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Editor's Note

Louisiana's cultural heritage dates back to approximately 10,000 B.C. when people first entered this region. Since that time, many Indian groups have settled here. Each of these groups has left evidence of its presence in the archaeological record. The Anthropological Study series published by the Department of Culture, Recreation and Tourism provides a readable account of various activities of these cultural groups.



Replica of a Mississippian effigy pipe

Robert W. Neuman, Curator of Anthropology at the Museum of Natural Science, Louisiana State University, and Nancy W. Hawkins, outreach coordinator for the State Division of Archaeology, co-authored this volume. It is the result of the realization that relatively few Louisiana residents are aware of the state's rich archaeological heritage. Furthermore, there is little introductory information available to them about Louisiana's past. *Louisiana Prehistory* was written to meet this need. It is a short summary of the state's prehistory and is meant to be a person's first exposure to the state's prehistoric archaeology. For this reason theoretical and technical discussions are kept at a minimum.

Louisiana Prehistory tells the story of human occupation of the state during its first 12,000 years. It begins with the big game hunters of 10,000 B.C. and describes the changing life styles brought about by the end of the Ice Age. It relates the influences of various peoples moving into and out of Louisiana and their effects on Louisiana cultures. Finally it recounts the development of mound building which culminated in the large ceremonial centers described by the early European explorers.

I trust that the reader will enjoy this introduction to Louisiana's prehistoric Indian heritage.

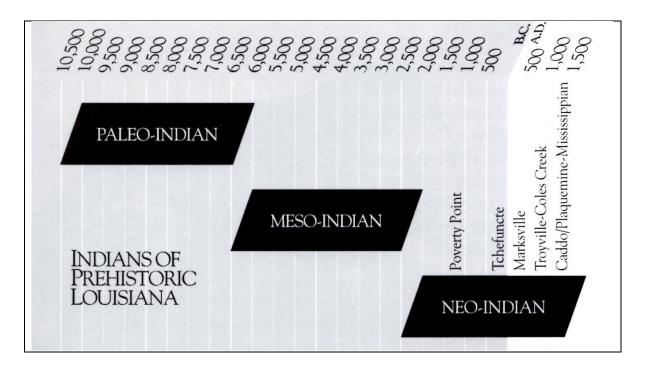
Kathleen ByrdState Archaeologist

Acknowledgments

Although many individuals have contributed to the development of this volume, special appreciation goes to Dr. Clarence H. Webb who allowed us to photograph artifacts from his private collection. Mr. David R. Jeane and Mrs. Marion McMichael also loaned artifacts for the illustrations. Mr. George A. Foster, Chairman of the Board of Guaranty Corporation, assisted us greatly by providing photographs of drawings from the Corporation's Indian display. We also thank Dr. Judith A. Schiebout, Curator of Vertebrate Paleontology, Museum of Natural Science, Louisiana State University, who provided continuous cooperation in the development of this project, and Mr. Daniel S. Peace for his efforts in photographing the artifacts used in this booklet.

Introduction

Tens of thousands of years ago, when the world was in the midst of the Ice Age, the first humans made their way into North America. At that time, thick sheets of ice covering the polar regions had tied up so much of the earth's water that the oceans were approximately 400 feet lower than they are today. All around the world, sections of land that are now underwater were then above sea level. An extensive land bridge connected Siberia to Alaska across what is now the Bering Strait, and people from Asia used this route for their passage into North America.



The land bridge between the two continents was clear of ice for thousands of years, and vegetation from both sides intermixed. Grazing animals, and the people who hunted them, gradually wandered from Asia into North America, probably without ever realizing they were moving into a new region.

Although the earliest immigrants may have reached North America over 40,000 years ago, most of the present evidence dates from between 23,000 and 8,000 years ago.

Much of Canada was covered with ice during this time, but periodically, ice-free corridors of land connected Alaska with the Great Plains of the United States. Over hundreds of generations, nomadic people spread throughout southern North America, Central America, and South America. By 12,000 years ago, the first Indians lived in the southeastern United States. The prehistoric era in Louisiana begins with these first inhabitants and concludes with the arrival of the Europeans. The chart above outlines the long, rich prehistory of Louisiana.

Paleo-Indian

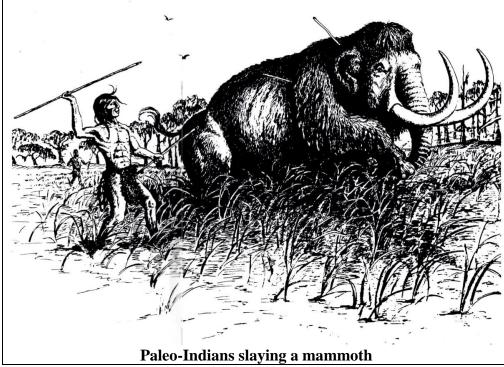
Twelve thousand years ago, the average temperature in the southeastern United States was five to 10 degrees cooler than it is now, and the climate was drier. The landscape was covered with oak and pine forests mixed with open grasslands. Some familiar animals such as rabbits and deer

lived in the area, but many other animals that have become extinct in North America were also common then. Among them were the camel, giant armadillo, short-faced bear, long-horned bison, mastodon, tapir, ground sloth, saber-toothed tiger, mammoth, dire wolf, and horse (the horse was later reintroduced by the Spanish).

The earliest Indians in Louisiana, called Paleo-Indians, hunted these animals using spears tipped with stone points. These lanceolate points were two to six inches long and had bases that were either straight or rounded inward. The Paleo-Indians in Louisiana made their points from carefully selected varieties of stone that appear to have come from neighboring regions in Texas and Arkansas. A stone point was fastened directly to a wooden shaft with hide, fiber, or an adhesive substance, or it was attached to a bone section that was connected to the spear shaft.



Early Paleo-Indian Point



To pierce the skin of one of the large animals, such as a mastodon or mammoth, the hunters had to be close to the powerful beast. They hurled or jabbed their spears at the animal and tried to confuse and immobilize their prey. Perhaps several hunters surrounded an

isolated animal, waved their arms, and distracted it while one or two others speared it. If the animal was wounded, the hunters would have tracked it until it became very weak or went to water to drink. Even a mastodon, wounded and exhausted, or mired in the mud of a shallow lake, would have been relatively easy game for a small group of experienced hunters.

Men and older boys almost certainly were the hunters for the Paleo-Indian groups. Women and children collected fruits, seeds, roots, and other plant foods to supplement their diet.

Paleo-Indians lived in small nomadic groups that remained in an area only as long as the animals and plant foods were plentiful. Evidence indicates that they camped near streams in temporary shelters made of branches, grass, and hides. At other times, they preferred high ground where they could see the countryside to watch for animals. The camp may have had a central area for group activities surrounded by living areas where families cooked and slept. These people probably used animal skins for clothing and as blankets, and they may have had dogs as hunting companions. They did not raise other animals or grow crops. They used no metal and made no pottery.

Louisiana Paleo-Indian sites (areas where remains are found) are not common, because the small groups of nomadic Indians left very few artifacts at any location. In time, high rainfall and humidity led to decay and erosion of many ancient sites while changing geography led to the disappearance of others. The sea level has risen, so any Paleo-Indian coastal remains are now on the ocean floor. Sites once along the Mississippi River have been washed away or deeply buried as the river shifted its course and deposited silt. Most Paleo-Indian spear points found in Louisiana have been collected from ridges, hills, and salt domes. Generally, these areas have not been affected by stream changes or sea level fluctuations that have occurred since the Ice Age.

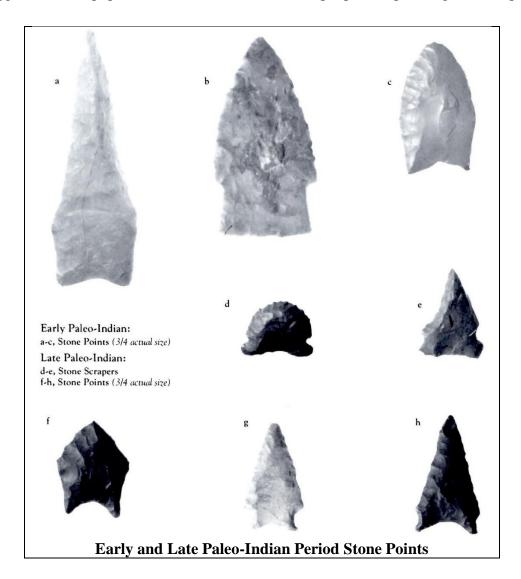


Both early and late Paleo-Indian Period materials have been found at the John Pearce Site in Caddo Parish, Louisiana. At the lowest (oldest) level, two early Paleo-Indian stone points were uncovered. A wide variety of later materials were excavated from higher levels. The site was used by small groups of people who camped there temporarily. These people used the site as a base camp for hunting, butchering, and hide-working activities.

As the Ice Age drew to a close, Louisiana began to change. The climate gradually became warmer and wetter, and many large Ice Age animals became extinct. The way of life of the Paleo-Indians began to change, too.

Late Paleo-Indians fashioned a variety of stone tools used to butcher game, prepare plant foods, tailor hides, and work bone and wood. They also manufactured many kinds of stone points that were generally smaller than the earlier points. These late Paleo-Indian tools were made from Louisiana stone, a change from the earlier times.

Sites of the late Paleo-Indian Period are more numerous than early Paleo-Indian sites. Their sites are characterized by more artifacts, and more varieties of artifacts, than earlier Paleo-Indian sites. This suggests that the population increased and that these people camped longer in one place.



Meso-Indian

The gradual transition from the late Paleo-Indian to the early Meso-Indian Period had occurred by 6000 B.C. Meso-Indians, also called Archaic Indians, lived in small nomadic groups. Unlike their predecessors, however, they remained longer in each camp location and exploited smaller geographical areas. Whereas a Paleo-Indian might roam from Texas to Mississippi in his lifetime, rarely returning to the same place, a Meso-Indian might spend his whole life in a six-parish area, returning each season to favored campsites.

Seasonal movements of the Meso-Indians were determined by the best times to hunt and gather certain foods. Clams, fish, and deer were available year-round, so Meso-Indians often stayed near streams, where these foods were plentiful. This strategy was especially critical in the winter

months when plant foods were least available. The Indians camped where they could collect tender, young plants in the spring; fruits in the summer; and acorns, pecans, and walnuts in the fall. Meso-Indians had a varied diet, eating seeds, roots, nuts, fruits, fish, clams, reptiles, amphibians, birds, and mammals.



The Banana Bayou Site, on Avery Island salt dome in Iberia Parish, is a man-made earthen mound, 80 feet in diameter and three feet tall. Charcoal from the mound gave the radiocarbon date of 2490 +- 260 years B.C. Nut shells and fish, deer, and turtle bones have been found in the mound, as well as stone points that are characteristic of the Meso-Indian Period. These findings lead archaeologists to conclude that the site is one of the earliest mounds in the United States.

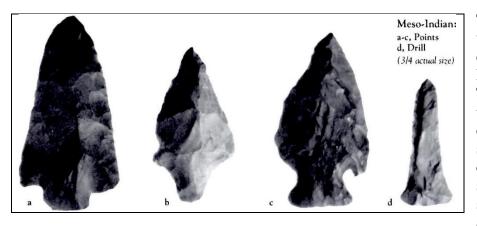
As Meso-Indian family groups traveled, they met other hunting groups and sometimes camped together. These were important times for social and ceremonial activities. Sometimes these large groups camped together for a season or more, near rivers or near the coast where dependable food resources could support many families.



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Dogs may have been kept as pets and may have helped in hunting. Meso-Indians developed many new hunting and fishing techniques. They used fishhooks, traps, and nets for catching fish and other small animals, and they used a new weapon called the atlatl (pronounced at latl) to help kill their most important prey, deer.

An atlatl was made from a flattish, two-foot-long piece of wood and was used as a spear-thrower. It had a hook, made of bone or antler, attached on one end and a hand grip carved on the other end. A stone, clay, or shell weight was sometimes attached toward the hooked end to increase the force of the throw, or perhaps only for decoration. A spear was rested on the atlatl with the end of the spear shaft inserted into the atlatl hook. The hunter held the atlatl grip and the middle of the spear in the same hand, then he hurled the spear from the atlatl. The atlatl acted as an extension of his arm, giving extra power and accuracy to the throw.



The Meso-Indian spears used with the atlatl differed from those Paleo-Indians used. They were shorter, and the stone points were different. Meso-Indian spear points were chipped from local stone, and they were slightly larger and not as artistically made as late

Paleo-Indian points. Beyond these general trends, however, many Meso-Indian points found in Louisiana have little in common with each other. The sides of some are curved, others are straight, and some are serrated. Some are wider at the base, some are narrower, and others have notches in the base. The variations in shape seem almost unlimited.

In contrast to the changes in types of points, Meso-Indians continued making their stone butchering and hide-working tools in much the same way as the Paleo-Indians. Meso-Indians also fabricated non-stone tools and ornaments. They made bone needles, awls, fishhooks, beads, and hairpins; and antler atlatl hooks, handles, and spear points. Less common objects were tortoise shell rattles and shell ornaments.

Meso-Indians developed new tools as they increased their knowledge of plant resources. They made baskets to carry and store seeds, roots, fruits, and nuts. They cracked nut shells with specially shaped stones, and ground nuts and seeds into meal with grinding stones.



The Meso-Indians also made axes and chopping tools for cutting down trees and hollowing out tree trunks. Like the atlatl weights, grinding stones, pipes, and stone ornaments, some of these axes were made using a new technique. Instead of being flaked, these stone tools were roughly pecked into desired shapes with a hard hammerstone, then ground smooth with sandstone or sand and water. When

completed, some of these ground stone tools had highly polished surfaces.

Although the methods of hunting, gathering plants, and making tools remained relatively unchanged throughout the Meso-Indian Period, some things were changing. Gradually the population expanded. Groups began to move less frequently and to travel over smaller areas. They learned more about their environment as they began living, from one season to another in the same general area. Apparently some Louisiana Meso-Indians remained in one place long enough to build earthen mounds. These sites have from one to as many as four mounds, and the mounds themselves consist of single- or multiple-stage constructions. Radiocarbon dates for these Louisiana mounds suggest that they are the earliest known mounds in North America.

Neo-Indian

During the Neo-Indian Period, the population expanded and some groups became sedentary, staying in one place for extended periods. Most Meso-Indian tools continued to be used by Neo-Indians, but added to these were stone and pottery vessels, baked clay balls, and many decorative or ceremonial objects. Also, shell and earthen mounds were built regularly.

The Neo-Indian Period lasted from 2000 B.C. to A.D. 1600 and included the following cultures: Poverty Point, Tchefuncte, Marksville, Troyville-Coles Creek, Caddo, and Plaquemine-Mississippian. These groups differed from one another in when and where they lived, as well as in the objects and earthworks they made.

Poverty Point

The Poverty Point Culture flourished from approximately 2000 B.C. to 600 B.C. The culture is named for the famous Poverty Point Site where the largest earthworks of the period were built. During this time, Poverty Point people lived in Louisiana, Mississippi, and Arkansas, and they usually settled near major rivers, junctions of lakes and rivers, or in coastal marshes. These locations supported a wide variety of plants and animals that could be used for food.

Like Meso-Indians, some Poverty Point Indians lived in small dispersed groups, but others established regional centers where large populations lived throughout the year. Oval or horseshoe-shaped structures of earth or shell were usually built at these centers. The reason for the construction is unknown, but it is likely that the Poverty Point leaders lived at such sites and that the sites functioned as ceremonial, political, and trading centers.

The Poverty Point Site in northeastern Louisiana was the largest regional center. When it was built, it lay between the Mississippi and the Arkansas rivers. Using these rivers, as well as land routes, Poverty Point Indians traded with other Indians as far away as Wisconsin, Tennessee, and Florida.



The Poverty Point Site is near Epps, Louisiana, in the northeastern corner of the state and is now a State Commemorative Area open to the public. The site covers more than a square mile, and when the ridges and mounds were built, they were the largest earthworks in the Western Hemisphere. Although the exact function of the ridges is as yet unknown, it is speculated that the aisles may have been used in astronomical observations because two of them line up with the summer and winter solstice sunsets.

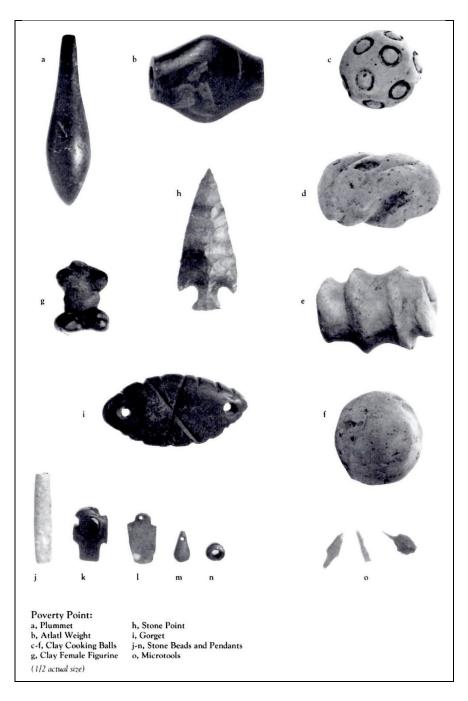
At the Poverty Point Site, the Indians built earthen ridges that form six semicircles, one inside the other. The ridges are interrupted by four aisles that radiate out from the inner area. The outer ridge of these earthworks measures nearly three-quarters of a mile across. Immediately to the west is an earthen mound 70 feet high, and just north of it is another mound, 21 feet high.

The ridges and mounds were built by hand. Workers loosened dirt with shells or stones used like hoes, then filled baskets and animal hides with soil and carried them to the construction area. Approximately 30 million 50-pound loads were used to build the earthen ridges and the two large mounds at Poverty Point. The construction may have taken many generations to complete.

Poverty Point Indians probably had a ranked society, perhaps with a chief to administer earthwork construction and long-distance trade. The leadership also may have helped organize food collecting and hunting activities.

People living at the regional center relied on hunting, fishing, and plant collecting to supply their food, just as Meso-Indians had. They gathered pecans, acorns, hickory nuts, persimmons, seeds of wild grasses, and other wild plant foods. Animals they are included deer, rabbits, squirrels, raccoons, muskrats, ducks, geese, turkeys, turtles, catfish, gar, bowfin, and bass.

Poverty Point Indians continued to use the tools that Meso-Indians had used for hunting, collecting, and food preparation. They were likely, however, to get some of the stone for these tools through long-distance trade. Neo-Indians also added new tools to the Meso-Indian ones.



They made oval-shaped stone plummets that were used as weights on bolas or nets. A bola could be flung so that it wrapped around the feet of wild game. Weighted nets could have trapped both fish and small game. Magnetite and hematite from Missouri and northern Arkansas were used by Louisiana Indians to make these plummets.

The Poverty Point Indians cooked their food in a new way. They made clay cooking balls that probably were used like charcoal briquettes for roasting and baking. They rolled clay in their hands, then squeezed or shaped it into one of many forms. These balls were dried and heated in a fire until hot, then up to 200 were placed in a roasting pit. The different shapes may simply indicate the maker's design preference or may have controlled temperature and cooking time.

Another change in food preparation was the introduction of stone, and later, pottery vessels. Stone cooking or storage bowls were made from steatite (soapstone) or less commonly from sandstone. Later in the period, the first Louisiana pottery vessels were made, and these probably were modeled after the earlier stone bowls.

In addition to these practical goods, Indians of this period made many ornamental objects, including stone and clay figurines, beads, and pendants. The figurines measured about 2.5 inches tall and represented seated females, but usually the heads were removed. This characteristic may indicate that the clay figurines were used in some kind of ceremony. Beads were made from copper, clay, and exotic stones. Pendants, also made of clay and stone, were made in the shape of birds, insects, miniature tools, and geometrical shapes.

To make pendants and beads, the Indians cut and drilled stones with small stone tools usually less than an inch in length. These tools, called microtools, were also used for cutting, scraping, sawing, and engraving bone, antler, and wood.

Some archaeologists think that distinctive traits of the Poverty Point Culture were shared by people living in Mexico and Central America at that time and even earlier. These traits included earthwork construction, planned villages, clay figurines, stone beads and pendants, and microtools. These southern Indians almost certainly influenced the development of certain aspects of Poverty Point Culture, either by direct contact or by descriptions shared by travelers.

The Poverty Point Culture that flourished for over 1,000 years had virtually disappeared by 600 B.C. There is no evidence of warfare or conflict with another group, so perhaps internal political or religious changes caused the decline. In any event, people gradually abandoned the regional centers and returned to living in small scattered settlements. Never again in Louisiana did the Indian people build such massive earthworks or trade over such an extensive area.

Tchefuncte

The simplified lifestyle that developed at the end of the Poverty Point Period continued throughout the next cultural period. During the time of the Tchefuncte (pronounced Chefunk'tuh) Culture, from 600 B.C. until A.D. 200, people lived in small scattered settlements. Long-distance trade was much less important, yet people in Louisiana were in contact with people in western Mississippi, coastal Alabama, eastern Texas, Arkansas, and southeastern Missouri.

In Louisiana, most Tchefuncte people appear to have lived in coastal areas and in lowlands near slow-moving streams. In these areas, they camped on natural levees, terraces, salt domes, cheniers, and ridges that provided dry ground in the wet environment. Here they built their

Department of Culture, Recreation and Tourism Louisiana Archaeological Survey and Antiquities Commission Anthropological Study No. 6 houses, probably temporary circular shelters having a frame of light poles covered with palmetto, thatch, or grass mixed with mud.

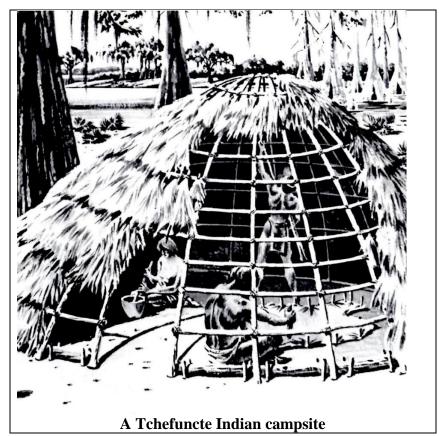


The Tchefuncte Site, on the north shore of Lake Pontchartrain, was so named because it was situated inside Tchefuncte State Park (renamed Fountainbleau State Park). The site had two shell middens, one that measured 100 feet by 250 feet and another 100 feet by 150 feet. Both were excavated, and archaeologists found 50,000 pieces of pottery, as well as artifacts made from bone, shell, and stone. Forty-three human burials were recovered, none of which had objects buried with them.

Tchefuncte peoples continued to depend on wild game and collected plant foods. In the coastal areas, they are tens of thousands of brackish-water clams and oysters, leaving behind piles of

shells called shell middens. Because of the number of shells, archaeologists once thought clams provided the major protein source for Tchefuncte people. Clam meat, however, is actually low in protein and other nutrients and calories. Clams were probably eaten because they were always available, but they were not an important source of nourishment. Surprisingly, Tchefuncte people apparently did not eat crabs or crawfish, which also were plentiful.

Tchefuncte Indians obtained most of their protein from deer, raccoons, alligators, and fish, but many other animals, especially small



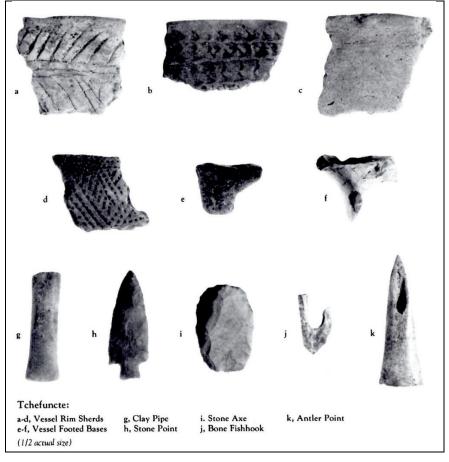
animals and migratory birds, also were eaten. The Indians used spears and atlatls to kill large game like deer and bear. For smaller mammals and birds, they preferred traps, nets, and bolas. They probably used several techniques for fishing including netting, spearing, and fishing with hook and line. Like the Meso-Indians before them, they gathered plant foods, such as grapes, plums, persimmons, acorns, and hickory nuts. They also may have grown squash and gourds in small gardens.

Tchefuncte people were the first Indians in Louisiana to make large amounts of pottery. They rolled coils of clay into shape and then smoothed them to form a container. Many shapes of pots were made, but characteristically they had "footed" bases. Often these Indians decorated the vessels by pressing fingernails, twigs, or tools into the surface or by rocking a small tool across the wet clay. After decorating the pots, they fired them by slow baking.

Later Indians almost always kneaded the clay thoroughly and mixed it with a small amount of another substance, called temper. These two steps strengthened the clay and helped prevent it from shrinking unevenly and cracking. Tchefuncte potters often omitted these steps, perhaps because they were unaware of their importance, or perhaps because clay was readily available, and they could easily make another vessel if one cracked.

The introduction of pottery was an important improvement in food storage. When these pots were kept covered, they provided a relatively dry and animal-proof, portable container. This made it easier to store food in times of plenty for use in leaner times. Tchefuncte pots also allowed stewing and other new cooking techniques to be experimented with and developed for the first time.

Most of the other utensils and tools Tchefuncte Indians used were very similar to those Poverty Point Indians made. These included smoking pipes; stone, bone, and antler



spear points; ground stone atlatl weights; mortars; bone fishhooks; clay cooking balls; and other butchering, hide-working, and woodworking tools.

In contrast to Poverty Point Indians, Tchefuncte Indians did not specialize in making stone beads, pendants, or microtools, and they did not usually import materials to make tools and ornaments. Although some innovations from the Poverty Point Culture were carried over, most Tchefuncte tools and most Tchefuncte settlement patterns resemble those of the Meso-Indians.

Information about this era comes largely from coastal regions of the state. Archaeologists are not sure how Indians in the rest of Louisiana were living at this same time, but it is likely that their culture somewhat resembled that of the Tchefuncte Indians.

Marksville

Sometime after 200 B.C., the highly influential Hopewell Culture was centered in Ohio and Illinois. By at least the first century A.D., groups of Louisiana Indians had met Hopewell travelers and had learned about their culture. Hopewell people had powerful leaders who organized construction of large mounds in which certain high-status people were buried along with exquisitely crafted objects made of copper, stone, bone, shell, pottery, and rare minerals.

At about the same time, the Marksville Culture flourished in Louisiana. It shared a number of important traits with the Hopewell Culture. For example, Marksville burial mounds, pottery, pipes, and ornaments resembled those of the Hopewell Culture. Marksville people most likely had leaders who directed craftsmen, organized community life, and officiated at burial ceremonies.

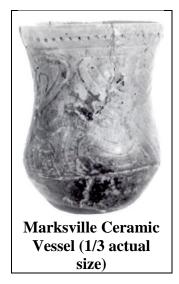
Burial rituals must have been a very important part of the Marksville Culture. Large mounds were constructed in several stages over many years. The first stage usually was a flat, low platform approximately three feet high and 40 feet in diameter. Burial ceremonies may have been held months or years apart and those who died between ceremonies were gathered up and buried together. Some remains had been temporarily stored in other areas, so these were interred along with primary burials and cremations.



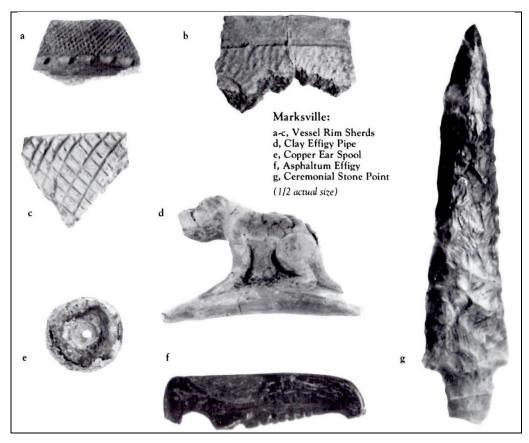
The Marksville Site, in Avoyelles Parish, was the first scientifically excavated site of the Marksville Culture. Burial mounds at the site are encompassed by a horseshoe-shaped earthen embankment almost 3,000 feet long. The site is now a State Commemorative Area open to the public. A museum at the park houses an exhibit describing the site and the people who lived there.

Pits were dug into the mound surface, and sometimes lined with logs and matting. Human remains were placed in the pits with pottery, pipes, stone points, shells, asphaltum, quartz crystals, and other valuable objects. Some of the bodies were ornamented with jewelry, such as copper beads, earspools, bracelets, and necklaces of shell, pearls, or stone. Occasionally, a dog was placed in a grave. The pits were then filled with dirt. filled with dirt.

Later, other pits might be dug for another occasion, or burials might be made by placing remains on the mound surface and covering them with a layer of earth. More construction eventually increased the overall size of the mound and shaped it into a dome. People buried in the mounds were high status individuals.

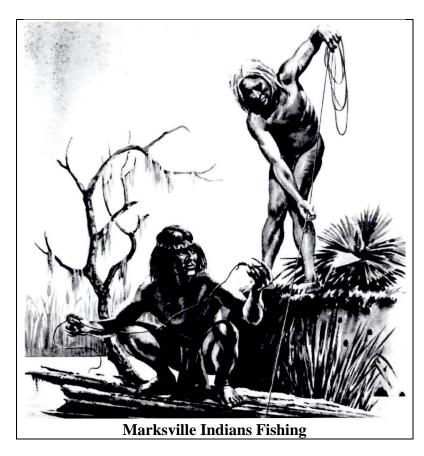


Marksville pottery was made from local clay, but it was quite similar in shape and decoration to pottery of the Hopewell Culture in Illinois and Ohio. A typical Marksville vessel was three to five inches tall and three to seven inches in diameter. Sometimes the rim had cross-hatched lines on the exterior at the top. The rest of the pot commonly had a design outlined with bold lines. Quite often the designs were geometric shapes or stylized birds. The background was textured by rocking or stamping a small, toothed tool across the wet clay. These decorated pots were made primarily for ceremonial uses.



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Marksville people also made other objects, including copper and stone jewelry, platform pipes, and figurines. The pipes had relatively broad, flat bases (platforms) approximately three inches long. At one end was a hole for a wooden or reed pipe stem, and in the center was a bowl. Sometimes an animal figure was on the platform, with the bowl formed in the animal's back. Animal and human figurines were also made. Most of these objects were buried in mounds as religious or burial offerings.



In contrast, Marksville people made most of their utilitarian objects the same way as Tchefuncte people before them. Marksville people hunted with atlatls, bolas, and nets, and fished with hooks and line. They gathered wild plants and shellfish, and probably grew a few domesticated plants in small gardens. They stored food in pots and baskets, and cooked in pots.

Despite the Hopewellian contact, much of daily life was unaffected by relationships with the northerners. Through time, Hopewellian influence diminished. Louisiana Indians built fewer burial mounds, developed their own distinctive pottery, and began a new way of hunting.

Troyville-Coles Creek

The Troyville-Coles Creek Period lasted from approximately A.D. 400 to A.D. 1100. By the beginning of this period, pottery styles, mound building, and ceremonial life had gradually changed from Marksville patterns.

The Troyville-Coles Creek people continued building ceremonial centers with mounds, but these mounds differed from earlier ones. They were larger, shaped differently, and more numerous. They also served a new purpose. Instead of being primarily for burials, these mounds were constructed to support temples or civic buildings. Pyramidal mounds with flat tops, and sometimes with stepped ramps leading up one side, came into style. They were constructed over hundreds of years and usually were enlarged one or more times. Although the total mound height might reach only 20 feet, the base might be enlarged to more than 200 feet on each side. At certain sites, three to nine mounds eventually were built, all around an open, central plaza.



The Greenhouse Site, in Avoyelles Parish, is the most extensively excavated site that is typical of the Troyville-Coles Creek Period. Seven earthen mounds there surround an open plaza that measures 200 feet by 350 feet. No remains of a village or campsite were found either in the plaza or outside the mound area. This leads archaeologists to conclude that the mound group was used for ceremonial activities only and that villagers lived elsewhere.

A temple and one or more other buildings were usually constructed on a mound summit. These buildings were either circular or rectangular with wattle and daub walls. Wattle is a construction technique whereby branches, twigs, cane, or vines are interlaced around upright posts that have been sunk in the ground. This wattle framework is then plastered with mud or clay daub. The Troyville-Coles Creek people probably used grass thatch or palmetto fronds for the roof.

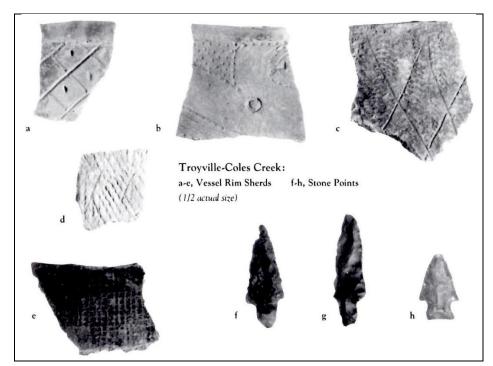
Some people were buried in the mounds, but in contrast to Marksville burials, the bodies were not accompanied by a rich assortment of objects. One or more bodies were buried in pits or simply laid upon the mound summit and covered with dirt. People also were buried in village areas away from the mounds. No one knows why some individuals were buried in the mounds and some were not. It may be that people associated with mound construction, with temple activities, or those of significant social status were buried in the mounds. Alternatively, if many people died from illness, famine, or disaster, this might have signaled a time for special ceremonies and mound enlargement.

Villages and campsites were often a mile or more from these ceremonial centers. There, daily life was more focused on maintaining a stable food supply than on ceremonial activities. Important changes in hunting techniques helped guarantee this food supply.

During the Troyville-Coles Creek Period the bow and arrow came into use in Louisiana. First invented in Europe thousands of years before, bows and arrows were gradually adopted by people in Asia and eventually by people in North America. The introduction of the bow and arrow meant hunters could shoot farther, more accurately, and with more firepower than before. The arrow points were generally smaller than those used on spears. These then, were the first true arrowheads made in Louisiana.

Troyville-Coles Creek people also continued using the atlatl, as well as the traditional butchering and hide-working tools that had been made since Meso-Indian times. There was no dramatic change in the types of animals hunted during this time. The Indians killed game such as deer, bear, small mammals, and birds. Like their ancestors, these people also ate fish and mollusks.





Troyville-Coles Creek people continued collecting wild seeds, fruits, roots, and other plant foods. They probably cultivated squash, gourds, and native plants, such as sunflowers and lamb's quarters. These Indians no doubt experimented with cultivation for many generations, developing techniques best suited to Louisiana conditions. Certain

plant foods were still ground with mealing stones and probably stored in pottery vessels.

During this period, pottery styles changed as people produced more durable pots with more diversified uses. The Troyville-Coles Creek Indians tempered their clay with particles of dried clay before coiling it to shape the pot. They specialized in rounded or barrel-shaped jars and in deep or shallow bowls. The potters removed coil marks by patting the surface with a smooth wooden paddle.

Sometimes they used a carved wooden paddle to stamp designs onto the entire outer surface of the vessel. Most of the time, however, they decorated only the top half of the pot with designs formed by incising lines or pressing tools into the damp clay. The colors of the clay were usually tan, brown, gray, or black. On rare occasions, vessels were colored red on the outside or shaped into human effigies.

Late in the Troyville-Coles Creek Period, changes began to occur. Indians in the northwestern part of the state developed close ties with people living north and west of them, while those in the east became more closely aligned with people to their east.

Caddo

By about A.D. 800, people living in northwestern Louisiana had developed close ties with people in southeastern Oklahoma, northeastern Texas, and southern Arkansas. From this region emerged the Caddo Culture. These Indians developed a fine, new style of pottery and used special ornaments and objects made from imported materials. They also prepared elaborate burials of upper class people.

There was little change in the daily life of the ordinary Indians. Most people spent their lives in small villages and hamlets near streams or lakes. Many trends established in earlier generations persisted. Now garden crops included corn, squash, gourds, native plants, and later, beans. People from these small settlements probably were governed by high status individuals living at the ceremonial centers. Common people were probably required to help build mounds, to supply food, and to make tools or special objects for their rulers. They gathered at the centers when they were needed or when special ceremonies or festivals were celebrated.

Early Caddo people continued the Troyville-Coles Creek custom of constructing ceremonial centers with mounds around a central plaza. They built temples or special buildings on top of the mounds and also dug graves into the mounds for burials of important people.



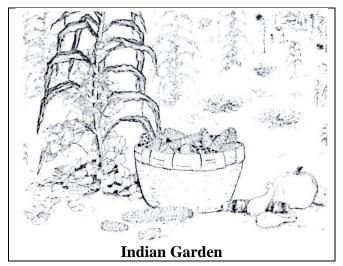
At the Gahagan Site, in Red River Parish, early Caddo Indians built mounds and a village around a large open plaza. One mound had three deep shaft burials, each with three to six bodies and 200 to 400 burial items. Some of the unusual burial objects from this site are two clay, human effigy pipes, two copper cutouts of human hands, two copper, long-nosed-mask ear ornaments, two frog effigy pipes, and numerous triangular stone blades called "Gahagan knives."

These mound burials, however, differed somewhat from those of earlier cultures. To bury an honored priest or chief, Caddo people dug a large deep shaft, often all the way from the top of the mound to the ground level. Then they placed the chief's body, and other bodies (possibly of sacrificed servants or family members) in the grave side by side. Special objects were piled in the corner or along the wall of the pit.

Burial offerings included exquisite tools, ceremonial objects, and jewelry designated only for high status people. Typical objects were fine pottery, carefully flaked stone knives, arrow points, bows, turtle shell rattles, polished stone axes, rare minerals, stone or clay smoking pipes, animal teeth pendants, bone hairpins, ear ornaments of bone, shell, or copper, and beads of copper, shell, and stone. Unusual objects were pipes in the form of humans and frogs, sheets of copper cut in the shape of hands, and ear ornaments resembling small copper masks. The face of each "mask" was an oval about three inches long, but the nose was seven inches long. Interestingly, at the same time, identical masks were also used by Indians as far away as Missouri, Wisconsin, and Florida.

Caddo potters made special new shapes, such as bottles, and bowls with sharply angled rims. They fired the pieces in a new way so they would be black or dark mahogany in color, then polished the dark surfaces to make them glossy. Some common ornamental designs were curved lines cut into the surface and sometimes highlighted with red or green-colored pigment rubbed

into the engraved lines. Much of the utilitarian pottery remained quite similar in appearance to the late Troyville-Coles Creek pottery. Caddo Indians probably still used it for daily chores, whereas they saved more ornate wares for special occasions.



Ordinary Caddo Culture people lived in hamlets. Their lives were centered around hunting, fishing, collecting, and gardening activities. When a commoner died, he or she was buried in the hamlet in a simple grave. Although this way of life appears to be separate from the elaborate life of the elite, the two worlds overlapped at ceremonial occasions, when everyone gathered at the mound centers.

Between A.D. 1100 and A.D. 1400, burials generally were simple, with only one person in a grave. Fewer imported stones and

minerals were used to make high status objects, but both ordinary and fine, engraved pottery continued to be made.

After A.D. 1400, many early Caddo customs were revived, but new practices were added. Mound construction continued, with temples, lodges, or chiefs' houses being built on top. These structures characteristically were built of wattle and daub and had thatched roofs. They were used for a time, then burned, probably when the leader or an important person died. Workers covered the ruins with sand or clay and eventually replaced the old building with a new one. Sometimes graves were dug through the floor of standing buildings or through the rubble of burned ones. As many as seven people have been found buried together in these graves, along with food offerings and large numbers of objects.

As in earlier times, important people had special customs and belongings that ordinary people did not have. One custom was that of binding an infant's head to a cradleboard so that as the person grew to maturity the head was noticeably flattened. This characteristic distinguished a high class person from a person of the lower class. Upper class people used ornate clay pipes, conch shell cups, ceremonial objects, fine pottery, and jewelry. Their jewelry included anklets, necklaces, bone hairpins, and ear ornaments made of bone, shell, and pottery. Some pendants were fashioned from mammal teeth or shells, and occasionally a large sea shell pendant had a lizard or salamander engraved on it.

During this late period, the Caddo made some of their most delicate and decorated pottery. Pots ranged in size from miniatures to large wide-mouthed storage vessels. Many shapes were made, but special vessels were formed to resemble birds and turtles, or to act as rattles. Popular designs were circles, scrolls, and crosses engraved into the vessel after firing. Engraved designs were often highlighted with red, white, or green pigments.



Daily life of ordinary people continued as it had during the earlier part of the period. They lived in circular houses in small villages located near their gardens and usually buried their dead along with pottery in simple graves.

By the time the first Europeans reached Caddo villages in the mid-1500s, Caddo Indians were divided into several distinct groups. In Louisiana, these were the Adaes, Doustioni, Natchitoches, Yatasi, and probably the Ouachita. The Indians supplied the Europeans with salt, horses, and food in exchange for glass beads, kettles, guns, ammunition, knives, ceramics, bells, and bracelets. Contact with Spanish and French explorers ended the prehistoric era, and led to rapid and devastating changes in traditional Indian life.

Plaquemine-Mississippian

While Caddo Indians flourished in northwestern Louisiana, by approximately A.D. 1000, those in the rest of the state had a slightly different way of life. Many of the latter were part of the Plaquemine Culture, who were descendants of Troyville-Coles Creek Indians. In keeping with the patterns established by their ancestors, Plaquemine people built large ceremonial centers with two or more large mounds facing an open plaza. The flat-topped, pyramidal mounds were

Department of Culture, Recreation and Tourism Louisiana Archaeological Survey and Antiquities Commission Anthropological Study No. 6 constructed in several stages and eventually measured more than 100 feet on a side and 10 feet high. Sometimes they were topped by one or two smaller mounds.

Plaquemine Indians often built mounds on top of the ruins of a house or temple and constructed similar buildings on top of the mound. In earlier times, buildings were usually circular, but later they were likely to be rectangular. They were constructed of wattle and daub, and sometimes with wall posts sunk into foot-deep wall trenches.

At times, the Indians dug shallow, oval or rectangular graves in the mounds. These might have been for primary burials of individuals, but more frequently they were for the reburial of remains originally interred elsewhere. Some graves contained only skulls, and one of these had 66 skulls. Burial offerings included pottery, pipes, stone points, and axes made of ground stone.



The Medora Site, typical of the Plaquemine Culture, is in West Baton Rouge Parish. The site had two mounds approximately 400 feet apart with a plaza in between. One was a flat-topped pyramid 125 feet on a side and 13 feet high, with a small domed mound three feet high and 25 feet in diameter on top. The other one was two feet high and 100 feet in diameter. Eighteen thousand pieces of broken pottery were found at Medora, along with a few stone tools.

One kind of pottery occasionally placed in the graves is called "killed" pottery. This type has a hole in the base of the vessel that was cut while the pot was being made, usually before it was

fired. The Plaquemine Indians also decorated their pots in other characteristic ways. They sometimes added small solid handles called lugs and textured the surface by brushing clumps of grass over the vessel before it was fired. They often cut designs into the surface of the wet clay, and like their Caddo contemporaries, the Plaquemine Indians engraved designs on pots after they were fired. Plaquemine Indians also had undecorated pots that they used for ordinary daily tasks.

Ordinary Plaquemine people lived much as the average Caddo Indians. They participated in festivals and ceremonies at mound centers but spent most of their time with families and neighbors collecting and producing food, or participating in village activities.



Plaquemine Ceramic Vessel

During the early part of the period some hunters still used atlatls, but soon bows and arrows predominated. Plaquemine Indians hunted deer, bear, rabbits, squirrels, raccoons, turkeys, and ducks; fished for gar and drum; and collected mussels. Although these Indians tended gardens of corn, squash, pumpkins, and beans, they still collected many wild seeds, roots, nuts, and fruits.



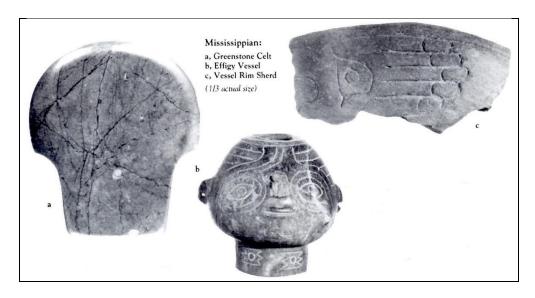
At approximately the same time as Caddo and Plaquemine Indians were living in Louisiana, Mississippian Culture people in the St. Louis area had developed the largest prehistoric center in the United States.

This was a ceremonial, residential, and trading center with a population of 35,000-40,000 people. The Mississippian Culture spread throughout the southeastern United States and was characterized by huge earthen temple mounds, widespread trading networks, and a ceremonial complex represented by elaborately shaped pottery and stone, bone, shell, and copper objects.

No evidence has been found of major Mississippian centers in Louisiana comparable to those established in Georgia at Etowah and in Alabama at Moundville. There is evidence that sometime between A.D. 1000 and A.D. 1600 small groups of people from the eastern

Department of Culture, Recreation and Tourism Louisiana Archaeological Survey and Antiquities Commission Anthropological Study No. 6 Mississippian centers made their way to Louisiana. They came to the Avery Island area to collect and refine salt, and to other parts of the state to search for other materials.

Through repeated contacts, a few groups of Louisiana Indians learned classic Mississippian techniques of making pottery and other ceremonial objects. Some Indians in the south-eastern and northeastern parts of Louisiana may even have established close ties with their eastern neighbors and added Mississippian customs to the Plaquemine Culture. Louisiana groups that may have descended from those Mississippian groups are those who speak the Tunican, Chitimachan, and Muskogean languages. Those who probably descended from Plaquemine Culture Indians are the Taensa and Natchez.



European Travelers Describe Indians

As Europeans explored North America, their diseases spread rapidly to Native Americans throughout the continent. These illnesses killed many Indians and led to significant changes in traditional Indian life. Nevertheless, descriptions of the Natchez and Taensa Indians written by European explorers provide a glimpse of how the late prehistoric Indians lived.

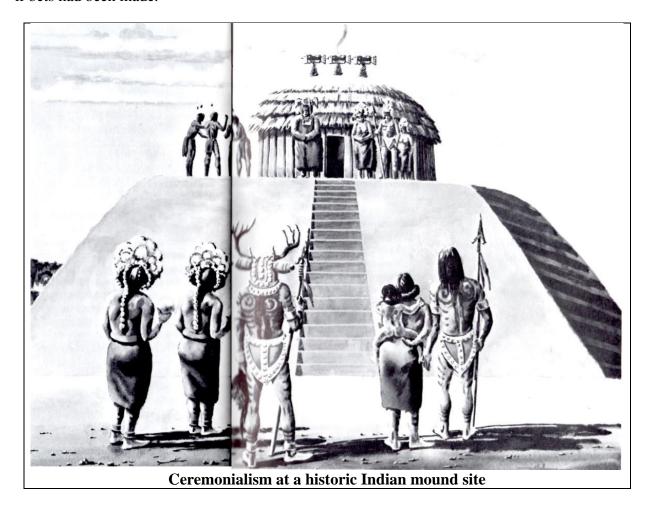
European travelers reported that some Indians lived near the ceremonial centers that had mounds surrounding a central plaza. The two most important buildings, the temple and the chief's house, were here.

The temple was on the summit of one of the mounds or was in a prominent place facing the plaza.

It had thick wattle and daub walls and a thatched roof with carved and painted wooden animal effigies on top. Inside, a sacred fire was tended by several Indians, whose job it was to keep the fire always burning. Bones of past chiefs, and servants who had died with them, were stored in baskets or on a low clay altar. Valued objects, such as clay figurines, crystals, and carved wooden objects also were kept in the temple.

The temple faced a plaza that was the scene of community feasts and rituals, as well as games, such as chunkey. In chunkey, opponents hurled long poles after a rolling disc. The one whose

pole landed closest to the place where the disc stopped rolling won a point or valued possessions if bets had been made.



The chief's house, situated on top of a mound, overlooked the plaza area. The chief used the house as his living quarters and as a reception area for visitors and subjects. The furnishings of the house included wooden beds covered with matting, and perhaps a wooden stump used as a stool. Reed or cane torches provided light. Servants waited on the chief, always keeping a respectful distance and quickly meeting all of his needs. No one ever used the chief's belongings or walked in front of him.

The chief was a highly honored and respected person, and his death was a time for great mourning. Ceremonies, dancing, and processions were part of the burial rituals that continued for several days. The chief's wife, servants, and others who volunteered for the honor, were sedated and ritually strangled as part of the ceremonies. The bodies were placed on special raised tombs covered with branches and mud. After many weeks, the bones were removed and placed in baskets that were stored in the temple. Eventually, the bones were buried in a platform in the temple or in the mound when it was expanded. The deceased chief's house was usually burned and perhaps covered with another layer of earth before the new chief's house was built. The son of the dead chief's sister became the next ruler.

People from miles around came to participate in the burial ceremonies, after which they returned to their villages and resumed their normal lives. Some lived in small communities near the mounds, but others lived in scattered settlements miles away.

Their clothing was very simple. Men wore only a cloth or deerskin breechcloth, unless the weather was cold. Then they added long deerskin shirts and leggings. Women wore skirts of skin or of cloth woven from tree bark, and in cold weather they also wore a skin wrap.

Women usually wore their hair long, sometimes tying it back or braiding it. Men wore theirs short and in many styles. Sometimes they completely removed the hair from one side of their head. Women often decorated themselves by blackening their teeth with ashes and by rubbing red pigment on their faces, shoulders, and stomachs. Men decorated themselves, too, especially on ceremonial occasions when they painted themselves with red, white, or black markings and tied feathers in their hair. Both men and women wore earrings in their pierced ears and large pendants or strings of shells or seeds around their neck. Honored warriors and upper class people wore red and black tattoos on their faces and other parts of their bodies.

Men and women had very different daily tasks. Women took care of the young children; planted, tended, and harvested the crops; cooked the meals; and made the pottery, baskets, mats, and clothing. Men's work consisted of house building, canoe making, and clearing land for gardens, along with defense, hunting, woodcutting, and making the tools for these chores. Men also had primary responsibilities for ritual and political activities.

The European explorers traded with the men. Europeans provided guns, ammunition, metal kettles, iron tools, glass beads, and metal ornaments. These were sometimes given as gifts to hosts, guides, or to the chief, and they were also exchanged for pearls or baskets, and for necessities, such as meat, oil, salt, skins, and horses.

Archaeology and Louisiana's Past

Although the journals of European explorers provide some information about historic Louisiana Indians, hundreds of questions about prehistoric Indians remain unanswered. When did the first Indians reach Louisiana? What sparked the development of the Poverty Point Culture? Where and how were the Mexican plants of corn, beans, and squash introduced to Louisiana? Which prehistoric groups were the ancestors of each of Louisiana's historic Indian tribes? The answers to these and many other questions remain buried in archaeological sites throughout the state. If enough sites can be studied before they are destroyed, there is hope that the story of the state's prehistory can be better explained.

The importance of archaeology in understanding Louisiana's past does not stop with the end of the prehistoric era. Historical archaeologists also study Indian sites that date after contact with Europeans to document the many dramatic changes in Indian culture during historical times. Archaeologists also excavate sites associated with African-American and European-American life in Louisiana. These archaeological investigations supplement, and often correct, the written documents that describe the state's history.

With the cooperation and participation of Louisiana's citizens, the archaeological study of our state will continue. Through the protection of sites and the funding of scientific excavations, more can be discovered about the past. Then Louisiana's prehistory and early historical development can be interpreted more accurately and more completely.

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