 32W	3-E	0	0	0	0	0	0	1	0	0	1	1	5
A	1N 33W	1-PZ	3	1	1	0	0	1	0	0	2	0	0	15
A	1N 33W	2-Ab	3	0	7	0	0	0	0	0	3	0	0	32
A	1N 33W	3-E	1	1	0	0	0	0	1	0	0	3	0	9
A	1N 33W	3-E	0	0	0	0	0	0	0	0	0	1	0	3
A	1N 33W	4-B	0	0	0	0	0	0	0	0	0	1	0	3
A	1N 33W	4-B	0	0	1	0	0	0	0	0	0	3	0	12
A	1N 33W	4-B	1	0	1	0	0	0	2	0	0	3	1	16
A	1N 34W	1-PZ	1	1	2	0	0	0	0	0	0	0	1	9
A	1N 34W	2-Ab	4	3	28	1	0	0	10	0	0	2	0	70
A	1N 34W	3-E	1	0	0	0	0	0	2	0	0	6	0	24
A	1N 34W	3-E	0	0	1	0	0	0	0	0	0	2	1	18
A	1N 34W	3-E	0	0	0	0	0	0	0	0	0	0	1	9
A	1S 26W	1-PZ	4	0	11	0	1	0	0	0	0	0	0	21
A	1S 26W	2-Ab	8	1	17	1	1	0	0	0	0	0	0	36
A	1S 27W	1-PZ	1	0	3	0	0	0	0	0	0	0	0	6
A	1S 27W	2-Ab	4	0	10	0	0	0	3	0	0	1	3	38
A	1S 28W	1-PZ	5	0	3	0	0	0	2	0	0	1	0	20
A	1S 28W	2-Ab	5	1	12	0	0	0	2	0	0	0	1	40
A	1S 28W	3-E	2	0	0	0	0	0	0	0	0	0	0	2
A	1S 29W	1-PZ	1	0	2	0	0	0	0	0	0	0	2	10
A	1S 29W	2-Ab	3	1	10	0	0	0	4	0	0	1	0	33
A	1S 29W	3-E	0	3	0	0	0	0	0	0	0	0	0	6
A	1S 30W	1-PZ	0	1	4	0	0	0	0	0	0	1	0	8
A	1S 30W	2-Ab	1	0	10	0	0	0	2	0	0	1	3	25
A	1S 30W	3-E	0	1	4	0	1	0	2	0	0	0	0	21
A	1S 30W	3-E	0	1	0	0	1	0	1	0	0	0	0	6
A	1S 31W	1-PZ	1	0	4	0	0	0	2	0	0	2	0	17
A	1S 31W	2-Ab	1	4	19	0	0	0	0	0	0	7	1	50
A	1S 31W	3-E	1	0	2	0	0	0	1	0	0	0	0	14
A	1S 31W	3-E	0	1	1	0	0	0	0	0	0	2	0	18
A	1S 32W	1-PZ	3	0	5	0	1	0	0	0	0	2	0	18
A	1S 32W	2-Ab	7	1	5	0	1	0	0	0	0	10	5	57
A	1S 32W	3-E	0	0	0	1	0	0	2	0	0	4	2	44

A	1S 32W	3-E	3	0	3	0	0	0	3	0	0	0	0	18
A	1S 33W	1-PZ	2	0	6	0	0	0	4	0	0	2	0	22
A	1S 33W	2-Ab	3	1	9	0	0	0	0	0	0	3	5	42
A	1S 33W	3-E	3	1	0	1	0	0	0	0	0	14	1	50
A	1S 33W	3-E	0	0	0	0	0	0	0	0	0	4	0	9
A	1S 34W	1-PZ	1	0	2	0	0	0	3	0	0	3	0	18
A	1S 34W	2-Ab	8	2	13	0	0	0	3	0	0	13	1	71
A	1S 34W	3-E	0	0	0	0	0	0	0	0	0	10	0	21
A	1S 34W	3-E	1	0	0	0	0	0	0	0	0	9	0	14
B	0N 16W	1-PZ	0	0	5	0	0	0	0	0	0	0	0	6
B	0N 16W	2-Ab	9	0	15	3	0	0	0	0	1	0	0	44
B	1S 16W	1-PZ	0	0	1	0	0	0	0	0	0	0	0	3
B	1S 16W	2-Ab	3	0	14	0	1	2	0	0	0	0	0	28
C	19S 21W	1-PZ	3	3	6	0	1	0	0	0	2	0	0	34
C	19S 22W	1-PZ	1	1	1	0	1	1	1	0	0	0	0	7
C	19S 22W	1-PZ	2	1	4	0	0	0	0	0	0	0	0	22
C	19S 22W	1-PZ	4	1	1	0	0	0	0	2	1	0	0	16
C	19S 23W	1-PZ	0	0	0	0	0	0	0	0	0	0	0	0
C	19S 23W	1-PZ	2	3	4	0	0	0	0	0	1	0	0	17
C	19S 23W	1-PZ	1	2	0	0	0	1	0	0	1	0	0	17
C	20S 21W	1-PZ	2	1	4	0	1	0	0	0	4	0	0	27
C	20S 22W	1-PZ	0	0	2	0	1	0	4	0	2	0	0	20
C	20S 22W	1-PZ	2	0	1	0	1	0	1	0	3	0	0	17
C	20S 22W	1-PZ	0	0	2	0	1	0	2	0	0	0	0	8
C	20S 23W	1-PZ	1	1	7	0	2	0	2	0	0	0	0	26
C	20S 23W	1-PZ	2	0	3	0	0	0	0	0	0	0	0	5
C	20S 23W	1-PZ	0	0	1	0	0	1	1	0	1	0	0	13
C	21S 22W	1-PZ	4	2	8	0	2	4	5	3	1	0	0	54
D	17S 28E	1-PZ	2	3	1	0	0	1	0	0	1	0	0	13
D	17S 28E	1-PZ	2	4	1	0	0	0	0	0	0	0	0	23
D	17S 28E	1-PZ	2	1	0	0	0	0	0	0	0	0	0	6
D	17S 29E	1-PZ	5	5	0	1	0	0	0	0	2	0	0	22
D	17S 29E	1-PZ	4	2	0	1	0	0	0	0	0	0	0	22
D	17S 29E	1-PZ	4	0	3	0	0	0	0	0	2	0	0	15
D	18S 28E	1-PZ	5	2	2	0	0	0	0	0	1	0	0	13
D	18S 28E	1-PZ	3	2	1	0	0	0	0	0	1	0	0	10
D	18S 28E	1-PZ	2	2	0	0	0	0	0	0	0	0	0	4
D	18S 29E	1-PZ	3	6	0	0	0	0	0	0	0	0	0	12
D	18S 29E	1-PZ	4	3	0	0	0	0	0	1	1	0	0	24
D	18S 29E	1-PZ	3	4	1	0	0	0	0	1	1	0	0	18
D	19S 28E	1-PZ	1	2	1	0	0	0	0	0	0	0	0	9

D	19S 28E	1-PZ	4	1	2	0	2	0	0	0	0	0	0	16
D	19S 28E	1-PZ	3	7	0	0	0	0	0	0	0	0	0	12
D	19S 29E	1-PZ	9	5	3	0	0	0	0	0	4	0	0	41
E	10S 30E	1-PZ	8	2	2	0	0	0	0	0	0	0	0	34
STP	0N 20W	1-PZ	0	0	0	0	0	0	0	0	0	0	0	0
STP	0N 30E	1-PZ	0	0	0	0	0	0	0	0	0	0	0	0
STP	10S 10E	1-PZ	0	0	0	0	0	0	0	0	0	0	0	0
STP	10S 20E	1-PZ												
STP	20S 10E	1-PZ	0	0	0	0	0	0	0	0	0	0	0	0
STP	20S 20E	1-PZ	0	0	0	0	0	0	0	0	0	0	0	0
STP	20S 20W	1-PZ												
STP	20S 30W	1-PZ	0	0	0	0	0	0	0	0	0	0	0	0
STP	30S 0	1-PZ	0	0	0	0	0	0	0	0	0	0	0	0
STP	40S 0	1-PZ	0	0	0	0	0	0	0	0	0	0	0	0

References Cited

Ayers, Harvard, L. Jill Loucks, and Bruton L. Purrington
1980 *Excavations at the Ward Site, a Pisgah Village in Western North Carolina*. Paper presented at the Southeastern Archaeological Conference, New Orleans.

Binford, Lewis
1980 Willow Smoke and Dogs' Tails: Hunter-Gatherer Settlement Systems and Archaeological Site Formation, *American Antiquity* 45(1):4-20.
1983 *In Pursuit of the Past: Decoding the Archaeological Record*. University of California Press, Berkeley.

Braun, E. Lucy
1950 *Deciduous Forests of Eastern North America*. Blakiston, Philadelphia.

Brewer. E.
1985 *Soil Survey of Ashe County, North Carolina*. U.S.D.A., Soil Conservation Service, Washington.

Cain, Daniel
2012 Revisiting Lithic Scatters: A CRM Perspective. *Southeastern Archaeology* 31(2):207–220.

Coe, Joffree
1952 Cultural Sequence of the Carolina Piedmont. In *Archaeology of Eastern United States*, edited by James B. Griffin, 301-311. University of Chicago Press.

Dean, Jesse R.
2012 Geophysical Analysis of Four South Fork New River Terrraces in Ashe County, NC. Honors thesis, Department of Geology, Appalachian State University, Boone.

Fenneman, Nevin M.
1938 *Physiography of the Eastern United States*. McGraw Hill, New York.

Goodwin, Joshua M.
2014 An Archaeological Survey of Rockshelters Within the Grandfather Mountains Attraction Area, North Carolina. Honors thesis, Department of Anthropology, Appalachian State University, Boone.

Keel, Bennie C.
1976 *Cherokee Archaeology: a Study of the Appalachian Summit.* The University of Tennessee Press, Knoxville.

Keeley, Lawrence H.
1980 *Experimental Determination of Stone Tool Use*. University of Chicago Press, Chicago.
1982 Hafting and Retooling: Effects on the Archaeological Record. *American Antiquity* 47:798-809.

Kimball, Larry R.
1989 *Planning and Functional Variability in the Upper Palaeolithic: Microwear Analysis of Upper Perigordian Tools from Le Flageolet I (Dordogne)*. Unpublished Ph.D. dissertation. Northwestern University, Evanston.

Kimball, Larry R.
1992 Early Archaic Settlement and Technology: Lessons from Tellico. In *Paleoindian and Early Archaic Research in the Lower Southeast*, edited by D. Anderson and K. Sassaman, pp.143-181. Council of South Carolina Prof. Archaeologists, Columbia.
1993 Rose Island Revisited: The Detection of Early Archaic Site Structure Using Grid Count Data. *Southeastern Archaeology* 12:93-116.
2010 Fieldnotes of excavations at Colvard II.
Kroeber, Alfred L.
1939 Cultural and Natural Areas of Native North America. University of California *Publications in American Archaeology and Ethnology* 38.
Lautzenheiser, Loretta, Mary Ann Holm, and Keith Seramur
1995 *Site Formation Processes at Site 31AH213, Ashe County, North Carolina TIP B-1035*. Technical Report submitted to the North Carolina Department of Transportation, Raleigh.
North Carolina Geological Survey (NCGS)
1988 *Preliminary Explanatory Text for the 1985 Geological Map of North Carolina*. Department of Natural Resources, Raleigh.
Peacock, Evan
2008 Space, Time, and Form at the Pinnix Site (22GR795): A "Lithic Scatter" in the North Central Hills of Mississippi. *Mississippi Archaeology*. 43(1): 67–106.
Purrington, Burton L.
1983 Ancient Mountaineers: An Overview of the Prehistoric Archaeology of North Carolina's Western Mountain Region. In *The Prehistory of North Carolina: An Archaeological Symposium*, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 83-160. North Carolina Division of Archives and History, Raleigh.
Robertson, Linda B. and Ben P. Robertson
1978 The New River Survey: A Preliminary Report. *North Carolina Archaeological Council Publication* 8.
Senior, C.D.
1981 *A Preliminary Analysis of Pisgah Phase Ceramics from the Ward Site, Northwestern North Carolina*. Ms. on file, Department of Anthropology, Appalachian State University, Boone.
Whyte, Thomas R.
2003 Prehistoric Sedentary Agriculturalists in the Appalachian Summit of Northwestern North Carolina. *North Carolina Archaeology* 52:1-19.
2009 Fieldnotes of excavations at Colvard II.
2010 *Archaeological Investigations at the Colvard II Site (31AH266) on the South Fork of the New River, Ashe County, North Carolina: Field Season 1*. Submitted to the North Carolina Office of State Archaeology, Raleigh. Copies available from the Department of Anthropology, Appalachian State University, Boone, North Carolina.
2013 Radiocarbon Dates on Materials and Contexts at Church Rockshelter No. 1 (31WT155), Watauga County, North Carolina. *North Carolina Archaeology* 62:1-26.

Whyte, Thomas R.
2014 Gifts of the Ancestors: Secondary Lithic Recycling in Appalachian Summit Prehistory. *American Antiquity* 79:679-696.
2015 Prehistoric Use of Stillhouse Hollow Cave, Watauga County, North Carolina. *North Carolina Archaeology* 64:135-149.
2019 How Ancient Lithic Scavenging Influences Models of Settlement, Mobility, and Exchange in the Appalachian Summit. Paper presented at the 2019 Southeastern Archaeological Conference, Jackson, Mississippi.
Whyte, T.R. and L.R. Kimball
2017 The Birckhead Clovis Point, Watauga County, North Carolina. *North Carolina Archaeological Society Newsletter* 27(4):1-3.