Test Pit Digging

Anthropology 377

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For any given archaeological site 100% excavation is rarely obtained; as was the case at 44AH10: Robinson's Gap Site on the Blue Ridge Parkway. To compensate for this a process of grid-oriented test pits can be placed on the site to give archaeologists a general idea as to the density of a site, the boundaries defining the site, and general time spans as to which areas were used when.

The process of test pit digging is relatively simple. The pits are dug along a grid line and in various other locations in regards to the grid line. With 44AH10, pits were dug along a 425 foot line at 25 foot intervals. In addition to these pits numerous other pits were dug at 25 to 50 foot intervals, 45 degrees East of North. The placement of these pits off the grid was defined with the aid of a Brunton. Once defined the pits along the grid line and others are ready to be dug.

The pits were around one foot in diameter and were to be dug to level of sterile soil, which was usually 18" to 24". All material recovered was sifted and bagged. Each pit had its own separate bag including information dealing with the pit's location, such as: S25E200 this denotes that the pit was located 25 feet South of the 200 foot grid marker. All material from the test pits was cleaned separately and then rebagged. Next all flakes, points, and other lithics were counted. This information along with the pits' locations were plotted on a grided map. Once all these processes were completed the conclusions could be drawn on site density, site boundaries, and time frames.

With 44AH10 patterns can be noted from the information yielded
from test pits. The highest concentration of lithic material seems to be along the grid line between the 125 foot and 275 foot markers. As pits were dug out from the grid line, there seemed to exist a general decline in the total amount of lithic present. This is on account of the sloping of the land. Also the presence of the logging road and pot hunter's back dirt disturbed the soil significantly making the process of defining the site boundaries more difficult. As you move out toward Area B the amount of lithic material in outward directions reduces significantly. At the 425 foot marker the material almost ceases to exist. South of the 350, 375, and 400 foot markers the same reduction is noted. Thus the density seems more concentrated between Area A and Area B from the 125 foot and the 275 foot markers. Although further conclusions need to be drawn and the presence of both the logging road and the pot hunter's back dirt need to be accounted for, these seem to the general trends of the 44AH10 site at Robinson's Gap.
Physiographic Background

The 44AH10 archaeological area and its surrounding environs provide suitable location for habitation. This report will focus mainly on the local geology, topography, climate, soils, forest cover, and water sources.

Topography

The 44AH10 site lies entirely within the Blue Ridge physiographic province. Access to the site is limited to two entrances. The main route is directly off the Blue Ridge Parkway south onto State Route 607. This route leads directly to Robinson's Gap, where the dig site is located. The back entrance to the site is also State Route 607, but it is accessible in the town of Buena Vista, Virginia and circles around the back of the site and joins with the front access of 607.

Water Sources

There are several convenient water sources within a five-mile radius of Robinson's Gap. The main source is a spring located about a mile southwest of the 44AH10 excavation area near Punchbowl mountain. The remaining water sources are a series of rivers, creeks, and runs which also flow within a five-mile radius of the site.

To the northeast in Amherst County runs Roberts Creek, Shady Mountain Creek, and Pedlar River. Directly east of the site run two branches of the Little Irish Creek, which flows into the Lynchburg Reservoir. South of Robinson's Gap and still in Amherst County is Bluff Creek which flows east into Enchanted Creek. To the west in Rockbridge County there are also several water sources. To the north are Indian Gap Run and the South Fork Chalk Mine Run, along with Pedlar Gap Run. Directly to the west is Lowry Run and to the south are Poplar Cove Run, North Fork Bennett's Run, and South Fork Bennett's Run. Also, a branch of Irish Creek runs directly through Robinson Gap.

Local Geology

The bedrock of the 44AH10 excavation area is the Pedlar Formation, (Bloomer and Werner). This formation is prevalent throughout the 44AH10 site area. This formation is bordered on the northwest by the...
Cambrian formations of Tomstown, Antietam, Harpers, and Unicoi, with the Snowden member mainly to the west and east.

To the south the Catoctin and Swift Run (Late Precambrian) formations are prevalent, with both Pedlar and Marshal basement complexes.

**Precambrian System**

**Pedlar Formation**

The Pedlar Formation consists mainly of granitic, syenitic, granodioritic, anarthositic, quartz dioritic, and unakitic rocks (Bloomer and Werner). The colors range from green to red to white, consisting mainly of coarse-grained granular rock.

**Swift Run Formation**

**Catoctin**

The Catoctin formation is primarily greenstone, which is a lithic source for 44AH10. Its location to 44AH10 makes it the closest lithic source to 44AH10.

**Unicoi Formation**

The Unicoi formation is the basal formation of the Chilowee group (Bloomer and Werner) in the Blue Ridge area, and is overlain by the Harpers formation. It is comprised of greywacke, small pieces of quartzite, and volcanic rocks. The Unicoi is basically unmetamorphosed.

**Harpers Formation**

The Harpers formation is lithologically transitional between subgreywacke and quartzite (Bloomer and Werner). The base of the formation is greyish-green subgreywacke and the quartzite increases upwardly into about 75% quartzite.

**Antietam Quartzite**

This particular formation has a transition zone of dolomitic sandstone (Bloomer and Werner). The major portion of the Antietam Quartzite formation is homogeneous consisting of quartzite.
Tomstown Dolomite

Tomstown Dolomite consists of dolomite ranging in color from a tan to a dark bluish-grey, and increasing in grained texture (Butts, 1940).

Soils

The soils of the 44AH10 project area dictate the many different types of fauna and flora that were available for human use during the prehistoric period. From the evidence found on the site, it is safe to conclude that both prehistoric and historic Indian practices took place on the 44AH10 site.

Time and topography are the major factors influencing the soil formations in Robinson Gap. Of course the climate, flora, and fauna are also of great importance. The soil is almost entirely developed beneath a forest cover, with the exception of stream deposits. The soils of the project area are moderately acidic, thus creating an area not conducive of good bone preservation.

The 44AH10 project area had been divided into two designated areas, A and B, about 50 meters apart. Area B had been part of a logging zone and did not seem to have a designated plow zone in the top soil levels. Instead, the top levels were mainly dark organic materials. Area A, on the other hand, had a distinct plow zone.

The basic soil formation of the area includes a humus layer on top (A₀) which consists mainly of organic material and is a dark brown or black. The next level is the A horizon (A₁) which is the plow zone. It is dark brown and here the cultural materials are mixed together. Beneath A₁ is A₂, which is the active leaching zone.

The B horizon soils typically are yellowish or reddish-brown in any number of hues. The B horizon also includes any soils that have been leached of minerals by water sinking down to the lower levels.

The C horizon is basically a mixture of soil and pieces of rock. The different levels, if not distinguishable by the color, are different in texture, ranging through combinations of clays, silts, and sands.

Climate

The climatic history of the Blue Ridge area is known primarily through palynological investigations (Carbone 1976). These investigations indicate that from present to 1000 BC, the climate has, in general, been cooler, wetter, and basically more stable than from 4500 BC to 1000 BC, which was a dry, warm period, proceeded from 6500 BC to 4500 BC by a warm and wet climate. From 8500 BC to 6500 BC
The climate was moderately cool and dry. Prior to 8500 BC, the climate was very cool with a slight increase of precipitation.

The modern climate (U.S.S.C.S. 1975) is characterized by mean annual temperatures ranging from 59° F to 54° F at lower elevations and 50° F to 45° F at the higher elevations along the Blue Ridge. In general, the temperature drops an average of 3°F per thousand feet in elevation between the valley and the crest of the Blue Ridge.

Flora

During the last 10,000 years, there have been many environmental shifts in the Middle Atlantic (Carbone, 1976). These shifts were characterized by changes in climate and ranged from late glacial (including Alpine Tundra) to Pre Boreal/Boreal (including bogs) through Early Atlantic (including Oak, Hickory, and more grassy areas).

The forest cover, at present, around and including the project area, is 'I don't know yet'.

Fauna

The fauna in the Robinson Gap area is a wide variety of animals, differing depending upon proximity to water, elevation, and living habits. The reptiles in the area range from spotted and box turtles to a variety of salamanders, frogs, and toads, with a few species of snakes, including the Brown snake.

Birds of the area include Turkey Vultures, Teals, and an assortment of hawks.

Mammals in the site area are many. Deer mice, moles, Raccoons, Black bear, Grey squirrel, pine vole, Grey fox, Bobcat, Woodchuck, and Eastern Chipmunk, to name a few.