TCHEFUNCTE

(Below) Artist's rendition of daily life at the site. Painting by Jack McLehany, courtesy of Guaranty Corporation.

600 B.C.- 200 B.C. -



The Tchefuncte site is in the coastal marsh of southeastern Louisiana. The main excavations at this large, prehistoric site were in the late 1930s and early 1940s. They were crucial for understanding how American Indians in the area lived during the Early Woodland period. This was the first era when people commonly used pottery for cooking and other daily tasks. Archaeologists call those who lived in this region during that time the Tchefuncte culture. The name shows that much of what is known about the people came from the Tchefuncte site. This site provided a rich record of how the group that lived there used the resources around them to create a good life.

Time and Place

The Tchefuncte site is in St. Tammany Parish, on the north shore of Lake Pontchartrain, within Fontainebleau State Park. The site has two midden deposits on the bank of a small bayou in the coastal marsh. Middens are the result of trash building up in an area where people lived and worked.

Midden A lies at the eastern end of the site. It extends for over 270 feet along the bayou. Most of the midden is composed of soils that have been darkened by the charcoal, animal bones and other waste that people discarded here long ago. Along the bayou bank, the midden contains abundant shell, left over from clams that were an important part of the local diet. Midden B lies about 100 feet west of Midden A. It is smaller, about 160 feet long, and is almost entirely made of shell.

American Indians lived at the site from 600 B.C. to 200 B.C., during the Early Woodland period. The site gives an important view of life at this time. In fact, throughout Louisiana, the people of this period are called the Tchefuncte culture.





During this time, people began making and using lots of ceramic pots for storing and cooking food. Pottery making was still a new skill, so many of the pots were poorly made and easily broken. As a result, archaeologists found more than 47,000 fragments of pots at the Tchefuncte site. That was nearly five times more than any other type of artifact. No other site has a larger number of pieces of Tchefuncte pottery.

Because of its importance, the site was listed on the National Register of Historic Places in 2000. In this series of photos, artist Doyle Gertjejansen is making ceramic pots using the same materials and techniques that some of the people at the Tchefuncte site did long ago. 1) Clay was dug from the banks of the bayou. 2-3) Then it was rolled into coils and the pots were built up, one coil at a time. 4) The outside edge was flattened and burnished. 5) Then, decorations were added to the pots. 6-7) A hot fire was lit and the ceramics were fired. 8) After cooling, it was time to see if the pots could be used for cooking. 9) Success! Credit: Doyle Gertjejansen, doylegert@aol.com.









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Trade and Travel

People at the Tchefuncte site traveled or traded to get some minerals and rocks. However, they also made use of other raw materials that were nearby. Stone was not available at the site, so people had to travel at least a few miles to get it. Much of the stone for spear or dart points and other tools came from sources 15–25 miles north of the site.

The people at the site used a lot of yellow limonite and red hematite to make paint and dyes. Sources for these pigments, along with sandstone, were in northern Louisiana, Mississippi and Alabama. A few pieces of other stone came from farther away, like Arkansas and Tennessee.

Most of the ceramic pots and smoking pipes were made of local clays. However, examination of the clays indicate that some pots came from the Tombigbee River region of western Alabama. This shows that people at the Tchefuncte site were trading with people from that area or were traveling there.

Archaeologists found 42 pieces of pumice at the site. Pumice is a volcanic rock, so these fragments came from very far away. The source of the pumice may have been a volcano in Mexico or in the Caribbean Ocean. Pumice floats, and these pieces could have washed up on a beach in Louisiana rather than arriving through trade. The pumice also could have been acquired by trade from the western United States.



Examples of pottery from the Tchefuncte site that came from the Tombigbee region.

Food

The people at the Tchefuncte site fished in the nearby bayou and coastal marsh. They also went to higher ground inland to hunt animals like deer and to gather foods from the woodlands.

The archaeologists' techniques in the 1930s and 1940s did not recover many animal bones. They did not screen the dirt and did not find many small items. Most of the bones they did collect were large and easy to see while they were digging. Small bones, like those from fish, were easy to miss. A small project at the site in 1986 used screens to find small bones, like those from fish. Recent study of these bones gave a good understanding of the diet of the people at the site.



(Above) The people at Tchefuncte had lots of dietary options because they lived so close to different ecological zones. (Right) Artist's interpretation of American Indians fishing. Painting by Jack McLehany, courtesy of Guaranty Corporation. People caught many kinds of fish, but especially catfish and gar. Most of these came from the bayou, and only a few species were from Lake Pontchartrain. The Tchefuncte people ate a wide variety of animals, including bear, muskrat, opossum, raccoon, alligator, duck and turtle. However, deer was the preferred meat source. In addition to the meat, deer were valuable because the bones were used for tools. The people at the site surely ate plants as well, but researchers did not find any traces of them.



Ceremonial Life

The two middens at the site were areas where people lived, worked and played. Archaeologists did not identify any activity areas or earthworks that were set aside just for ceremonial use. However, the people buried their dead in both of the middens, and they may have had ceremonies at those times. At least 34 bodies were in Midden A. Only three burials were in Midden B. The graves were shallow pits dug into the midden. None of the individuals had artifacts buried with them.

Based on the position of the remains, archaeologists can interpret burial practices. Some burials happened soon after death. Those people were probably living at the site when they died. Other people were living elsewhere when they passed away. Someone brought the remains to the Tchefuncte site for burial. This practice suggests the Tchefuncte site was an important place where people wanted to be buried.

Around the world, people have often buried the dead with offerings. Sometimes, people meant for these objects to help in the afterlife. Archaeologists did not find any artifacts with the burials at the Tchefuncte site. The people may have believed they were not necessary for a happy afterlife. On the other hand, they may have felt that the midden already surrounded the bodies with the objects of daily life.

Yellow and red pigments found at the site hint at colorful ritual life. At other times and places, American Indians used red and yellow ochre to paint artifacts and bodies. The paint may have been used in life or may have been part of preparing bodies for burial.

Archaeologists found many clay pipes at the site, like those seen to the right. People may have smoked them during ceremonies or used them in healing rituals. Smoking also may have been a leisure activity at the end of the day.



Archaeology Then and Now

The story of life at the site can be told now because of work done more than 75 years ago. Two times, crews from federal New Deal programs excavated the site. This kind of project gave jobs to people who were out of work after the Great Depression. First, in 1938, a State Parks historian led a Civilian Conservation Corps (CCC) project at the site. Then, two years later, an archaeologist and a Work Projects Administration (WPA) crew dug there again.

The methods at that time left some gaps in understanding. For example, compared to today, there was less focus then on finding small remains and on recording patterns in the soil. That limited the data about food and houses. Even so, the projects gave a rare glimpse of the site as a whole. Archaeologists have found that the artifacts and records from those past projects are still very useful today.

Study of the site began in 1938, after a construction crew took shell from Midden B to use as road fill. This activity destroyed nearly one-third of the midden, but it called attention to the site. Research efforts focused on the part of the site that further road construction would destroy. The team dug with shovels and did not screen the dirt to recover smaller artifacts. The crew dug down about 2.5 feet in a single level to the top of the water table. The work did not reach the bottom of the site.

The photo below shows the site being readied for excavation in 1940 or 1941. Credit: LSU Museum of Natural Science.





In 1940/1941, the WPA workers excavated almost all of Midden A and the rest of Midden B. In most of the squares, they reached the bottom of the site. It was hard to go that deep because water seeped in the units. The men dug the levels below the water table on days when the tide in Lake Pontchartrain was low, and a north wind was blowing. These conditions lowered the water table at the site enough that the workers could continue digging to the bottom of the site. As was usual at that time, the crew did not use screens to recover small artifacts.

After the WPA project, a few small areas of Midden A remained for future study. In 1986, an archaeologist from Tulane University supervised a small group from the Louisiana Archaeological Society. Although they dug only one 3-x-3-foot square, the results provided important information. First, the project proved that parts of the site were still intact. Second, it showed that the site still held more information. The crew used water hoses to wash all of the dirt through ¼-inch mesh screen, capturing all artifacts bigger than that size. This technique gave information about what people ate, as many animals have small bones that the earlier crews did not see.

The Works Progress Administration (WPA) was formed in 1935 and was renamed the Work Projects Administration in 1939. Various WPA work relief projects put a lot of unemployed people to work during the Great Depression. Some of the WPA projects included excavations of archaeological sites, like the Tchefuncte site. Courtesy of the Library of Congress, LC-USZC2-1018.

Explore the Site

The two major excavations at the Tchefuncte site were during the 1930s and 1940s. For these two projects, large crews of workers did the digging under professional supervision. All of the work was in 5-x-5-foot square units. Over several months in 1938, a Civilian Conservation Crew (CCC) excavated 53 squares in Midden B. In 1940/1941, Work Projects Administration (WPA) workers completed 760 squares. They finished digging Midden B and almost all of Midden A. The Louisiana Archaeological Society had another small excavation at Midden A in 1986. Check out the site to see what these projects found!



Midden A

The 1940/1941 project created a 5-foot grid across Midden A, and then the crew dug 632 squares of that grid. This let archaeologists know where every artifact came from. Using the grid, they could examine patterns in the distribution of artifacts. Groups of artifacts showed the activity areas at the site.

Midden A extended for at least 270 feet along the bayou bank and up to 100 feet inland. Most of the midden was dark soil, but clam shells were concentrated on the edge of the bayou. Why would people discard shells only along the bayou rather than across the entire area? This pattern suggests that people used most of the midden for activities other than processing clams. Perhaps people did not want to walk on shells all the time or have them around their living areas. The WPA crew excavated Midden A in 6-inch levels, and recorded the level where each artifact was found. Like at most sites, the oldest level was at the bottom, and the most recent one was at the top. Therefore, archaeologists could look at changes over time. For example, at the bottom of the site, in the oldest levels, smoking pipes were rare. In the later levels, they were more common.

Archaeologists also could see trends in the styles of pottery at the site. Incised designs were more frequent in the earlier levels than in the later ones. Stamped decorations increased in popularity through time. The types of pottery found at the bottom of Midden A show that the first people at the site lived at Midden A. Later, people lived at both Midden A and Midden B. These trends remind archaeologists that the traditions and styles were changing during the 400 years people lived at the site.



Midden A. Credit: LSU Museum of Natural Science.

At least 34 human burials were in Midden A. All of them were in pits and none had objects buried with them. Most burials were in the western part of the site away from the living areas. Interestingly, they were placed across a broad area and were not grouped in a cemetery.

At Midden A, pieces of pottery clustered in three areas. These were probably living areas where people used and broke pots. Bone tools were in the same places. That pattern supports the



Living space clusters

idea the midden had three residential areas. The notes do not record any remains of houses, like postholes, but it is likely that many small houses once stood at the site.

Artifacts used to produce red and yellow pigments had a similar pattern. These items, like grinding tools and pieces of hematite (for red) and limonite (for yellow), were concentrated near the living locations, as well as in one other area.



Burial cluster



All clusters

Midden B

Midden B was a shell deposit that formed a crescent-shaped area extending 160 feet along the bayou and up to 40 feet wide. It was first excavated in 1938, when a CCC crew dug 53 units. Nearly all of the squares were dug in a single level. The crew dug down to the top of the water table but did not reach the bottom of the site.

During the 1940/1941 project, a WPA crew returned to Midden B and completed the excavation of this midden. The men excavated 128 squares. The excavators dug the units in 6-inch levels to a depth of 4.5 feet.

Cross-section (side-view) map of Midden B. Figure 5 from The Tchefuncte Culture, an Early Occupation of the Lower Mississippi Valley *by James A. Ford and George I. Quimby, Jr., 1945; Memoirs of the Society for American Archaeology No. 2, published jointly by the Society for American Archaeology and Louisiana State University Press.* Midden B was different from Midden A. First, it was composed mostly of shell. Second, it had only three burials. Third, stone points, pipes, bone tools and pigment stones were only half as common as at Midden A. The ceramics from Midden B indicated that people began using this area after they had been living at Midden A for some time. The fact that Midden B consisted entirely of shell suggested that the area was primarily for collecting and using clams. The differences in artifacts confirm that Midden B was a special activity area for the people living at Midden A. They used many tools in the residential area that they did not need in the clam processing area.



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Artifacts

Artifacts are the things that people made and used. They give a view into the past and a glimpse of the ingenuity of the people who lived at a site. Artifacts from the Tchefuncte site give special insight into two kinds of native technology. First, the site has the largest collection of Early Woodland period pottery in Louisiana. This period was the time when pottery making became widespread. Second, the site produced 930 bone and shell artifacts, which is the largest sample from any site of the Early Woodland period in Louisiana. People made these tools from the bones of deer, alligators, raccoons, birds and other animals. However, nearly 90% of the bone artifacts were made of deer.

Antler Tools

Forty-three deer antler artifacts came from the Tchefuncte site. Most of them were waste pieces left over from making tools. White-tailed deer antler tips, or tines, were well suited for pointed tools. People could make them sharper by grinding or whittling them. To attach the tines to a handle, they sometimes hollowed out the base of the tool, as in all of these artifacts.



Bone Tools

In areas where stone was scarce, bone often was used instead of stone for some tools, such as projectile points used on the ends of spears or darts. Deer was the preferred animal for many kinds of bone tools. Bones from the lower leg were especially popular for making bone projectile points (A, B, C) and pins (D) because these bones are long and straight.

Researchers can reconstruct the process of making a deer bone point from bone artifacts from the Tchefuncte site. Some of the bone artifacts recovered from the site represent leftover pieces that were discarded waste from making a tool, while others were pieces that broke while the tool was being made. This production process is illustrated in the bottom photo.





Chipped Stone Tools

Projectile points were the sharp tips on the ends of spears, darts or possibly harpoons. Some of the stone used for projectile points came from other states. However, Citronelle chert from sources only one or two days walk from the site was the most common stone for points. Most of the points archaeologists found at the site were Pontchartrain types, which are long and well made, with short, square bases (A, B and C). They also found a number of Kent (D, E and F), Gary (G and H) and Delhi (I and J). Kent points are similar to Pontchartrain types, but are not as well made. Gary points have rounded bases, while Delhi points have short barbs at the lower corners of the blade. Sometimes a tool made for one purpose was recycled for a new use. This example began as a projectile point and was resharpened into a drill (K). Several adzes, used to work wood also were found at the site (L, M and N). These examples have a distinctive shape, and most are shiny on one end as a result of rubbing against the wood.





Pigment Grinding Stones

Archaeologists found 87 sandstone slabs for grinding up pigments at the site. Limonite (yellow) and hematite (red) were minerals traded into the Tchefuncte site. When ground up, they made a yellow or red powder for use in decoration. Some of these slabs still show traces of the red and yellow powder on their surface. Another stone (seen on the right of the photo below), held in the hand to crush the mineral against the palette, is still covered in red pigment.



Mineral Pigments

The site is unusual because of the number of pieces of mineral pigments. Excavations found 378 pieces of limonite (top row of photo below) that make a bright yellow color and 127 pieces of hematite (bottom row) that make a red color. People could grind up these soft stones and possibly mix the powder with animal oil. Then they could paint the pigment on people, on pots or on other artifacts.



Pendants

Researchers found three pendants at the Tchefuncte site, one made of a black bear canine tooth (A), one of a drum fish bone (B) and one of shell (C). These pendants may have hung on string or on leather strips. They were suspended in different ways. The bear tooth and drum fish pendants had a hole drilled in the top of each. The shell pendant, on the other hand, had a groove cut along its top end.

Pipes

Archaeologists found 67 pipe fragments at the Tchefuncte site. People made most of these pipes using clay from or near the site. Many have incised lines and other designs on them. The number of pipes found at the site suggests that smoking was an important activity there. It may have been part of ceremonial life at the site. Healers also could have used pipes in rituals to remove/cure illness or the effects of bad magic.





Pottery

The pot makers at the Tchefuncte site used clays from around the site to make most of their pots. They may have traded for a few pots from other places.

Although people in some other parts of the Americas were making pottery before 3000 B.C., the craft of making ceramic pots did not spread to Louisiana until about 2,000 years later. Tchefuncte potters made pots that were functional, and sometimes beautifully decorated. However, they had not yet learned how to make pots that were very strong. The clays found in Louisiana should be kneaded, like a baker kneads bread dough, in order to remove imperfections. If the clays are not kneaded well, pots made from those clays could have flaws that make the vessels easier to break. Each of these pieces of Tchefuncte pottery has flaws that look like thin lines, called laminations, which is where the clay is starting to separate, and may eventually form a large crack (top).

Usually, people did not throw away a pot unless it was broken. Because of this, archaeologists typically only find fragments of each pot, and determining the original shape and size can be difficult. However, sometimes they find enough pieces of one pot to put it back together (bottom).

(Bottom) Figure 17 from The Tchefuncte Culture, an Early Occupation of the Lower Mississippi Valley by James A. Ford and George I. Quimby, Jr., 1945; Memoirs of the Society for American Archaeology No. 2, published jointly by the Society for American Archaeology and the Louisiana State University Press.







Most pots made during the Tchefuncte period were plain. In fact, about three-quarters of the fragments had no decoration. Some, however, had decorations on their surface. These include lines drawn on the wet clay (A-D), punctates pushed into the wet clay (E-H), and designs where a tool was rocked back and forth across the surface (I-K). A few vessels also had decorations on the lip of the pot (below).







The potters took these various methods of decorating pots and used them to create designs. One common design motif was triangles and nested triangles. People drew these with a pointed or rounded tool (A and B). In other instances, they used a piece of cord (C and D), or a rocker stamp (E) to press a design in the wet clay. The pot makers also sometimes combined these styles to create complex designs (F and G)

Curvilinear designs are less common but create beautiful patterns (H).

Some vessels had very complex designs that include rectangular, curvilinear and zoned elements (I and J).

The pots made in northern Mississippi and western Alabama show similar but clearly different designs (K, L and M). The picture below shows a piece of a pot made at the Tchefuncte site (right) and one from Mississippi or Alabama (left) that share an identical design.



Credit: R. Christopher Goodwin and Associates

Turtle Shell Rectangles

Several small rectangular pieces of turtle shell were found at the site. They may have been decorations, or people may have used them in making fishing nets. The rectangles could have been measuring tools to make the openings in nets a standard size.



Learn More

You can learn more about the Tchefuncte site by exploring the items below. Have more questions about the site? Be sure to visit the **Top Site FAQs** section!

- The Tchefuncte site is in Fontainebleau State Park, but the site is in an area that is not accessible to the public. You are welcome to visit the park to learn more about the fascinating environmental setting of the site.
- Hays, Christopher T., and Richard A. Weinstein. "Tchefuncte and the Early Woodland." In *Archaeology of Louisiana*, edited by Mark A. Rees. Baton Rouge: LSU Press, 2010.

The Tchefuncte site is in a remote area and currently is covered in dense vegetation. The image below is of the area surrounding Midden A. Credit: George Castille.





Glossary

Early Woodland Period: (800 B.C. – A.D. 1) This period is known in Louisiana for the first widespread use of pottery. However, although people made a lot of pottery, it was mostly of very poor quality. The Tchefuncte culture is associated with this period. At this time, Tchefuncte-style pottery was made at sites throughout the Lower Mississippi River Valley.

Earthworks: American Indians sometimes built mounds, ridges and other things using nearby soils. Since these things are made of earth, they are called earthworks.

Hematite: A form of iron ore that can be used to make red dye or paint.

Limonite: A form of iron ore that can be used to make a yellow or brown dye or paint.

Midden: A midden is an area of trash and debris that accumulated where people lived. A shell midden contains a very large amount of shell from bivalves like clams or mussels. This usually suggests a place that was used repeatedly for meals.

Posthole: A posthole shows where a wooden pole or post once stood. When archaeologists find them, postholes usually look like dark circular or semi-circular stains in the soil because the hole was filled with different dirt. Sometimes, there are stains remaining from wooden posts that rotted or burned in place, and they are called postmolds.

Screen: A technique using wire mesh screen to trap artifacts from excavated dirt. Sometimes, archaeologists use water hoses to wash the dirt through the screen.

Unit: Archaeologists typically plan a grid over a site before they excavate. Each square on this grid represents a single unit that could be excavated. When a square is excavated, it is called a unit. Units make mapping and excavation more orderly.

Top Site FAQs (Frequently Asked Questions)

Q1. What tribe(s) built the Tchefuncte site?

Archaeologists do not know what tribes may have lived in the Tchefuncte area more than 2,000 years ago. There is no way to connect any living tribes directly to the site based on the materials found there. Modern archaeologists gave these people the name "Tchefuncte," because they first learned about them from the excavations at the Tchefuncte site. "Tchefuncte" also is the name of a river on the north shore of Lake Pontchartrain.

Q2. What does Tchefuncte mean?

According to Clare D'Artois Leepers in *Louisiana Place Names: Popular, Unusual, and Forgotten Stories of Towns* ..., it is from the Choctaw name for the chinquapin, which is a type of chestnut.

Q3. How do you pronounce Tchefuncte?

Tchefuncte is usually pronounced Cheh-funk' tuh.

Q4. How do archaeologists know how old the site is?

Archaeologists used a technique called radiocarbon dating to find out the site's age. Radiocarbon dating is a reliable way for archaeologists to tell the age of old organic remains like bone or wood. All living things absorb carbon, including radioactive carbon-14, from the atmosphere. When something dies, it stops absorbing carbon. The carbon-14 in its system decreases at a known rate through radioactive decay, but the other stable carbon atoms remain. Comparing the number of carbon-14 and stable carbon atoms reveals the age of the organic material.

Q5. What kind of religion did the people of Tchefuncte practice?

Archaeologists are not sure what kind of religion the people of Tchefuncte practiced. Many historic tribes have clans, often named after an animal (bear clan, deer clan, etc.). Each clan has its own animal and its own sacred duties (performing rituals, healing, hunting, etc.). Membership in these clans may have been based on someone's gender, ancestry or something else. Perhaps the people of Tchefuncte had similar beliefs.

Q6. Did the people of Tchefuncte have political or religious leaders?

The people may have had leaders, though, if they did, they did not leave behind any evidence of it. Burials at the site were all simple. Everyone was surrounded by broken pots, bone tools, left over food, and stone spear tips. Archaeologists might expect a leader's burial to be different from the others. Perhaps this burial would be marked by a burial mound, or contain special items placed with the dead, such as fancy pots or decorated bone objects, that would symbolize the person's importance.

Q7. Why were some of the bodies bundled and possibly reburied at the site?

People may have only buried the dead at the site during certain times of the year. If people did not pass away during these special times, the living may have had to bury them elsewhere until it was the burial season. The two kinds of burials at the site could also reflect different cultural traditions for honoring the dead.

Q8. How did people learn to make ceramic, stone and bone tools?

Sometimes archaeologists find stone or bone tools or ceramics that are flawed or not quite right. These things may exhibit visible mistakes in how they were made. These things may have been left behind by people who were first learning how to make ceramics or construct tools.

Q9. Why was shell mining permitted on the site if it ended up destroying Midden B?

In the1930s and 1940s, there were few laws in the U.S. to protect archaeological sites. Since then, however, the state and federal governments have passed laws that offer greater protection for archaeological sites. The sort of damage the Tchefuncte site suffered still occurs at sites sometimes, but now archaeologists have legal tools to help save those sites.

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Tchefuncte style pot reproductions. Credit: Doyle Gertjejansen, doylegert@aol.com.

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