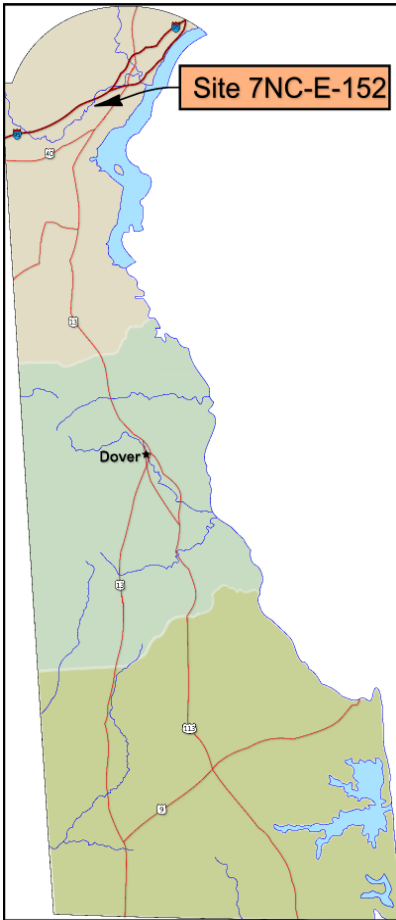


# Native Americans at Churchmans Marsh

Archaeological Investigations at  
Site 7NC-E-152

**Airport and Churchmans Road  
Intersection Improvements Project  
New Castle County, Delaware**





Delaware Division of Historical  
and Cultural Affairs

***Acknowledgments.** The **Federal Highway Administration** and the **Delaware Department of Transportation** sponsored the archaeological investigations at Site 7NC-E-152. Kise, Straw, and Kolodner conducted the fieldwork; URS Corporation reported the results and produced this booklet.*

November 2010



## ***Introduction***

Archaeological site 7NC-E-152 represents a temporary camp that was part of the Native American settlement system surrounding Churchmans Marsh. Archaeologists found the site in the spring of 2001 while surveying areas to be disturbed by improvements to the Airport Road and Churchmans Road intersection. More extensive excavations at the site were completed in 2002 and turned up hundreds of stone tools and other artifacts representing Native American occupation beginning as early as 6500 B.C. As a result, archaeologists from DelDOT and the Delaware State Historic Preservation Office concluded that the site represented an important archaeological discovery eligible for listing in the National Register of Historic Places. Because of the significance of the site, additional excavations were conducted in 2004 to recover the archaeological information before roadway construction.

During the Native American occupation of the site (circa 6500 B.C. to circa A.D. 1650), the environment went through many changes. Ice Age conditions disappeared and plants and animals like those of today gradually spread into the area from warmer regions in the south. Native American groups throughout the region adapted their ways of life to these new circumstances.



*Excavations at Site 7-NC-152 involved hand excavation (distant right in the photo) and screening of soil for artifacts (left).*

## *Native Americans at Churchmans Marsh*



*Aerial view of Churchmans Marsh with the Christina River flowing from the bottom of the photo and White Clay Creek from the left.*

Churchmans Marsh is the name given to a large expanse of wetlands in the low-lying area where White Clay Creek flows into the Christina River. The marsh began to develop around 6500 B.C. because of the rising sea level as glaciers melted at the end of the last ice age. Marsh environments are extremely productive and therefore attractive to people who hunt and gather wild plant foods. Marsh environments are attractive to migrating waterfowl, muskrat, and fish, as well as many other animal species that Native Americans hunted. Edible plant foods found in marshy environments include the tubers (thickened roots) of cattails and wild rice. Nuts and berries were plentiful on the drier ground near the marsh.

Because the vicinity of the marsh is so rich in resources, Native Americans visited the area often over thousands of years, establishing camps and staying as long as food was readily available. Archaeological sites resulting from these camps are found on the floodplains of rivers, on higher ground around the rim of low-lying floodplains, and along smaller tributary streams. Many of these sites have been investigated over the years and have provided insights on how these early inhabitants of the

region organized themselves across the landscape and acquired the resources they needed to survive.

During the period between 6500 and 3000 B.C., which archaeologists call the Archaic period, population density was low and family groups could move their camps frequently to be in the best, resource-rich areas. In the Woodland I period, extending from 3000 B.C. to A.D. 1000, camps were more often multi-seasonal as people remained in one place for longer periods of time. However, seasonal camps and special-purpose procurement camps were also common during this period. By the end of the Woodland I period, pottery was used for cooking and storage. After A.D. 1000, known as the Woodland II period, Native Americans continued to settle around Churchmans Marsh in seasonal camps. While people in other areas of North America began growing their own food, settlers in the Coastal Plain continued their successful hunter-gatherer way of life. At the time Europeans entered the region, known as the Contact period, Native Americans were called the Delaware, or Lenape, by Europeans. The Delaware and Lenape lived in the lower Delaware Valley in villages of a few hundred people. Although hunting and gathering were still important, they also practiced agriculture, growing corn, beans, and squash.

In the Churchmans Marsh area, archaeologists have found several large sites representing multi-seasonal camps adjacent to the marsh and along White Clay Creek. The sites are in resource-rich locations and show evidence of repeated occupations dating from around 6500 B.C. to the time of European contact. The sites have large, deep pits thought to be for storing food, which could indicate occupations of many seasons. Evidence of living floors likely representing the interiors of houses has also been found. Smaller sites, interpreted as seasonal camps, have been found in various locations, including along the Christina River and the upper reaches of White Clay Creek. Such camps generally have fewer artifacts because they were occupied by smaller family groups for shorter periods of time. Much less is known about procurement sites, which most often occur along small streams and contain only a few artifacts.

Archaeologists believe Site 7NC-E-152 was a seasonal camp. Family groups making use of the plant and animal resources of the marsh occupied the site repeatedly beginning as early as 6500 B.C. They also used cobbles from the nearby river as a source of material for making stone tools, such as knives, drills, and spear or arrow points.

## ***Field Excavations at Site 7NC-E-152***

Archaeologists conducted field excavations at the site in three stages. To find the site, archaeologists excavated small shovel test pits at regular intervals in the area that would be disturbed by road construction. Native American artifacts found in the shovel test pits revealed the presence of an archaeological site. Then, 25 one-meter (3.3-foot) square test units were excavated to recover artifacts and determine whether the site was important enough to require intensive excavation. Based on the work and the determination that the site contained important information, an additional 79 units were excavated. DelDOT made design changes to reduce disturbance to the site, so the final stage of fieldwork was conducted within a much smaller area along the existing roadway. The archaeologists excavated test units in large blocks within areas of high artifact density, so that the patterning of artifacts could be analyzed.



*Archaeologists map the locations of the test units with a Total Station laser transit to precisely measure distance and elevation.*



*Field maps showing the locations of each test unit are updated throughout the project.*



*Most of the artifacts were found in the plowzone, which is the dark brown soil layer disturbed during plowing. The plowzone is a darker color because it contains decayed organic material, such as leaves and roots. Artifacts from over 6,000 years of occupation have been mixed in this layer via plowing.*



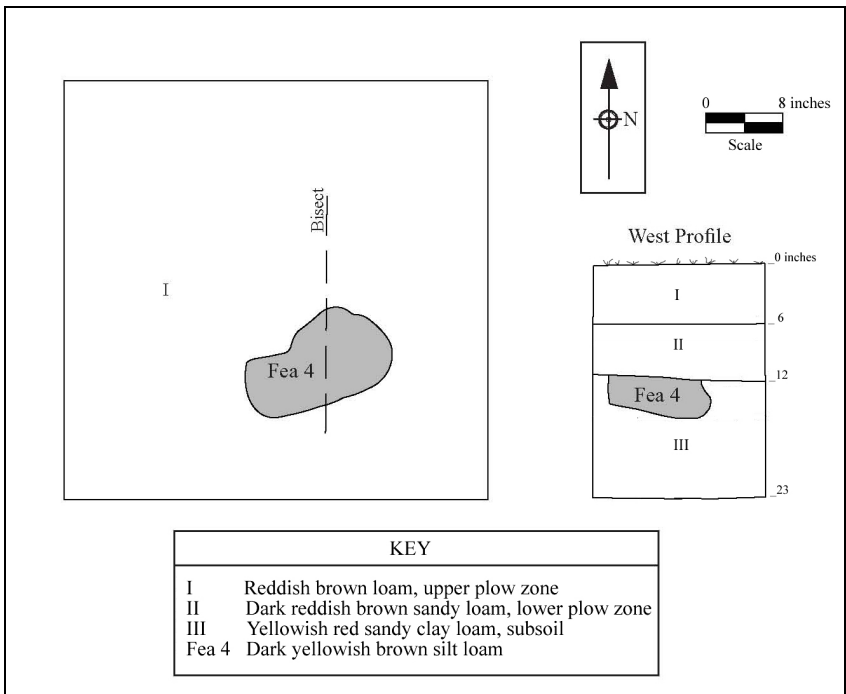
*Archaeologists push the excavated soil through a shaker screen with 1/4-inch wire mesh and remove the artifacts left behind. They bag the artifacts according to the test unit number and excavation level.*



*A completed block excavation.*



*Maintaining detailed records of the excavations is critical for later interpretation of the site. Archaeologists record the depth and map coordinates of each excavation level. They include notes on soil characteristics, such as color and texture.*



*Drawing of Feature 4. Archaeologists recognized the feature by its dark soil color and the scattered charcoal within it.*

Archaeologists use the term “feature” for archaeological finds that cannot be picked up and carried. Features include fire hearths and storage pits on Native American sites and foundation walls and wells on historic archaeological sites. The deep pit feature above was probably used as a hearth due to its size, shape, soil color, and the presence of charcoal.

## ***The Artifacts***

Artifact is the term archaeologists use for manmade objects that can be picked up and carried. The artifacts recovered from the field excavations at 7NC-E-152 were returned to the laboratory to be washed and inventoried. The field excavations recovered over 6,000 artifacts, including stone tools, waste material from tool manufacturing, and pottery sherds.



Most of the artifacts are waste flakes left over from stone-tool manufacturing. Waste flakes can provide information on the methods of tool manufacturing, as well as the types of stone material used. Much of the stone at 7NC-E-152 came from cobbles found in the soil and in the nearby stream banks. Other material came from the Iron Hill region, about nine miles southwest of the site. Also found were small amounts of a material called rhyolite, the closest source of which is in south-central Pennsylvania. The material may have been exchanged through widespread trade networks between 1,400 and 2,000 years ago.

Archaeologists catalog stone tools according to their function and material type. An important type of tool for archaeological research is the projectile point, used on spears and arrows and often also used for cutting. The shape or form of a projectile point can sometimes provide information on the age of a site, since some projectile points were only used for limited periods of time. Most of the projectile points from Site 7NC-E-152 are stemmed types with rounded bases (pictured below) in use during the Woodland I period (3000 B.C.– A.D. 1000).

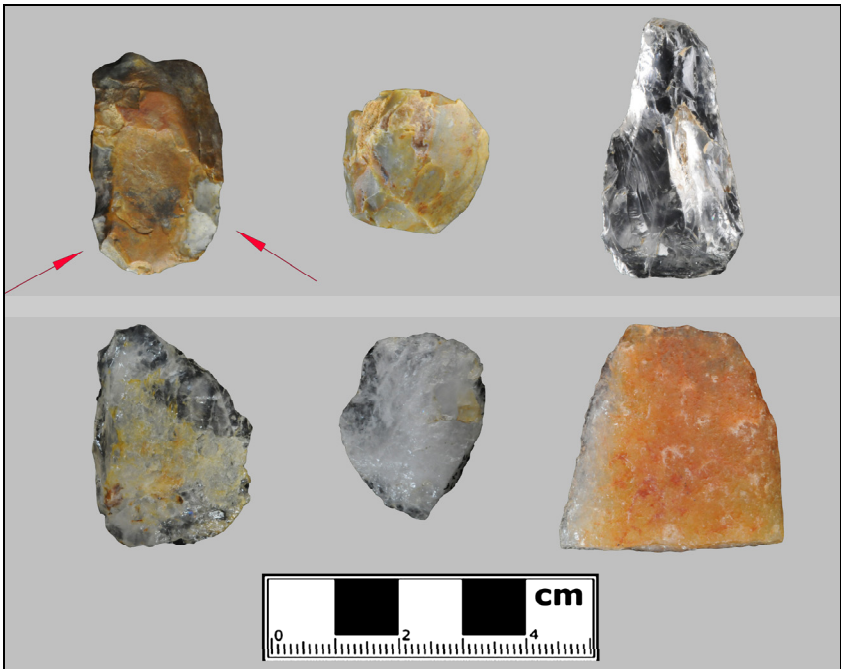


*Stemmed projectile points from the Woodland I period. The projectile point on the left is made of quartzite; the one on the right is chert; and the two in the center are quartz.*



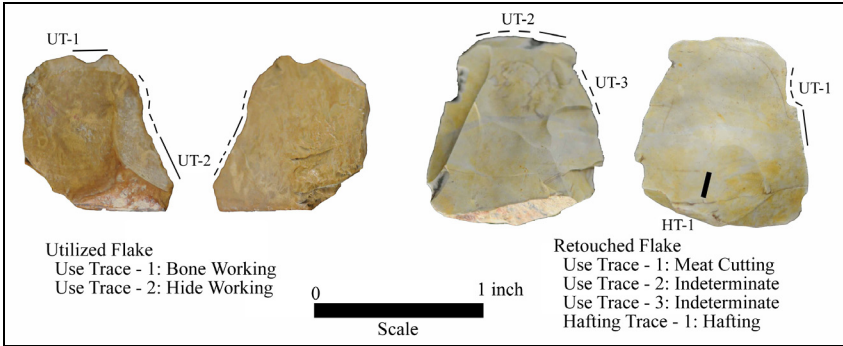
*The projectile point to the left, with a deep notch in the base, dates to the Archaic period (6500–3000 B.C.) occupation of the site. Archaeologists recovered only one point of this type at Site 7NC-E-152, made of chert.*

The most common tools other than projectile points are scrapers, used primarily for cleaning hides. Scrapers are made by knocking flakes off pieces of stone with large cobbles in order to form sharp edges.



*Scrapers. The scraper in the upper right corner is made of quartz crystal, a carefully made and unusual tool. The other scrapers were made of quartz and chert. The red arrows show where flakes of stone have been removed to sharpen edges.*

When stone tools are used, the edges become worn and damaged. Under a microscope, this damage, called microwear, can provide clues to the type of use—cutting or scraping, for example. The wear also tells us whether the tool was used on soft materials, such as plants or hides, or on harder materials, such as wood or bone. The tools below are flakes of stone used for a variety of tasks and then discarded.

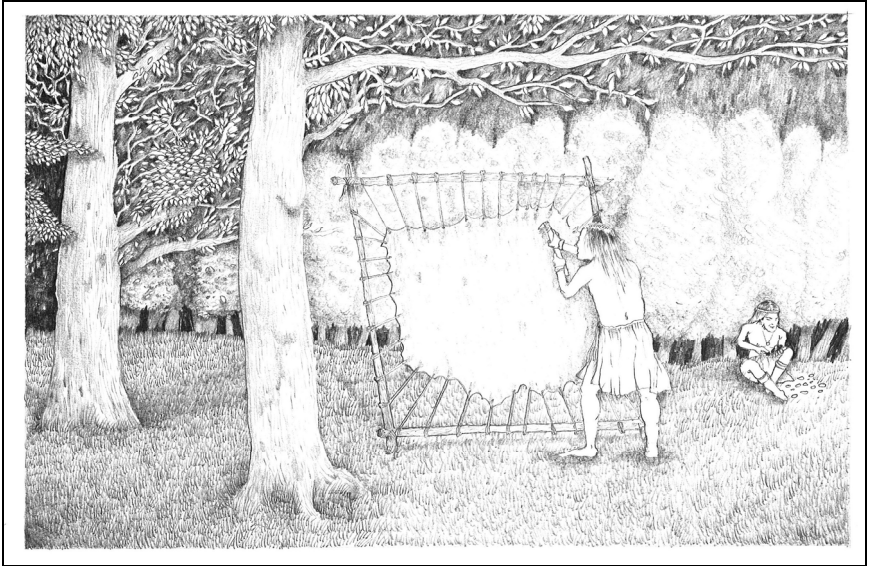


*Flakes with microwear.*

Pottery also provides information on the age of a site and the activities of people who lived there. The surface decoration of Native American pottery provides information on site age, since decoration changed over time.



*Archaeologists found 17 small pieces of pottery at the site. The pieces likely date to the Woodland II period, sometime after A.D. 1000.*



*Native Americans cleaning hides and making stone tools.*

Throughout the occupation of the site, Native Americans conducted everyday tasks such as gathering and preparing foods, manufacturing tools, and making clothing and other items from hides. Observations of modern hunter-gatherers indicate that they also had an abundance of free time to engage in social and religious activities. The customs and beliefs of modern Native Americans, along with the activities uncovered in this archaeological investigation, teach us that a rich and fulfilling culture existed.



## ***What Did We Learn?***

The earliest occupation of the site was during the Archaic period (6500–3000 B.C.). These early inhabitants were likely very mobile, living in small family groups and moving their camps frequently to be close to needed resources. The Churchmans Marsh area would have provided them with many important resources. The Native Americans occupying the site could have walked down slope to the stream banks of the Christina River, where they could find cobbles in the channel bed and along eroded banks that would provide the stone for tool manufacture. Churchmans Marsh was likely a freshwater marsh at this time and provided foods, such as cattail tubers (thickened roots like potatoes) and wild rice. The riverbanks and adjacent slopes had trees like oak and hickory that provided nuts and acorns. Native Americans would also have been able to fish and hunt migrating birds, such as ducks and geese. The small number of archaeological sites from this period suggests that few people inhabited the region, so competition for resources would have been very low.

The Archaic occupation, or occupations, at the site appear to have been relatively short term, perhaps for only a few weeks. The people who lived there spent some of their time making stone tools from cobbles found near the site. They also engaged in other activities associated with daily life, such as butchering game and grinding flour from nuts or acorns for baking into breads.

During the Woodland I (3000 B.C.–A.D. 1000) occupation, families camped at this location repeatedly over the 4,000-year period and dense concentrations of artifacts accumulated. The large number of Woodland I archaeological sites in the Churchmans Marsh area suggests that many more people now lived here compared to the Archaic period, so people may have been more restricted in their use of land and resources. But in their daily activities, the Woodland I occupants were much like the earlier Archaic period groups. They used cobbles from the nearby streams for making stone tools. The tools in turn were used for butchering and hide working. Bone, antler, and wood were fashioned into tools or into handles for stone tools. One of the Woodland I camps from late in the period had an earth oven for cooking and baking breads. The marsh and surrounding forests continued to provide abundant plants and animals for the hunter-gatherer way of life.

The Woodland II (A.D. 1000–1650) occupations were at the southern end of the site, adjacent to a small tributary of the Christina River. These occupations dated to a time when Native Americans in many areas of the Middle Atlantic region were farming and living in stockade-protected villages. However, Native Americans in the Coastal Plain of northern Delaware continued much of the hunter-gatherer ways of earlier peoples, most likely because the marsh and forests provided enough food to support them. During the Woodland II period, Site 7-NC-152 continued as a seasonal camp. Native Americans who occupied the site likely spent much of the year living with other families in multi-seasonal camps, where they made and used pottery for cooking and storage.

Overall, the excavations at Site 7NC-E-152 have shown us how Native Americans lived and worked in this setting, overlooking the marshes of the Christina River and nearby Churchmans Marsh. The site was a seasonal camp where family groups settled and could easily find the resources they needed, including wild plant foods, game, fish, and stone for tools. But for much of the year, families gathered together at sites nearer the marsh to socialize and exchange information. Fire pits and storage pits, along with dense concentrations of artifacts, indicate that these sites were occupied for more than one season and probably by larger groups. Thus, the Native American inhabitants of the Churchmans Marsh area were dynamic, adjusting the size and locations of their camps according to the availability of food resources and social events.

## ***For More Information***

To read the full report of archaeological investigation at Site 7NC-E-152, go to:

[http://www.deldot.gov/archaeology/airport\\_churchmans/data\\_recovery/index.shtml](http://www.deldot.gov/archaeology/airport_churchmans/data_recovery/index.shtml)

To learn more about DelDOT's archaeology program, visit:

<http://www.archaeology.deldot.gov>

For booklets and brochures on other DelDOT projects, visit:

<http://www.deldot.gov/archaeology/brochures.shtml>

You can learn about museums, historic sites, and the archaeology of Delaware by visiting:

<http://history.delaware.gov/>

The Archaeological Society of Delaware is an organization for amateur and professional archaeologists founded in 1933. For more information, visit:

<http://www.delawarearchaeology.org/>

Preservation Delaware is an organization devoted to preserving the architecture and history of Delaware. Their website is found at:

<http://preservationde.org/>

The Society for American Archaeology hosts a section for the public that includes educational resources, games and CDs and information on Archaeology Month:

<http://www.saa.org/publicftp/PUBLIC/home/home.html>

The National Park Service website includes a section on history and preservation, including sections for teachers and for kids:

<http://www.nps.gov/history/>

To download a pamphlet on the Federal government's efforts to protect archaeological and historic resources, go to:

<http://www.achp.gov/docs/CitizenGuide.pdf>