

SECTION 15.0 COLOR ANALYSIS

Ethnohistoric evidence indicated that color was an important component of Native American societies and that color carried symbolic and ritual meanings (Section 5.0). A study of artifact color was initiated to describe the visual appearance of artifacts in order to identify patterns that may relate to symbolic and ritual behavior.

The color study was implemented for selected artifacts, including projectile points, ceramic lots, specialized artifacts (i.e., pitted stones, pestles, hammerstones, and groundstone), and thermally altered stone (TAS) from selected features. The projectile points were included to provide chronological control in color use and change, and because they may have carried special connotation in their use as weapons or other functional or non-functional uses. Ceramic lots were included because previous archaeological studies indicated that temper color may have had a symbolic function (Stewart 1998a). The specialized items were chosen either because they were rare pieces, inferred to have special significance, or because they were from feature contexts which had alternate interpretations. The TAS was chosen for analysis since heated materials and materials in fire may imply regeneration and further, it was hypothesized their residues may be either avoided or reused by site inhabitants depending on their significance.

Color was determined visually using Munsell® color chips in the Rock-Color Chart (1995). All artifacts and materials were examined under a 100W light and compared with Munsell® color chips. Some artifacts and materials exhibited mottling or variable coloration; in those cases, the dominant color of the visible surface area was selected. The Munsell® color codes were then grouped by basic colors for comparative analysis (Table 15.1).

Table 15.1 Color Definitions for Selected Hickory Bluff Artifacts

White	Yellow	Black	Gray	Red	Brown	Purple	Other
10YR8/2	10YR6/6	10R2/2	5B5/1	10R3/4	10YR4/2	5P6/2	10R7/4
5Y8/1	10YR8/6	5R2/2	5G4/1	10R4/2	10YR5/4		10R8/2
5YR8/1		N2	5Y4/1	10R4/6	10YR6/2		5YR7/2
N8		N3	5Y6/1	10R5/4	10YR7/4		5YR8/4
N9			5Y7/2	10R6/2	5YR3/1		
			5YR6/1	10R6/6	5YR4/1		
			N4	5R3/4	5YR4/4		
			N5	5R4/2	5YR5/2		
			N6	5R4/6	5YR5/6		
			N7	5R5/4	5YR6/4		

PROJECTILE POINTS

Two hundred ninety-eight projectile points were examined in the study (Appendix F); thirty-nine different Munsell® color designations were recorded (Table 15.2). About 16 percent of the projectile points were noticeably heat altered and cataloged as either reddened, potlidded, fractured, or combinations of the three (Table 15.2). Eighteen of the color designations contained heat altered artifacts. About 46 percent of the heat altered color designations were identified in the 10R hues indicating brownish and grayish reds.

Table 15.2 Color Data for the Hickory Bluff Projectile Points

Munsell® Code	Munsell® Color	Heat Altered	Unaltered	Total Frequency
10R2/2	Very dusky red	1	4	5
10R3/4	Dark reddish brown	5	1	6
10R4/2	Grayish red	4	2	6
10R4/6	Moderate reddish brown	4	2	6
10R5/4	Pale reddish brown	8	4	12
10R6/6	Moderate reddish orange		2	2
10R7/4	Moderate orange pink		1	1
10YR4/2	Dark yellowish brown	1	9	10
10YR5/4	Moderate yellowish brown	8	40	48
10YR6/2	Pale yellowish brown	1	13	14
10YR6/6	Dark yellowish orange		9	9
10YR7/4	Grayish orange	3	14	17
10YR8/2	Very pale orange		8	8
5B5/1	Medium bluish gray		5	5
5G4/1	Dark greenish gray		1	1
5P6/2	Pale purple		2	2
5R2/2	Blackish red	1	1	2
5R3/4	Dusky red	3	0	3
5R4/2	Grayish red		3	3
5R4/6	Moderate red	1	0	1
5R5/4	Moderate red		1	1
5Y4/1	Olive gray		9	9
5Y6/1	Light olive gray		15	15
5Y8/1	Yellowish gray		8	8
5YR4/1	Brownish gray	2	6	8
5YR4/4	Moderate brown	1	1	2
5YR5/2	Pale brown		5	5
5YR5/6	Light brown		1	1
5YR6/1	Light brownish gray	1	5	6
5YR7/2	Grayish orange pink	1	1	2
5YR8/1	Pinkish gray		2	2
N2	Grayish black		10	10
N3	Dark gray		10	10
N4	Medium dark gray	2	12	14
N5	Medium gray	1	14	15
N6	Medium light gray		6	6
N7	Light gray		6	6
N8	Very light gray		2	2
N9	White		15	15
TOTAL		48	250	298

Unaltered (i.e., no visible evidence of heat altering) projectile point color designations varied widely. Those colors with the highest frequencies included moderate yellowish brown (jasper), light olive gray (argillite and rhyolite), medium gray (argillite and rhyolite), and white (quartz). The basic colors of projectile points were predominantly browns and grays (Table 15.3). Smaller percentages of points were red and white. Overall, the highest percentage of heat altered projectile points were red (Table 15.3). Unaltered projectile points were mostly browns or grays; only smaller percentages were white, yellow, black, or red.

Table 15.3 Color Analysis for the Hickory Bluff Projectile Points

Color	Heat Altered		Unaltered		Total	
	#	%	#	%	#	%
White	0		35	14.0	35	11.7
Yellow	0		9	3.6	9	3.0
Black	2	4.2	25	10.0	27	9.1
Gray	4	8.3	73	29.2	77	25.8
Red	25	52.1	15	6.0	40	13.4
Brown	16	33.3	89	35.6	105	35.2
Purple	0		2	0.8	2	0.7
Other	1	2.1	2	0.8	3	1.0
Total	48		250		298	

Variations in lithic material color were examined for the different time periods represented by the temporally diagnostic projectile points. The point assemblage frequencies for the Early-Middle Archaic and the Late Woodland periods were too small for accurate comparisons. The Late Archaic projectile points reflected mostly gray and brown lithic materials with similar percentages of white, black, and red materials (Table 15.4). The Early Woodland

Table 15.4 Color Analysis for the Temporally Diagnostic Projectile Points

Color	Early-Middle Archaic		Late Archaic		Early Woodland		Early-Middle Woodland		Middle Woodland		Late Woodland	
	#	%	#	%	#	%	#	%	#	%	#	%
White			9	13.4	5	16.1	2	3.6				
Yellow					1	3.2	3	5.4				
Black			7	10.4	3	9.6	4	7.2			1	33.3
Gray			21	31.3	8	25.8	7	12.7	10	66.6		
Red			8	11.9	5	16.1	7	12.7	2	13.3	1	33.3
Brown	2	100	20	29.8	8	25.8	32	58.1	3	20	1	33.3
Purple			2	2.9								
Other					1	3.2						
Total	2		67		31		55		15		3	

point assemblage also consisted of gray and brown materials; however, higher percentages of white and red projectile points than the preceding period were observed (Table 15.4). During this time, a slight decrease in the percentages of black and yellow material in the assemblage

occurred. Projectile points identified for the Early-Middle Woodland period demonstrated an increase in the use of brown materials and a corresponding decrease in selection of gray lithic materials. Smaller percentages of white, black, and red materials were noted from the preceding period and a slight increase in the use of yellow lithic material was observed. The Middle Woodland period displayed an increase in the use of gray lithic materials with smaller percentages of brown and red lithic materials.

CERAMIC LOTS

Ten ceramic lots, representing Marcey Creek and variations in Clay Tempered ceramics, were examined as part of the color study (Table 15.5). 'Classic' and transitional examples of the most common types of ceramics at Hickory Bluff were selected; this portion of the study focused on identifying characteristic temper and inclusions for each variation and determining change or

Table 15.5 Color Data for Selected Ceramic Lots at Hickory Bluff

Type	Lot	Sherds	Temper	Munsell® Code	Munsell® Color	Inclusion	Munsell® Code	Munsell® Color
Marcey Creek	MA01	6	steatite	N5	Medium gray	Iron oxide	10R4/6	moderate reddish brown
Marcey Creek	MA02	9	steatite	N7	Light gray	Clay	5YR6/4	Light brown
Marcey Creek	MA04	4	schist	N4	Medium dark gray			
Marcey Creek	MA05	8	steatite	N5	Medium gray	Mica	5Y7/2	Yellowish gray
	MA05					Iron oxide	10R4/6	Moderate reddish brown
Clay Tempered Cord-marked	CC02	4	grog	10R6/6	Moderate reddish orange	Clay	10R4/6	Moderate reddish brown
Clay Tempered Cord-marked	CC11	3				sandstone	10YR6/2	Pale yellowish brown
	CC11					Iron oxide	10R4/6	Moderate reddish brown
Clay Tempered Net-impressed	CN05	4				Iron oxide	10R6/6 to 5YR6/4	Moderate reddish orange to light brown
Clay Tempered Net-impressed	CN08	5				sand	N9, N2, N4, 10R5/4	White, light gray, medium dark gray, pale reddish brown
Clay Tempered Net-impressed	CN12	2				quartz	N9, 5YR8/1	White, pinkish gray
	CN12					Iron oxide	10R4/6 to 5YR5/6	Moderate reddish brown to light brown
Clay Tempered Cord-marked	HCC4	6				Iron oxide	10R4/6	Moderate reddish brown
TOTAL		51						

continuity of color through time. To account for variability in temper and inclusions coloration, several sherds from each lot were examined to determine ‘most common’ or dominant colors.

Colors of temper and inclusions varied across this small ceramic sample (Table 15.6). Temper changed from gray steatite and schist in Marcey Creek ceramics to reddish grog in the Clay Tempered cord-marked sample. A wider variety of inclusions were identified in the Marcey Creek sample including clay, mica, and iron oxide with color variations consisting of red, gray, and brown. The Clay Tempered ceramic lots contained clay and iron oxide inclusions reflecting red and brown colors, and white, gray, black, and red sand, sandstone and quartz inclusions.

Table 15.6 Color Analysis for Selected Ceramic Lots

Color	Marcey Creek		Clay Tempered Cord-Marked		Clay Tempered Net-Impressed		Clay Tempered	
	<i>Temper</i>	<i>Inclusions</i>	<i>Temper</i>	<i>Inclusions</i>	<i>Temper</i>	<i>Inclusions</i>	<i>Temper</i>	<i>Inclusions</i>
White						X		
Black						X		
Gray	X	X				X		
Red		X	X	X	X	X		X
Brown		X		X		X		

ARTIFACTS/FEATURES

Several specialized tools (the two gorget fragments and the ulu fragment) and two discrete artifact-bearing features, Features 202 and 294, were selected for color (Table 15.7). Feature 202 was a small circular basin containing a capstone, a small double pitted stone and pestle resting side by side, and a cluster of 10 clay-tempered ceramics. Feature 294 was a small discrete cluster of three artifacts: an anvil (3997-1), a hammerstone (3997-2) and an unmodified cobble. These artifacts were vertically stacked and the arrangement appeared to be intentional.

Table 15.7 Color Data for Specialized Features and Artifacts from Hickory Bluff

Catalog No.	Artifact Type	Munsell® Code	Munsell® Color	Comment
2376-1	Gorget	N3	Dark Gray	
2377-1	Gorget	5YR3/1	Dark Brownish Gray	
3481-1	Ulu	5YR4/1	Brownish Gray	
2379-1	Abrader/Double Pitted Stone/Hammerstone	10YR7/4	Grayish Orange	Feature 202
2379-2	Pestle	10YR7/4	Grayish Orange	Feature 202; 10R5/4 on one end
2380-1	Cobble	5Y6/1	Light Olive Gray	Feature 202
3997-1	Abrader/Hammerstone	10YR7/4	Grayish Orange	Feature 294; 10R4/6 along one edge
3997-2	Hammerstone	10YR6/6	Dark Yellowish Orange	Feature 294
3997-3	Cobble	10YR7/4	Grayish Orange	Feature 294

The three ground stone implements (i.e., the gorgets and the ulu fragment) were all dark grays or browns. The two tools associated with Feature 202 were both grayish orange (Table 15.7) and categorized as brown (Table 15.8); however, the pestle (#2379-1) was reddened on the distal end. The hammerstone from Feature 294 was yellow.

Table 15.8 Color Analysis for Specialized Features and Artifacts

Color	Gorgets	Ulu	Feature 202	Feature 294
Yellow				1
Gray	1		1	
Red			*	
Brown	1	1	2	2

* Pestle 2379-1 was reddened on one end

TAS Features

Components from five TAS features (Features 98, 173, 175, 230, and 296) were examined to determine both a dominant color for each TAS and each feature as a whole. Over 255 individual TAS were examined (Table 15.9). Feature 98 exhibited nine color designations; although most of the TAS were grayish orange (36.5%) and light brown (23%). Very few TAS in this feature were designated red. Only four color designations were identified for Feature 173; the TAS were primarily pale yellowish brown (60.6%) and pale reddish brown (30.3%). Feature 175 was represented by eight color designations with 22.7 percent of the TAS defined as a pale yellowish brown and 18.1 percent identified as a light brownish gray. Feature 230 exhibited 12 color designations; 34 percent of the TAS were defined as pale reddish brown and 18 percent were identified as light brown. Feature 296 yielded twenty color designations; 28.9 percent of the TAS were recorded as a grayish orange and 14 percent were grayish orange pink.

Table 15.9 Color Data for Selected TAS Features from Hickory Bluff

Feature		98	173	175	230	296
No. of TAS	Total = 258	52	33	22	44	107
Munsell® Code	Munsell® Color					
10R2/2	Very dusky red	0	0	0	0	1
10R3/4	Dark reddish brown	0	1	0	0	1
10R4/2	Grayish red	0	0	0	0	2
10R5/4	Pale reddish brown	2	10	3	15	10
10R6/2	Pale red	0	0	0	0	5
10R6/6	Moderate reddish orange	0	0	0	0	3
10R7/4	Moderate orange pink	0	0	0	0	3
10R8/2	Grayish orange pink	0	0	0	0	1
10YR4/2	Dark yellowish brown	0	2	0	0	1
10YR5/4	Moderate yellowish brown	0	0	1	0	0
10YR6/2	Pale yellowish brown	5	20	5	3	6
10YR6/6	Dark yellowish orange	1	0	0	1	0
10YR7/4	Grayish orange	19	0	2	6	31
10YR8/2	Very pale orange	7	0	3	1	12

Table 15.9 Color Data for Selected TAS Features from Hickory Bluff (Continued)

Feature		98	173	175	230	296
No. of TAS	Total = 258	52	33	22	44	107
Munsell® Code	Munsell® Color					
10YR8/6	Pale yellowish orange	2	0	1	0	1
5R4/2	Grayish red	0	0	0	0	1
5Y7/2	Yellowish gray	1	0	0	1	0
5YR5/2	Pale brown	3	0	0	3	0
5YR6/1	Light brownish gray	0	0	4	1	1
5YR6/4	Light brown	12	0	0	8	7
5YR7/2	Grayish orange pink	0	0	3	2	15
5YR8/1	Pinkish gray	0	0	0	2	0
5YR8/4	Moderate orange pink	0	0	0	1	0
N2	Grayish black	0	0	0	0	2
N3	Dark gray	0	0	0	0	3
N5	Medium gray	0	0	0	0	1

Overall, each feature may reflect different combinations of color. Feature 98 TAS were mostly brown and white (Table 15.10); Feature 175 TAS would appear to be predominantly brown and gray, with a smaller percentage of red and white. The TAS from Features 173, 230, and 296 exhibited mostly browns and reds (Table 15.10).

Table 15.10 Color Analysis For Selected TAS Features

Color	Feature 98		Feature 173		Feature 175		Feature 230		Feature 296	
	#	%	#	%	#	%	#	%	#	%
White	7	13.5	0		3	13.6	3	6.8	12	11.2
Yellow	3	5.8	0		1	4.5	1	2.3	1	0.9
Black	0		0		0		0		6	5.6
Gray	1	1.9	0		4	18.1	2	4.5	2	1.9
Red	2	3.8	11	33.3	3	13.6	15	34	22	20.6
Brown	39	75	22	66.6	8	36.4	20	45.5	45	42
Other	0		0		3	13.6	3	6.8	19	17.8
Total	52		33		22		44		107	

INTERPRETATIONS

One avenue to investigate symbolism and potential cognitive and belief systems is through artifact color. The color of objects served as major symbolic media in belief systems, ceremonies and social life (Section 5.0). Given that rock is a basic resource on the landscape, in recurrent use for thousands of years, rock color may be an original and underlying basis for symbol use, including and extending into ethnohistoric contexts. The choice of color of projectile points may be of symbolic import. Since projectile points are a special tool category, serving to procure and kill animals, they played a vital role in the sustenance of life. In the activity of stalking and killing game, the animal is transformed from life to death. At Hickory Bluff, colors of hafted items, while certainly tied to practical concerns, such as raw material

availability, show some patterns of selection. In examining the Late Archaic and Early Woodland projectile points, five predominant colors were used, gray, brown, white, red, and black. While it is difficult to make emic assertions on the meaning of these colors, the use of a broad spectrum of certain recurring colors is of interest. The use of grays, browns, and black may be considered “dark” colors and perhaps an appropriate choice for killing game, as these are often associated with death and disharmony. The use of white and red had opposite connotations of the dark colors, and it is in this duality that some important hidden expressions may be preserved. The meaning of white and red were often associated with the living world, but these colors were often used to perpetuate a continuum between life and death.

The ceramic assemblage also provides information about potential social messages. In analyzing color schemes, the Marcey Creek ceramics, intentionally tempered with steatite, have a predominately gray color (light gray with some white). The production of steatite tempered vessels may have symbolic importance, showing both continuity with former steatite bowls and the choice of an agent which has a certain shine or sparkle (Stewart 1998a, 1998b). In taking this observation further, it should be noted that Marcey Creek vessels at Hickory Bluff have gray color, but they also contain red and brown inclusions, which can suggest deliberate, symbolic choices. The Clay Tempered wares show a more diverse and obvious color scheme choice compared to the Marcey Creek vessels, consisting of red tempering agents with inclusions of white, black, gray, red, and brown colors. Taken together, there is much variability in color schemes and, like the projectile points, there are recurrent colors that likely have symbolic purpose. The darker hued Marcey Creek vessels may indicate changes in use in the utilitarian and non-secular realms. The Clay Tempered wares are a form which appear to have much more diversity in color schemes, more comparable to the diversity of colors evidenced in projectile points. The identification of diverse color patterns is consistent with the diversity found in point forms, and dominant light versus dark colors may convey social messages.

The rare finds of two gorgets and one ulu provided information about potential rituals as well as human choices. The two gorgets were carefully manufactured, showed shaping, polishing, and hole perforations. One gorget was dark gray and one was dark brownish gray. The ulu was brownish gray and showed fine craftsmanship and careful manufacture in polishing and beveling. Ulus are associated with filleting and defleshing, and thus, they may be viewed as items of transformation. These items are rare archaeologically, and their fine craftsmanship suggest behaviors other than routine economic activity. All three items are dark colors and based on ethnographic survey, may be considered as a sign of death and decay.

An interesting consideration is the potential duality of the life and death cycles of TAS features. During their use life, these features serve a significant role, and their heat, fire, and smoke are animators of sacred and powerful sources. After their use, TAS features become inanimate objects. Overall, each feature may reflect different combinations of color on the landscape. Feature 98 was made up of TAS which was mostly brown and white; Feature 175 was predominantly brown and gray, with a smaller percentage of red and white; and TAS from Features 173, 230, and 296 exhibited mostly browns and reds. In any visits to Hickory Bluff by later groups, inanimate TAS features would have been observed, and taken as a sign of variable past actions. Several TAS features were apparently viewed as re-usable rock sources, whereas others were not used again, possibly because of non-secular associations.