

Southern New Hampshire University

Fountain of Youth Archaeological Park

Interactive Archaeology Exhibit

A Capstone Project Submitted to the College of Online and Continuing Education in Partial
Fulfillment of the Master of Arts in History

By

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Abstract

This thesis is to support the hands-on archaeology exhibit at the Fountain of Youth Archaeological Park in St. Augustine, Florida. St. Augustine is the oldest continuously occupied city in the United States. Before the British created Jamestown, Pedro Menendez de Aviles came with 800 men, women, and children to create a permanent settlement in Florida. Menendez landed and at the inlet that would become St. Augustine. Father Lopez, the fleet chaplain, conducted a mass at the landing site. Chief Seloy invited the newcomers to stay and gave Menendez his own council house. The village becomes the home of the new colonists for the first nine months in Florida. This was the first time in American history in which European/Iberian and Native American cultures lived together for any length of time. The Fountain of Youth Archaeological Park is the site of the first colony. It has been studied by archaeologists since 1934 when human remains were discovered. Dr. Ray Dickinson of the Smithsonian Institute determined these to be the remains of Timucua natives buried as Christians.¹ Dr. Kathleen Deagan, University of Florida Museum of Natural History, dedicated over thirty years of her career at this site discovering this to be the first colony. The location of which had eluded historians and archaeologists for hundreds of years. This archaeology exhibit project is aimed to provide a hands-on activity for fourth-grade Florida students. The main focus of this project will be pre-Columbian history, Spanish explorations, the founding of St. Augustine, and the cultural aspects of this new mixed community. It is important to share with students that more than just people came to Florida in 1565. The Spanish brought their culture with them, including food, animals, religion, weapons, and tools.

¹ Timucuan Burials, *Ponce de Leon's Fountain of Youth Archaeological Park*, accessed January 4, 2021, <https://www.fountainofyouthflorida.com/exhibits/timucuan-burials/>.

Dedication

I dedicate this project to my children, grandchildren, and my history teacher. My children, Paul, Nicole, and Noah, have always been my inspirations to teach outside of the box. I love to share our history, heritage, and traditions with my granddaughters, Isabella and Karissa. My history teacher, Mrs. Nunn, showed me that history is more than just names and dates to remember. It is important to understand that for a real education, one must get out of the library.

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Glossary

Archaeology – The scientific study of past human cultures by analyzing the material remains that people left behind.

Archaeological Site – A place where human activity occurred and material remains were deposited.

Artifact – Any object made, modified, or used by people.

Feature – A type of material remain that cannot be removed from a site such as roasting pits, fire hearths, house floors, or post molds.

Midden – An area used for trash disposal.

Post mold – A type of feature; a circular stain left in the ground after a wooden post has decayed; usually indicates the former existence of a house or fence.

Sleeper – A split log laid on the ground as a sill. The archaeological signature of a log sleeper is an impression or hole the shape and size of the log.

Introduction

St Augustine is the oldest continuously occupied European city in the United States. When Pedro Menendez de Aviles created this settlement in Florida, Chief Seloy of the Timucua people gave him his council house and they were invited to stay. The Spanish stayed in this village for less than a year before the settlement was burned and they had to move across the river to what is now Anastasia Island. It was also the first location of the Franciscan Mission of Nombre de Dios from 1587. For many years, the site of the first settlement eluded historians and archaeologists. A Christian Indian burial site was discovered in 1934 while planting orange trees. This brought the first archaeology team from the Smithsonian. During subsequent studies of the site of the Fountain of Youth Park as a Timucua village in contact with the Spanish colonists, archaeologists discovered the evidence to prove this as the site of the first colony and village of Seloy.

The Fountain of Youth Archaeological Park is a tourist attraction in St. Augustine, Florida.¹ It was added to the National Register of Historic Places for being the site of the first Spanish muster. The park offers historic interpretation and demonstrations about Ponce de Leon discovering and claiming Florida for Spain, the Timucua people, and the colonization of St. Augustine. This project is for a hands-on archaeology exhibit in which fourth-grade field trip students can attempt to find an artifact. This exhibit can be seen at <https://foyarchaeology.omeka.net/>.

First chapter will look at the history and historiography of the events that took place at this site. Next we will look at what is known about the Timucua through archaeology,

¹ Ponce de Leon's Fountain of Youth Archaeological Park, <https://www.fountainofyouthflorida.com/>.

anthropology, and historic documentation. Using the primary and secondary sources, the next chapter will cover the cultural aspects of the Timucua and Spanish. We will then look at the archaeology reports that explain the discoveries at Fountain of Youth site over the course of more than thirty years. This will show cultural information` from both Timucua and Spanish. The final chapter will explain the archaeology exhibit and recommendation for further expansion. This project will help teach students the history of the first colony and that history is more than just names and dates to remember using multiple learning styles and interactive activities.

Chapter 1: The First Colony of St. Augustine

The major interpretational trends of the events surrounding the settlement of St. Augustine are geopolitical and socioeconomic in nature. The methods used in this study will be focusing on the cultural aspects of the Timucua village of Seloy and the Spanish colonists. The primary sources focused on in this study will be the archaeological studies done at the Fountain of Youth Archaeological Park.

Historians have painstakingly researched, microfilmed, translated, and transcribed documents from the Archives of the Indies in Seville, Spain that are related to the colonial periods of Florida. The collections at the Archivo de Indias are of high interest for the “historical study of the work of Spain in the Indies, affecting an enormous area, including America (from the southern United States to Tierra del fuego) and the Philippines during the fifteenth to the nineteenth centuries”.¹ The St. Augustine Historical Society Research Library houses the microfilmed copies of the John B. Stetson Collection of the first Spanish period documents. The University of Florida houses the John H. Hann Collection which has several translated documents of primary sources from the Spanish colonial periods.

¹ “Introduction to documentary collections,” *General Archive of the Indies*, accessed November 2020, <http://www.culturaydeporte.gob.es/cultura/areas/archivos/mc/archivos/agi/fondos-documentales/introduccion.html>.



Figure 1: Pedro Menendez de Aviles, Founder of St. Augustine

Courtesy of Florida Museum of Natural History

Historian Eugene Lyons, considered the foremost authority on the history of St. Augustine, devoted more than forty years to researching and translating primary sources in Florida and Spain. In *Enterprise of Florida* Lyons narrated the events starting with the political and religious background in Spain and France. He portrayed Menendez not as a ruthless conquistador sent only to expel the French intruders, but as a loyal and faithful servant to his king, his country, and to God. It is noted by many of the historians, including Lyons, that the French and Saturiba were considered allies. This alliance between the French and this powerful chief, Saturiba, caused problems with the Spanish.

On September 8, 1565, “Menendez ...stepped ashore amidst the sound of trumpet and drum, the firing of cannon, and the shouts of the six hundred”.² As recorded by Gonzalo Solis de Meras who was Menendez’s brother-in-law and Father Francisco Lopez de Mendoza Grajales, the fleet chaplain, a mass was conducted upon his landing. Father Lopez recorded, “I took a cross and went to meet him, singing the hymn *Te Deum laudamus*. The general marched up to the cross, followed by all who accompanied him, and there they all kneeled and embraces the cross. A large number of Indians watched these proceedings and imitated all they saw done”.³

The Spanish set in to creating homes and fortifying the village against any attacks by the French and hostile natives. After the defeat of the French, Menendez came in contact with the Ais tribe south of Cape Canaveral. This was the next step in making allies with the natives. Lyons explained the encounter in *The Enterprise of Florida* writing, “Communication was difficult between the men, Pedro Menendez and the cacique Ais concluded an agreement, in which the Indian swore fealty to Philip II and promised peace and obedience”.⁴ The next group of natives Menendez met with were the Calusa. Menendez intended to acquire an alliance with Chief Carlos and gain the freedom of the shipwreck survivors from twenty years prior. According to Lyons, “Accompanied by an entourage of harquebusiers with matchcords lit and weapons ready, Menendez landed at the village to the music of fife, drum, and trumpet”.⁵ Chief Carlos was impressed by Menendez’s display of strength and power and an alliance was formed. One of the native traditions in creating such an alliance was through marriage to the chief’s sister

² Albert Manucy, *Menendez: Pedro Menendez de Aviles Captain General of the Ocean Sea*, Sarasota: Pineapple Press, Inc. 1983.

³ Matthew J. Connolly, “Four Contemporary Narratives of the Founding of St. Augustine,” *The Catholic Historical Review*, Vol. 51, 3, Oct. 1965.

⁴ Eugene Lyons, *The Enterprise of Florida*, 130.

⁵ Lyons, 148.

or other available family member. Menendez married the chief's sister and took her with him to Cuba.

Albert Manucy, author of *Menendez: Pedro Menendez de Aviles, Captain General of the Ocean Sea*, was a St. Augustine native⁶. He was one of the first National Park Service historians. He followed the events from the biographical perspective of Pedro Menendez as a loyal Spanish soldier and servant of God. Using a narrative of different episodes from his early career through the colonization, he created a memorable and entertaining story. Manucy also included the story of Menendez and the Calusa as well as several other encounters. One of the endearing moments with Chief Carlos was when they first met. Manucy wrote, "Menendez sat near him, Carlos knelt, with the palms of his hands turned upward, and Menendez joined hands with him in this gesture of respect and friendship".⁷ Chief Carlos had given his sister to Menendez as his wife. This princess was baptized that day as Antonia, since it was St. Anthony's feast day. She was then taken to Havana and set up with a household and given religious education.

Pedro Menendez de Aviles and the Conquest of Florida, by David Arbesu, was a translated narrative of the chronicle originally written by Gonzalo Solis de Meras⁸. He was a member of the expedition in 1565 and related to Menendez through marriage. Arbesu considered the account by Meras to be the single most important narrative of the conquest and settlement of Florida by Pedro Menendez and one of the oldest accounts written in and about the region. He provided background on the 16th century manuscript and information on the sources he used. The

⁶ Albert Manucy, *Menendez: Pedro Menendez de Aviles, Captain General of the Ocean Sea* (Pineapple Press 1983).

⁷ Manucy, 50.

⁸ Gonzalo Solis de Meras, edited, annotated, and translated by David Arbesu, *Pedro Menendez de Aviles and the Conquest of Florida: A New Manuscript* (University of Press Florida 2017).

narrative began with the preparation and voyage to Florida. It continued following Menendez as he met the people of Florida and the voyages until his return to Spain in 1567. Meras wrote as a religious man with loyalty to his King and also to his family. He showed his bias and religious fervor when he explains the storm saying, “God performed a miracle: even though the weather was calm and clear, all of a sudden the sea became very rough, and from the north came a strong wind that was contrary to what the [the French] needed to go [back] to their harbor and fort”⁹. The conquest of Florida was not just a conquest for land but their divine right to be victorious over the French heretics and to spread the Gospel.

Altar and Hearth: The Coming of Christianity by Michael V. Gannon¹⁰ is an article in Florida Historical Quarterly Volume XLIV, July 1965 – April 1966. Michael Gannon tells the religious contributions of the Spanish since the time of Juan Ponce de Leon until the death of Pedro Menendez in 1574. The last letter written by Menendez to his nephew in Florida on September 8, 1574 says, “After the salvation of my soul, there is nothing in this world that I desire more than to see myself in Florida, to end my days saving souls...that is all my longing and happiness”. Gannon began with the idea that the Catholic Church’s contributions to America began with the very first explorations. The first Franciscan mission was built in 1587 near the site of the 1565 Menendez encampment and was known as Nombre de Dios. This was a wood and thatch church constructed at what is now the southwestern corner of the Fountain of Youth Park. This is where the burial site is and was the first archaeological study done in 1934. There is

⁹ David Arbesu, *Pedro Menendez de Aviles and the Conquest of Florida* (University Press of Florida 2017).

¹⁰ Michael V. Gannon, “Altar and Hearth: The Coming of Christianity 1521 – 1565,” *The Florida Historical Quarterly XLIV* (July 1965 – April 1966): 17 – 44.

now an interpretive exhibit at the burial site that explains the discovery, excavation, and re-interment of these Christian Timucua.¹¹

Francisco Alonso De Jesus wrote a letter to King Philip IV in May of 1622 to advise him concerning a native people in South America, known at that time as New Granada, which was resistant to the efforts of missionary Christianization. Roderick Wheeler, author of “Letter of Fray Francisco Alonso de Jesus, O.F.M., Florida Missionary, to the King, concerning the Conversion of the Indians of Popayan” writes, “His ten years among the Indians of Florida and Georgia enabled Fray Francisco Alonso de Jesus to size up the situation of the numerous tribes of restless and warlike Indians dwelling in the immense regions administered by the Governor of Popayan”.¹² According to Wheeler, Fray Francisco gave advice to send peaceful missionaries saying, “The experience of the Franciscans in the Florida missions since 1573 had led them to the conclusion that the best way to convert even the most refractory Indians was that the peaceful penetration by missionaries, unaccompanied by armed soldiers”.¹³ Fray Jesus spent his life in America “in the service of their Indian charges, seeking them out even in the most inaccessible regions of the Americas to win them to Christ and to civilized life and protecting them against every danger of exploitation”.¹⁴ While this information covered a broad period of time, it is very important to include it in the interpretations of the Fountain of Youth since it is the site of the first colony and mission. It is too often the accepted history that native people were forced into

¹¹ Ponce de Leon’s Fountain of Youth Archaeological Park, <https://www.fountainofyouthflorida.com/>.

¹² Roderick Wheeler, “Letter of Fray Francisco Alonso de Jesus, O.F.M., Florida Missionary, to the King, concerning the Conversion of the Indians of Popayan,” *The Americas*, Vol. 6, 2, (Oct., 1949).

¹³ Wheeler, 238.

¹⁴ Wheeler, 240.

Christianity, forced into slavery, abused, and annihilated all across the colonies. It is important to show that this was not always the case.

Amy Turner Bushnell also explains the differences between the relationship between Spanish and Indians of Florida from that of the people of New Spain. Bushnell quotes Governor Pedro de Ybarra saying, “These people are not conquered like those of New Spain... This is a new land”.¹⁵ In this article, Turner looks at the relationship that developed in Florida between the native people and the Spanish. She looks to answer the questions of how the relationship came about, how it functioned, what the parties expected out of it, and what conditions could sustain or undermine the relationship. She points out that while the Spanish left written sources, the thoughts of the Indians must be gauged through their reported speech and behavior.¹⁶ The historiography of the failed Florida missions is written with the same bias and resentment as that of New Spain. The failure, she says, should not be blamed on colonial demands and native resistance, but on the fact that neither the colonists nor the natives could get the king to live up to their agreements.¹⁷

John E. Worth was the author of a two volume work, *Timucua Chiefdoms of Spanish Florida*, which studies the assimilation and destruction of the Timucuan societies of Spanish Florida near St. Augustine. He began with an analysis of late prehistoric chiefdoms in volume 1 to show their culture prior to colonization. He explained the effects of exploration and colonization and described the expansion of the mission frontier. He also explained the internal political and economic structure of the colonial system. The Spanish used the natural hierarchy

¹⁵ Amy Turner Bushnell, “‘These people are not conquered like those of New Spain’: Florida’s Reciprocal Colonial Compact,” *The Historical Quarterly*, Winter 2014, Vol. 92, 3.

¹⁶ Bushnell, 525.

¹⁷ Bushnell, 528.

of the Timucua to install the missionary work. Worth wrote, “The establishment of missions was a lengthy affair in which Franciscan Friars worked within the pre-existing political structure of local and regional chiefdoms to first baptize and catechize, or instruct, the inhabitants in the Faith”.¹⁸ The second volume, *Resistance and Destruction*, explained that the missions between St. Augustine and the Apalachee province became like a chain of way-stations. According to John Worth, the collapse of the missions and the English-sponsored raids on native settlements and missions led to the final demise of the Timucua people.

America’s Untold Story an episode of *The Secrets of the Dead* is a documentary film that tells story of the founding of St. Augustine using Historical imagination with reenactments. The archeologists use material history to tell the story of people whom would not have had a story otherwise. This film includes interviews with archeologists Dr. Kathleen Deagan, Maritime Archaeologists Dr. Sam Turner and Dr. Chuck Meide, Historians Dr. Eugene Lyons, Dr. Michael Gannon, Dr. Susan Parker, Dr. Jane Landers, Dr. Timothy Johnson, Dr. J. Michael Francis and Dr. Roger Smith, Historic Minister of Aviles, Spain Roman Gonzalez and Don Alvaro Armada Barcaiztegui, Conde (Count) De Guemes. Don Alvaro is a direct descendent of Pedro Menendez de Aviles, which provides him a unique view of the founding of St. Augustine.¹⁹ The narrative tells about the Spanish landing, conducting a mass and a feast which included the Timucua. Then it tells about defeating the French and capturing Fort Caroline, the mutiny, and finally about the natives getting aggressive toward the Spanish and the colonists have to relocate to Anastasia Island. This documentary stresses the fact that the founding of St. Augustine was really the

¹⁸ John E. Worth, *Timucuan Chiefdoms of Spanish Florida, Volume 1: Assimilation*, Gainesville: University Press of Florida 1998, p 40.

¹⁹ “Struggle to Survive,” *Secrets of the Dead: America’s Untold Story*, directed by Jane Buckwalter, written by Robbie Gordon, DVD 2017.

beginning of American history and has been almost completely ignored historians and educators. One of the reasons this story has gone untold this long is that the records were in Seville, Spain. Also, it has only been in recent years that United States scholars have been able to read and translate this archaic Spanish.

The interpretation of the natives becoming aggressive portrays this event to be those of the village of Seloy and that the Spanish had overstayed their welcome. Another source that uses this same interpretation of the colonists being relocated is the University of Florida's Museum of Natural History in Gainesville.²⁰ However, the event was explained differently by Eugene Lyons and also by David Arbesu. According to these historians, the aggressors were the Timucua from the San Mateo area. This was a different village with a different chief, Satariwa, and was considered enemies of the village of Seloy.

²⁰ "St. Augustine: America's Ancient City, Colonization and Conflict," Florida Museum of Natural History, accessed January 19, 2021, <https://www.floridamuseum.ufl.edu/staugustine/timeline/colonization-and-conflict/>.

Chapter 2: Combination of Cultures



Figure 2: First Mass

Courtesy of Florida Museum of Natural History

Archaeologists agree that American Indians have lived in the southeast since the last ice age. According to Jerald Milanich, author of *Florida Indians and the Invasion from Europe* and *The Timucua* “Twelve thousand years ago, what is now the state of Florida was first settled by American Indians whose ancestors had entered North America from eastern Asia during the Pleistocene epoch, the Great Ice Age”.¹ Dr. Kathleen Deagan says “archaeology is really the most democratic form of history. It’s not just what the people who know what to write say. It’s not just the most elite of the colonists”.²

¹ Jerald Milanich, *Florida Indians and the Invasion from Europe*, Gainesville: University Press of Florida, 1995.

² Dr. Kathleen Deagan, “Struggle to Survive,” *Secrets of the Dead: America’s Untold Story*, directed by Jane Buckwalter, written by Robbie Gordon, DVD 2017.

According to Susan Wurtzburg, author of Southeast cultural area, “The various Southeast Indian groups generally shared the following culture traits: a material culture that included dugout canoes, rafts, blowguns, shields, pipes, bird feather cloaks, basketry, mats, houses made of pole, thatch, or bark, and stockade towns, and a nonmaterial culture based on hunting, gathering, and agriculture, dual leadership, socially powerful women, clans, social stratification with a sharply defined class system, sun symbolism, the Green Corn Dance, elaborate mortuary rituals, the Chunkey game, warfare, and war captive torture-sacrifice”.³

European accounts of the Timucua portray them as sturdy, muscular, and athletic. Their complexion was described as reddish, olive, and tawny. Women were lighter tones, according to European observers, due to rubbing bear grease on their skin. They also used oils and emollients as cosmetics. Both men and women had long hair. Women wore their hair down while men wore theirs up entwined with grasses or moss. The men cut their hair when they became Christians. Both men and women had long pointed nails which could be used as weapons. Both had pierced ears, using bloated fish bladders and decorative shell pins for earrings. Chiefs and their families were painted and tattooed with special designs in azure, red, and black. They also wore painted deerskin cloaks and painted bird plumes. Clothing worn was minimal. Men wore deerskin loin cloths which were sometimes painted. Woven palm fronds and fabric made from beaten roots were also used. Women wore a short skirt or apron-like garment made from Spanish moss. Milanich notes, “other personal ornaments included feathers, necklaces and bracelets made of small and large shell beads, bracelets of fish teeth, small copper disk and freshwater pearls”.⁴

³ Susan Wurtzburg, Southeast Cultural area (Native American history). Salem Press Encyclopedia, 2020.

⁴ Jerald Milanich, *Timucua*, 60.

Indians would acquire European items such as clothes, glass and metal beads, rings, and necklaces, through trade, gifts, or salvage.

In regards to the culture of the Timucua, Eugene Lyons wrote that they generally shared cultural characteristics but were divided into separate, warring groups. The most powerful chief was Saturiba, located close to Fort Caroline, which the Spanish renamed San Mateo. Some of the best descriptions came from French sources. He quotes a letter Menendez wrote to a Jesuit friend saying, “The ceremonies of these natives, for the greater part, are to worship the sun and moon; they have dead stags and other animals for idols. Each year they make three or four feasts for their devotions, where they worship the sun. They are three days without food, drink or sleep; these are their fasts. He who is weak, who cannot suffer this, is taken for a bad Indian. He goes about scorned by the noble people. He who passes best through these troubles is taken for the principal, and is given the most courtesy. They are a people of many strengths, swift, and great swimmers. They have many wars with each other, and no chief among them is recognized as powerful”.⁵

When Menendez came to Florida in 1565, he had a company of “1,504 soldiers, sailors, locksmiths, millers, silversmiths, tanners, sheepshearers, and farmers, some with their wives and children”.⁶ In *The Enterprise of Florida* Eugene Lyons reports virtually all the crafts of sixteenth-century Spain were represented. There were “ten stone-masons, fifteen carpenters, twenty-one tailors, ten shoemakers, eight smiths, five barberos, and two surgeons. There were hose makers, metal smelters, cloth weavers, and cloth shearers. Two specialists in the making of

⁵ Eugene Lyons, *The Enterprise of Florida*, p. 118. This was taken from a letter, “Pedro Menendez de Aviles to a Jesuit friend at Cadiz,” St. Augustine, October 15, 1566, in Ruidiaz, *La Florida*, 2:155 – 56.

⁶ Michael V. Gannon, “Altar and Hearth: The Coming of Christianity,” *The Florida Historical Quarterly*, 38.

lime and mortar were aboard, as well as tanners, farriers, wool carders, a hatmaker, a bookseller, and an embroiderer. Weapons experts were there in the persons of three sword makers, a gunsmith, and a crossbow repairman. There were coopers, bakers, gardeners, a dealer in silks, a blanket maker, and two men skilled in the working of flax for making linen. An apothecary, a keeper of granaries, and a master brewer rounded out the list”.⁷ Some of the supplies brought with them included sea biscuit, meat, rice, beef and pork, sides of bacon, fish, beans, cheese, cassava, wine, olive oil, garbanzos, salt, vinegar, cloth, a medicine chest, and munitions.

It is common to hear visitors at the park say that the Native American people ate better food. This is another area of over-generalization that should be interpreted better. It is understood that the Timucua and other native people had plenty of seafood, shellfish, and wild game which they smoked on the barbaquoa. That wasn't the only method of cooking. They also roasted over a fire and cooked in pottery. It is taught that they grew beans, squash, and maize as their staple crops. Wild game would have included deer, bison, alligator, and an assortment of birds and small mammals. They would not have had pigs, cattle, sheep, goats, and salt. These were first brought to Florida by the Spanish and this was what the Spanish were use to eating. Unlike the native people here in Florida, Europeans did not all eat the same types of foods either. According to Dr. Linda Alvarez, “in the minds of Europeans, food not only functioned to maintain the bodily superiority of Spaniards, it also played a role in the formation of social identity. For example, in Spain, elites generally consumed bread, “meat,” and wine. The poor in Spain, however, could not afford such luxuries and instead ate such things as barley, oats, rye, and vegetable stew. Even vegetables were classified based on social status; for example, in some cases rooted vegetables were not considered suitable for elite consumption because they grew

⁷ Lyons, *The Enterprise of Florida*, 92.

underground. Elites preferred to consume food that came from trees, elevated from the filth of the common world. Thus, food served as an indicator of class”.⁸

⁸ Dr. Linda Alvarez, “Colonization, Food, and the Practice of Eating,” Food Empowerment Project, accessed January 19, 2021, <https://foodispower.org/our-food-choices/colonization-food-and-the-practice-of-eating/>.

Chapter 3: Archaeological Evidence



Figure 3: Timucua Christian Burials

Courtesy of Fountain of Youth Archaeological Park

The first archaeological work done at the Fountain of Youth Park was in by Dr. Ray Dickinson and his team from the Smithsonian in 1934. Dr. Dickinson was called in when human remains were discovered while planting orange trees. Dr. Dickinson determined this to be Timucua natives buried as Christians. Timucua Christians were given Catholic burial rites, as seen here at the Fountain of Youth site, in which individuals were buried extended, facing east, with their arms folded across their chest. After World War II, other teams of archaeologists studied the park and the burials. The most significant of these was done by Dr. Kathleen Deagan with the University of Florida. She began working at this site in 1976, using the site as a field school for students studying the interactions between the Timucua and the Spanish.

The first available report is the 1985 excavation season report written by Edward Chaney and supervised by Dr. Kathy Deagan. Starting on this project, archaeologists were studying the site as a village of Timucua that was in contact and trading with the Spanish. Archaeologists used subsurface testing, remote sensing data, and documentary evidence to further understand the features and patterns of human settlement within this area. The site shows evidence of prehistoric Timucuan Indian culture dating to the Orange Period, between 2000 B.C. and 1000 B.C. According to Chaney, the Orange period was among the first in North America to make pottery.¹ This occupation continues through the first and second St. Johns periods. Chaney says that the village buildings are represented by numerous circular postmold patterns which appear to be aboriginal structures since they lack the daub and architectural hardware usually found with Spanish buildings. There are also two shell middens from prehistoric times.

There is also a degree of early Spanish/Indian contact in northeast Florida, and the effects of such interaction on aboriginal culture. The report indicates that artifacts recovered in 1985 were 50% European and 50% aboriginal in origin. Some of the artifacts included Columbia Plain majolica, olive jar, glass, lead shot, and aboriginal pottery.² The most significant discovery of this study is the evidence of a pre-1580 Spanish occupation at the eastern end of the park site. Evidence of this occupation was the barrel well and the presence of a large number of early European artifacts. This is the first time they suggest that this could be the site of Seloy's village and also the initial settlement of St. Augustine. Other artifacts found at this time include lead

¹ Edward E. Chaney, "Prehistoric Period," Report on the 1985 Excavations at the Fountain of Youth Park Site (8-SJ-31), St. Augustine, Florida, University of Florida 1987.

² Chaney, 45.

shot, iron objects, an olive jar, and aboriginal pottery. He makes it clear that more study is needed to make a conclusion on this matter.³

The 1992 report by C. Gardner Gordon opens with an introduction by Dr. Kathy Deagan to show continuing effort to understand human occupation of this site. She indicates that this particular study is the most intensive effort so far to reveal and interpret the very early historic period. Although Chaney mentions the work done on the Christian burial site in 1934, Gordon has a section dedicated to the mission site. While the report by Dickson was not available, Dr. Deagan notes that he located a circular log structure indicating a village building about 100 meters from the edge of the water.

She explains that more than 100 burials were located in 1934 by Dr. J. Ray Dickson and about sixty-seven were excavated and recorded. The burial and village areas were studied from 1951 – 1953 under the direction of John Goggin of the University of Florida. There are different groups of burials in the area, some of Christian Indians and some not like the Christian burials that would indicate pre-contact burials. However, there is structural evidence around the burials indicating a building from historic period. It is important to note that she says this was the early site of the mission of Nombre de Dios.

³ Edward E. Chaney, Report on the 1985 Excavations at the Fountain of Youth Park Site (8-SJ-31), St. Augustine, Florida, University of Florida 1987.

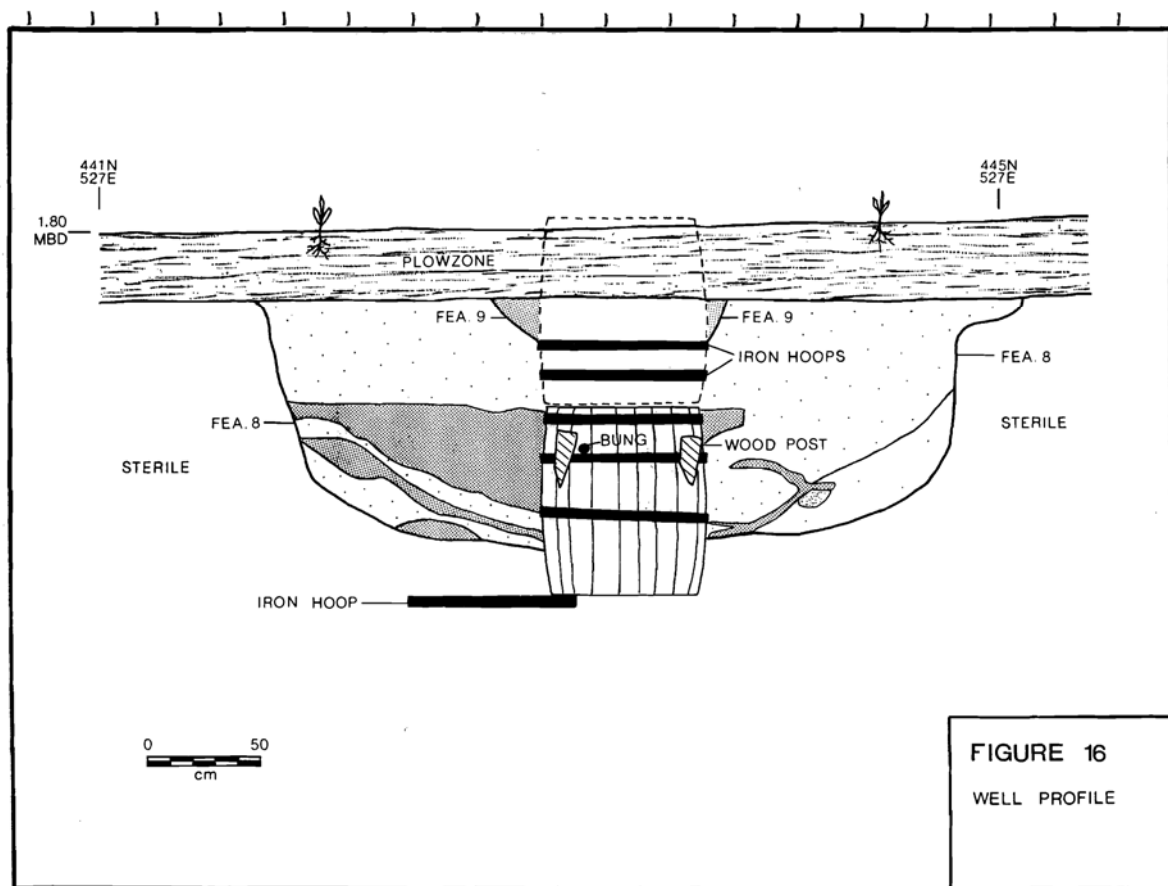


Figure 4: Barrel Well Profile

Courtesy of Florida Museum of Natural History

She further hypothesized that this was the site of the first fort of Pedro Menendez de Aviles which was established September 6, 1565 at the Indian village known as Seloy. This excavation reveals more evidence of Spanish occupation with stains that suggest a rather substantial structure of early Spanish origin. She writes, “it quickly became apparent that this area also contained very early European features, including rectangular structures made with cut

timbers and iron nails and a barrel well”.⁴ During this excavation is when they found a pre-historic dog burial. The dog’s stomach contents showed that he ate various fish, bird, and mammal, even deer. An area recorded as feature twenty-two was described as a “dark, roughly rectangular stain...containing aboriginal and early Spanish artifacts...and charcoal, suggesting that Feature twenty-two was the floor of a building which burned”.⁵ During this excavation, the post molds and burn marks led archaeologist to determine this as a rectangular building. Gordon concludes saying that more study is needed, possibly using mechanical stripping of the top plow zones.

The report written by Robin Shtulman notes the excavations done at the park in 1994. Shtulman states that this study is to better understand the nature and extent of the features discovered in the 1991 excavation and to begin to locate the boundaries of the settlement. This study shows more study of the stratification of the soil at the site. This seems to be to give a better understanding of what is indicated by the stains seen in the soil. The stains indicate building structures and fortifications through the post and posthole markings. Other markings indicate trenches and structure flooring. It is noted that a possible log sleeper trench, labeled feature 49, is evidence of a structure which does not appear to be aboriginal. Due to a short season and heavy flooding in October, this study mostly reveals more evidence of the settlement and the need for further study.⁶

⁴ C. Gardner Gordon, “Report on the 1992 Excavations at the Fountain of Youth Park, St. Augustine (8-SJ-31),” Florida Museum of Natural History, 1992.

⁵ Gordon, 11.

⁶ Robin Shtulman, “Report on the 1994 Excavations at The Fountain of Youth Park, St. Augustine (8-SJ-31),” Florida Museum of Natural History, 1994.

Cheryl White of the Florida Museum of Natural History wrote the report for the excavations done in 2000. In the historical background section, she mentions that the settlement and fort burned to the ground on April 19, 1566. This is what caused the Spanish to relocate to the northern end of Anastasia Island. The goal of this field season was to gather supporting evidence and detail for the 1565 settlement. This study served its purpose in finding evidence to further substantiate that the settlement was at this location with finding the location of the remains of the walls. Dr. Deagan also identified a sixteenth century housing configuration in the northern region of the unit. The angled linear formation of the stain indicated a Menendez era living quarter. . It also produced some very interesting artifacts, including jet rosary beads, multiple layer chevron beads, and a carved bone figa that was polished with a black finish.⁷ “Figas were adopted into Spanish culture from Moorish influences and were placed on babies and young children to ward off the powers of the evil eye, suggesting the presences of Spanish babies or children at this first settlement of St. Augustine”.⁸

Jamie L. Anderson wrote the report for the 2001 excavation. The goal for the 2001 season was to obtain more information about the central low lying area and the feature that appeared to be a ditch or trench at the far eastern area of the site. While this season did not produce more information on the settlement, it did provide more evidence of the structures. Feature thirty-six from the 1991 dig and feature seventy-four from 2001 appear to be postmolds

⁷ Cheryl White, “Report on the 2000 Excavations at The Fountain of Youth Park, St. Augustine (8-SJ-31),” Florida Museum of Natural History, 2000.

⁸ Jamie L. Anderson, “2001 Excavations at 8SJ31 – The Fountain of Youth Park Site 1565 Spanish Campsite,” Florida Museum of Natural History, 2001.

from a large structure. Features such as the mud sleepers reveal a town layout of long narrow barrack-like structures that housed the soldiers and settlers of the town.⁹

Dr. Kathy Deagan's report in 2002 provides a summary and professional interpretation of the work done from 1950 until 2002. As part of this report, Alfred Woods gives an overview of the 2002 Excavations. The section labeled Native American Tools and Weaponry provides explanation of how the different types and shapes of shells were used as tools. One example was a "large gastropod shell halved and hollowed to provide a concave vessel for holding liquid" which would have been used as a cup.¹⁰ Other items listed included a shell drill, a stone drill, projectile points, and beads made of bone, shell, and stone.

The excavation report by Ingrid Newquist offers another look into the location of the fort and campsite and better understand early cultural interactions between the natives and the Europeans. This report includes an explanation of the zone stratifications of the site. This information could be used to create a visual interpretation of the different levels of the excavations worked on at this site. The level designated as zone one is described as medium to dark grey/brown sandy soil that may contain small pieces of shell and charcoal. It contained mixed cultural materials from the sixteenth through the twentieth centuries. The level designated as zone two is described as medium brown/grey sandy soil with a heavy content of whole and broken shell. This zone is associated with shell midden and is found in noncontiguous, discrete areas throughout the site. Zone three is described as lighter golden tan and grey/brown mottled

⁹ Jamie L. Anderson, "2001 Excavations at 8SJ31 – The Fountain of Youth Park Site 1565 Spanish Campsite," Florida Museum of Natural History, 2001.

¹⁰ Alfred Woods, "Field Report on the 2002 Excavations at The Fountain of Youth Park," 2004.

sandy soil with rust colored flecking that contains no shell. This zone is associated with the prehistoric and Menendez occupations at the site.

The report in 2008 by Dr. Deagan offers a look at the environmental aspects of the Fountain of Youth site and an extensive look at the cultural history. The park is located on the banks of a tidal creek on the west side of the bay of St. Augustine. This site is described as a dry hammock within a Saltwater Lagoon-Marsh environmental zone. The archaeological evidence showed human occupation of this site for more than 2,500 years. This included the Archaic Orange period, the St. Johns I period, the St. Johns II period, the Menendez period, and the Mission period. She was also able to offer insight into the work done from 1934 until 1953. There were several different groups of burials of Timucua. Some of these were the Christian burials while others were group burials. Although there were photographs taken during these excavations, none were labeled and none of the photographs included scales or photo ID boards for identifying their locations or subjects.¹¹

Dr. Deagan also wrote *Archaeology at the Fountain of Youth Park* in 2008. This booklet summarizes the work and understanding of the archaeological work done at the park from 1934 until 2008. It was published to give visitors more information to take with them. It offers a great timeline of events from August 28 through June 21, 1566. This shows the events that happened at this original site of St. Augustine in the Village of Seloy.

¹¹ Kathy Deagan, "Historical Archaeology at the Fountain of Youth Site (8SJ31), St. Augustine, Florida 1934 – 2007," Florida Museum of Natural History, 2009.

Chapter 4: Archaeology Exhibit



Figure 5: Archaeology Exhibit

Courtesy of Brenda Daigle

There are several different stations throughout the park that provide historic interpretations and living history demonstrations. The first exhibit is the Spring House where students taste the water from the ‘fountain of youth’ and hear the presentation highlighting Ponce de Leon claiming Florida in 1513 and Pedro Menendez de Aviles creating the colony of St. Augustine. There are two indoor programs, the Planetarium and the Discovery Globe. The Planetarium shows how explorers would have navigated by the stars using the astrolabe. The Discovery Globe is a two-story globe that tells the history of Spanish exploration during the 16th century. At the replica of the Mission of Nombre de Dios, visitors are told the history of the mission and the Franciscan Friars that came to Florida. Guests can visit the replica of the Village of Seloy and listen to a story about the Timucua people. There is also a blacksmith demonstration, historic firearms demonstration, and the cannon demonstration. However, there needs to be an interactive exhibit; where students can do something besides just sit or stand and

listen to presentations. There are a great number of living museums that allow students a hand-on archaeology experience. The Florida Museum of Natural History, for example, has different stations in the Discovery Zone. One area shows how archaeologists study the past and allow children to participate in an archaeological excavation at the touch table.¹

While we cannot allow visitors to dig for real artifacts, we can give them an idea of what and how the archaeologists do. This exhibit combines history, math, science, and language arts while learning the history of St. Augustine in a fun and engaging activity. The exhibit addresses the Florida CPALMS standards for fourth grade Social Studies. Using cross-curricular studies, teachers can also implement standards for math, science, reading, and writing. The fourth grade standards for Florida Social Studies can be seen in the Appendix.

It is important to use different educational styles to teach because there are several learning styles. Nancy Csapo and Roger Hayen of Central Michigan University conducted a study on learning styles. According to their report, “The Role of Learning Styles in the Teaching/Learning Process,” learning styles are the way a person “concentrates on, processes, internalizes, and remembers new and different academic information or skills”.² Learning styles include visual, auditory, verbal, and physical learners. Visual learners prefer learning by observing the world around them. Pictures, diagrams, and whiteboards are some of the best methods for visual learners. Auditory learners learn best through sound, music, and verbal presentations. Verbal learners prefer speech and writing to learn. Physical learners are hands-on

¹ “Discovery Zone,” Florida Museum of Natural History, accessed January 23, 2021, <https://www.floridamuseum.ufl.edu/exhibits/discovery-zone/>.

² Nancy Csapo and Roger Hayen, “The Role of Learning Styles in the Teaching/Learning Process,” *Issues in Information Systems*, Volume VII, 1, 2006.

learners and need to participate in educational activities.³ This archaeology exhibit (<https://foyarchaeology.omeka.net/exhibits/show/foy-archaeology/fountain-of-youth-archaeology->) combines these different learning styles where students see the site and artifacts, listen to the presentation, and participate in the learning activity.

The exhibit currently consists of four wood boxes, divided length-wise by a sign. At each box there are eight sifting screens and eight plastic shovels, four of each on each side of the box. The boxes have sand, shell, and gravel for students to dig in. The sand is seeded with ‘artifacts’ such as replica coins, arrow points, and shark teeth. There is a thatch roof covering over the boxes for shelter. The boxes can be closed with door type covers. This does not keep the rain out completely but does offer some protection.

When students come to the park on a field trip a staff member plans out their visit through the park. Each of the presentations in the park are about ten to fifteen minutes. At the Spring House the students would listen to a presentation about Ponce de Leon claiming Florida for Spain, the founding of St. Augustine, and the Fountain of Youth. Then they each get a cup and get water from the ‘fountain’.

When students visit the archaeology exhibit they listen to a presentation about the Menendez encampment in the village of Seloy and how archaeology helped us to find this very important location. The presentation explains the significance of finding the Christian Timucua burials which brought the first archaeologists. Students get to see samples of artifacts such as pottery sherds, beads, a cannonball, and iron nails. They also get to see tools the archaeologists

³ “Different Learning Styles,” *Time4Learning, Inc.*, accessed January 23, 2021, <https://www.time4learning.com/learning-styles/#spatial>.

would have used, such as rulers, brushes, and trowels. The presenter asks probing questions to initiate a discussion about which culture would have used the different artifacts.

They then use small plastic shovels and screens to sift through the dirt in the box to find an artifact. The artifact could be a shark tooth, a replica Spanish coin, an arrowhead, or beads. During the activity I am walking around to talk to the students to see how they are doing. I ask them questions about the items they find such as what it would have been used for. They get to keep one artifact they find, which they love. This activity and the artifact they keep help them retain the information they learn about these two different cultures living together.

Teachers that bring their students to the exhibit are provided a copy of an activity of questions for the students to do in class. The students will draw a picture of the artifact they found. Students answer questions about what the artifact was and how they would have gotten it. The questions are to show that the students understand what the artifact was used for and which culture would have used it.

Chapter 5: Recommendations for Expansion

Research on the cultural differences between the Timucua and Spanish including the differences in foods, beliefs, tools, etc should be continued to improve interpretation. It is important to know not only the story of what happened in the long term but also explain how and why they became one community and the significance in this. The items used to seed the boxes need to be historically accurate. If items are to be added, they must be approved by the management team. There are items that would benefit the interpretation such as more shells, pottery sherds, and 16th century military buttons.

One of the additional pieces that would benefit this exhibit is a barrel well similar to the ones found at the site. There were three barrel wells found with debris and artifacts in them. This was a significant find because it would have been used by the Spanish, not by the Timucua. Using a full size barrel provides a real-world feel to what they found outside of just sharks teeth and replica coins. The barrel could have a cut-away section to show the interior and replica artifacts similar to those that were found at the site that the students can handle. The replica artifacts could include Timucua pottery sherds, Spanish pottery sherds, an olive jar, and iron hinges like the ones used at the colony.

It would also be beneficial to add a visual explanation of the stratification of the dig site. This would help to explain how archaeologists determine how old a site could be. Each layer of the stratification would represent a different time frame. The lowest level would represent prehistoric times. The next level would be St. Johns I period with corresponding dates followed by the St. Johns II period. Next would be the Menendez period with the date of contact. The top level would be top soil, trees, and grass. Each level would be a different color soil with different

examples of artifacts. This could be further expanded upon by turning it into a matching activity. Students could have different magnets for different artifacts and they could place them at the correct level.

I would also like to add a pottery element to this exhibit. Students could learn how the Timucua made their pottery from tempering, to decorating, to firing. This could be on a special display board with photos of the process or with physical pieces. This part of the exhibit could explain how archaeologists know what a piece of pottery is made with and where it was made. Students could see what the Timucua would have used to decorate their pottery, such as wooden paddles, bones, and shells.

It is also important to maintain proper maintenance of the exhibit. There are several issues that have already surfaced that have needed repair. Currently, the thatch roof is in need of repair. When it rains, the sand in the boxes gets wet and heavy. This can cause damage to the boxes if steps are not taken to correct the issue. It may be necessary to add wood roofing under the thatch to prevent leaking.

Conclusion

This exhibit is the perfect combination of history and science in an interactive activity. Students have a better opportunity to retain the information they learn during their field trip and they get to take home a piece of history, and free souvenir. The historic interpretation presentation can be extended and altered to accommodate all ages and abilities. The activity can also be extended and altered to fit all students of all abilities. Just remember to step behind the table after the presentation to prevent being run over by the students running to the dig tables.

Appendix I: Florida CPALMS Standards

- SS.4.A.1.1 – Analyze primary and secondary resources to identify significant individuals and events throughout Florida History.
-
- SS.4.A.2.1 – Compare Native American tribes of Florida
-
- SS.4.A.3.1 – Identify explorers who came to Florida and the motivations for their expeditions.
-
- SS.4.A.3.2 – Describe causes and effects of European colonization on the Native American tribes of Florida.
-
- SS.4.A.3.3 – Identify the significance of St. Augustine as the oldest permanent European settlement in the United States.
-
- SC.4.N.1.6 – Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences.
-
- MAFS.4.MD.1.1 – Know relative sizes of measurement units within one system of units including km, m, cm; kg, g, lb, oz; l, ml; hr, min, sec...
-
- LAFS.4.W.3.7 – Conduct short research projects that build knowledge through investigation of different aspects of a topic.
-
- LAFS.4.W.3.8 – Recall relevant information from experiences or gather relevant information from print and digital sources...¹

¹ CPALMS, Florida State University, <https://www.cpalms.org/Public/search/Standard>. 2019.

Appendix II: Project Budget

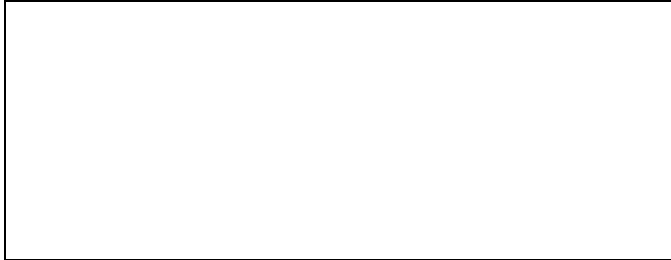
Archaeology Exhibit Budget

Materials for boxes includes wood and hardware	\$1,000.00 per box 4 boxes = \$4,000.00
Materials for deck, poles, roof and thatching including hardware	\$10,000.00 total
Play sand	\$30.00 per box 4 boxes of sand = \$120.00
Signage for boxes created by park marketing manager	\$200.00 per sign 8 signs = \$1,600.00
Total	\$15,720.00

Appendix III: Archaeology Writing Activity

Archaeology Notes

In the box below draw a picture of the artifact you found.



What is your artifact made of? _____

How many centimeters is the artifact? _____ cm.

What color is the artifact? _____

Who do you think used this artifact? _____

What do you think the artifact was used for? _____

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