Blood residue remained on one tool. The blood residue analysis demonstrated that a Yadkin point had been used to hunt a species of rodent, most likely a larger one like a beaver or a porcupine. Larger rodents like beavers or porcupines would have provided more meat as well as useful products like quills or fur pelts. In fact, beaver bones have been identified at other Late Woodland archaeological sites in the region, for example in Botetourt and Roanoke counties to the northwest.

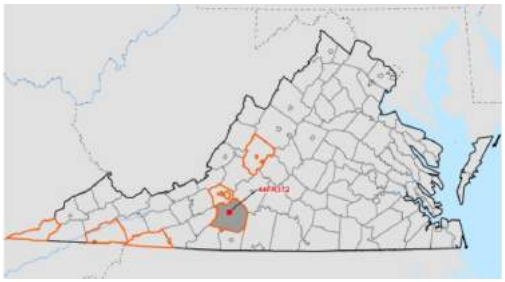
Yadkin that had the residue

Travel and Trade

Prehistoric Native Americans who lived at this site needed various things for their daily lives, including plant and animal foods, and wood for tools, building, or for camp fires. They also required stone for toolmaking. Most of these things, including stones like quartz and quartzite, were available locally and on a daily basis. But other types of stone, like chalcedony, flint, and rhyolite are not available near the site. Instead, these stones either had to be collected as part of seasonal-to-annual migrations, or during long-distance travels to bring food and/or tool stone to the site. Alternatively, the population may have had established trading relationships with more distant settlements and groups.

Undiagnostic biface fragments derived from quartz, quartzite, chalcedony, and chert

Either through long-distance travel or trade, these people were able to obtain the stone they desired from as far away as west of the Blue Ridge Mountains, in Lee, Washington and Grayson counties in the south, in Roanoke County in the west, and in Rockbridge County to the north.



Lithic sources

Summary

Site 44FR0372 was an encampment settled by Native Americans mainly during later prehistory, prior to the arrival of Europeans in North America in general and western Virginia specifically. The styles of their stone tools and pottery, in addition to radiocarbon dates from charcoal, allowed archaeologists to calculate the site's age and to conclude that it was most intensively occupied during the Late Woodland period. Beyond chronology, archaeologists learned that the people either went on carefully planned long-distance hunting and stone-collecting trips, or managed to form complex trade relations with surrounding groups of people. Through either, or both, of those actions, the population obtained the types of stone they needed for making some of their most important tools, and they also may have hunted certain animals in favorable locations distant from the settlement. Particularly intriguing was the blood residue evidence, which pointed to hunting animals we might not normally think of as food.

R. CHRISTOPHER GOODWIN & ASSOCIATES, INC.

Site 44FR0372

Archaeological Data Recovery at Site 44FR0372 —Virginia

Introduction

Natural gas pipelines certificated by the Federal Energy Regulatory Commission require compliance with the National Historic Preservation Act, which mandates that archaeological sites eligible for listing in the National Register of Historic Places must be documented when they are impacted by new projects. As a result of the pipeline's projected effects to archaeological sites, R. Christopher Goodwin & Associates, Inc., a private company dedicated to the preservation and documentation of our country's heritage, explored two archaeological sites in Franklin County, Virginia.

Below is a summary of the results of archaeological investigations at Site 44FR0372 (the site's assigned Virginia state site number), which was excavated during the summer of 2018.

Site 44FR0372

Natural Setting and Excavation Overview

Site 44FR0372 was located on a terrace where the Blackwater River and Little Creek meet, and along the base of a steep slope to the east. During archaeological excavations approximately 1,600 square feet of earth were excavated. In addition, archaeologists carefully stripped away the uppermost plowed soils from an area of almost 6,000 square feet. Removal of that topsoil enabled the archaeologists to quickly determine the presence or absence of the archaeological site in that area.

Block B Profile showing the dark Ab horizon

Beneath the stripped soils, archaeologists found a brown silt soil in the southern and central portions of the site. This soil was a former ground surface, what soil scientists refer to as an "Ab soil horizon." That horizon was buried beneath soils deposited by nearby streams and erosional runoff from widespread tree-cutting (deforestation) in the 1700s and 1800s.

The Ab horizon contained a large number of prehistoric Native American artifacts. These included nearly 1,200 rock flakes or "debitage" (the waste left from prehistoric stone tool manufacturing), almost 200 pieces of prehistoric ceramics, six flake tools (sharp, minimally shaped flakes of stone), and two cores (stone cobbles from which flakes were removed for tool manufacture). In addition, archaeologists found approximately 50 "bifaces."

Bifaces are stone tools with carefully chipped surfaces on both sides, tools that are commonly called arrowheads. Actually, these tools were not always arrowheads; some might have been spearheads or knives. Several bifaces, a flake tool, and around 300 pieces of debitage also were recovered from an older, B horizon soil that lay buried beneath the former ground surface Ab horizon soils.

Aside from stone tools, archaeologists also discovered pieces of wood charcoal. Charcoal is very important because archaeologists can determine the types of wood it came from as well as use it to date the site. Selected charcoal samples found during the excavation were sent to a laboratory to be dated. The charcoal was radiocarbon dated by calculating the date at which the plant died, in other words when the tree or branch was cut. The dates placed the age of the Ab horizon soils between the late Middle Woodland period (approximately A.D. 500-900), and the early historic period (approximately A.D. 1650-1800).

Chronology and Artifact Types

Late Woodland projectile points

The chronology of the site was clarified through studying items recovered during the excavations. The ages of some of these distinctive artifacts, possessing recognized styles, allows cross-dating based on the presence of the same artifact types at other sites for which the chronologies are well documented. The Late Woodland period (A.D. 900-1607), the primary period of occupation at this site, was represented by various styles of triangular arrow points typical of this period, including what archaeologists have named the Yadkin, Caraway, and Clarksville types, and by pottery sherds of the variety known as Dan River Ware. Yadkin arrowheads date from A.D. 300 to 1300, Caraway arrowheads date from A.D. 1200 to 1700, and Clarksville arrow points date later, between A.D. 1400 and 1700.

Archaeologists hypothesize that Dan River Ware pottery spread from an origin in North Carolina into southern Virginia. This pottery is defined on the basis of the sand potters mixed into the clay paste as a way to keep pots from exploding while being fired (what is known as "temper"). Dan River Ware seems to be an advancement from an earlier quartz-tempered pottery known as Uwharrie. Dan River Ware pots sometimes were undecorated, and sometimes they were decorated with various designs. Decorations were made by impressing twine or rope, netting, fabric, corn cobs, or patterned stamps into the clay before it was fired. Like the earlier Uwharrie pottery, quartz was added to Dan River ceramic pastes, but the sand additive distinguishes it from the preceding type.

Late Woodland Dan River ceramic sherds

Food Habits

Seven Late Woodland stone tools had cutting surfaces that proved they were used for cutting meat. The fact that people hunted animals for food is not surprising, but archaeologists want to know what kind of animals had been eaten. Unfortunately, no animal bones had been preserved at this site. Therefore, archaeologists tested the tools to see if animal blood (blood residue) had remained on any of them over the centuries since their last use, as is sometimes the case. When blood residues remain, it is possible to determine the animal(s) that were hunted or butchered.