

THE TURNBULL PLANTATION - A BRITISH SETTLEMENT IN FLORIDA

Students learn about Florida's British period, its indigo plantations, and its coquina archaeology.

ACADEMIC OUTCOMES/LESSON OBJECTIVES:

- Students read selections introducing them to the ways that Dr. Turnbull's indigo colony utilized coquina structures, introduced Minorcans to Florida, and founded the city of New Smyrna.

SUNSHINE STATE STANDARDS ASSESSED:

SOCIAL STUDIES 4TH-5TH

- (SS.A.4.2.1) Understands the geographic, economic, political, and cultural factors that characterized early exploration of the Americas.
- (SS.A.6.2.1) Understands reasons that immigrants came to Florida and the contributions of immigrants to the state's history.
- (SS.A.6.2.3) Knows the significant individuals, events, and social, political, and economic characteristics of different periods in Florida's history.
- (SS.A.6.2.5) Knows how various cultures contributed to the unique social, cultural, economic, and political features of Florida.
- (SS.B.2.2.2) Understands how the physical environment supports and constrains human activities.
- (SS.D.1.2.1) Understands that all decisions involve opportunity costs and that making effective decisions involves considering the costs and the benefits associated with alternative choices.
- (SS.D.1.2.2) Understands that scarcity of resources requires choices on many levels, from the individual to societal.

RESOURCES:

- Austin, Robert and Dorothy Moore. Archaeology of the New Smyrna Colony. New Smyrna Beach, FL: Southeastern Archaeological Research, Inc, 1999.
- Beeson, Kenneth Jr. Fromajadas and Indigo – The Minorcan Colony in Florida. Charleston, SC: The History Press, 2006.
- Florida Public Archaeology Network. 28 February 2008 <<http://www.flpublicarchaeology.org>>.
- Grange, Roger Jr. "The Turnbull Colonist's House at New Smyrna Beach: A Preliminary Report on 8VO7051," The Florida Anthropologist, Vol. 52. (Mar-Jun 1999).
- Grange, Roger and Dorothy Moore. "Search and Rescue Archaeology at the Smyrna Settlement: A Preliminary Description of Structure Types." The Florida Anthropologist, Vol. 56 (Sep 2003)
- Griffin, Patricia. "Life on the Plantations of East Florida: 1763-1848," The Florida Anthropologist, Vol. 56, (Sep 2003). "Indigo Cultivation in British East Florida." Florida History Online. 24 February 2008. <http://www.unf.edu/floridahistoryonline//Plantations/plantations/Indigo_Cultivation_and_Processing.htm>.
- Luther, Gary. History of New Smyrna East Florida with Illustrations. New Smyrna Beach, FL: Luthers Publishing, 2001.
- Moore, Dorothy and Dana St. Claire. "Dreams and Promises Unfulfilled: Andrew Turnbull and the New Smyrna Colony." The Florida Anthropologist, Vol. 52, (Mar-Jun 1999)
- "Smyrna: Dr. Andrew Turnbull and the Mediterranean Settlement at New Smyrna and Edgewater, Florida, 1766-1777." Florida History Online. 24 February 2008. <<http://www.unf.edu/floridahistoryonline//Turnbull/index.htm>>.
- "Three New Smyrna Maps Dated 1767-1700 Discovered in Dundee, Scotland." Musqueto Newsletter. New Smyrna, FL: Southeast Volusia Historical Society, Inc. 2003.

MATERIALS LIST:

None



This project has been financed in part with historic preservation grant assistance provided by the Bureau of Historic Preservation, Division of Historical Resources, Florida Department of State, assisted by the Florida Historical Commission.

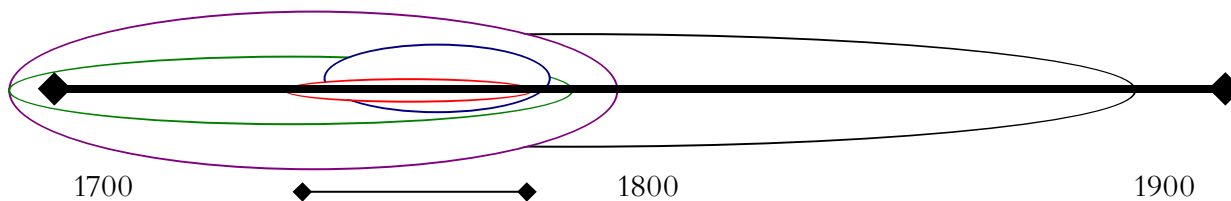


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ANSWER KEY FOR ACTIVITY:

B. BRITISH PERIOD (1763-1783):



AUTHOR: Kelley Weitzel, <http://www.KelleyWeitzel.com>

STUDENT ARTICLES & ACTIVITIES:

1. Who came to Florida with Dr. Turnbull?
2. The New Smyrna Settlement – Troubles from the Start
3. The New Smyrna Settlement – Problems to the End
4. Why was indigo an important crop?
5. Is there really a Fort in Old Fort Park?
6. Who else built on this coquina foundation?
7. What other coquina structures did Turnbull build?
8. **ACTIVITY:** Using Archaeology & History to Date the “Settlers’ House” Site

VOCABULARY: Artifact, Canal, Colony, Colonist, Coquina, Descendents, Drought, Dye, Excavate, Fort, Foundation, Indentured Servant, Indigo, Irrigate, Malaria, Minorca, Settlers, Structure, Synthetic, Thatch, Wharf

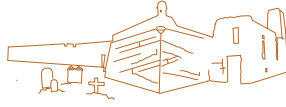
ASSESSMENT OPTIONS:

WRITING PROMPT #1: People once thought that the huge coquina foundation in New Smyrna was part of an old Spanish fort. Think about a time you confused one thing with something else. Write to explain how you finally figured out the truth.

WRITING PROMPT #2: Dr. Turnbull’s indentured servants agreed to work for him for 6-10 years in order to pay for their ship ride to America. Think about whether you would agree to be an indentured servant on Mars if someone was willing to pay for your spaceship travel. Write a story about your journey to Mars or about your decision to stay here on Earth.

ASSESSMENT #1: The signs at Old Fort Park still describe this coquina foundation as “Turnbull’s Mansion.” Based on your reading of the article titled, “Is there Really a Fort in Old Fort Park?” design a new sign that gives a more factual history of this coquina structure. Use details and information from the article to support your answer.

ASSESSMENT #2: Read the activity titled, “Using Archaeology & History to Date the ‘Settlers’ House Site.” Based on your reading, explain how archaeologists can use dates collected from artifacts and historical documents to pinpoint the date in history when a building was being used. Use details and information from the activity to support your answer.



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WHY ARE WE STUDYING THE TURNBULL COLONY?

The Turnbull Colony brought thousands of Minorcan people to live in Florida as plantation workers. These people brought their own cultures and ways of life, making Florida history richer and more diverse. They also grew indigo, an important crop in Florida's early economy. While working at the plantation, these Minorcans built several coquina structures that still survive today. These structures include a huge coquina wharf (dock), a drainage canal lined with coquina stone, a big storehouse, and the chimneys and fireplaces of many small houses. You can still visit these structures in the city of New Smyrna today. They help us learn more about Florida's distant past.

WHO CAME TO FLORIDA WITH DR. TURNBULL?

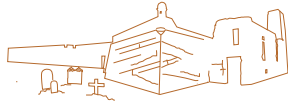
Florida's British Period lasted from 1763-1783. During this time, the British government wanted people to move in and become farmers in Florida. They agreed to give 20,000 acres of land to anyone who could bring in settlers and grow the crops that the British Empire needed. These crops included oil made from olive trees, wine made from grapevines, colored dye made from indigo plants, fibers made from hemp plants, and silk made by silkworms. Dr. Andrew Turnbull decided he wanted to give it a try.

At first, most of the workers that Dr. Turnbull spoke with didn't want to go. Why should they leave their comfortable homes and move to hot, buggy Florida? Other British investors solved this problem by forcing slaves to do the farming on their 20,000 acres. Dr. Turnbull thought differently. He felt it was important to get free European workers to join his project. He'd hoped to convince 500 workers to come with him, but eventually, more than 1,400 people volunteered. Why? On the island of Minorca (which is right near Spain), the farmers' crops had failed for three years in a row. Whole families were starving. They decided to take the risk and travel with Dr. Turnbull to Florida.

These Minorcans (along with a few Greek and Italian people) didn't have any money to pay for their ship ride across the Atlantic Ocean. Dr. Turnbull agreed to pay for their journey if they would become "indentured servants." What is an indentured servant? This is someone who agrees to work for several years to pay off a debt they owe. Each adult would work for Dr. Turnbull for 6-8 years. Then they would receive their own piece of farmland. It seemed like the answer to everyone's problems.

COOL FACT:

When Dr. Turnbull visited Minorca, he landed at the capital city of Mahón. This city's people are called Mahónese. They are famous for inventing a popular sandwich spread. Can you guess which one? It's mayonnaise, of course!



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THE NEW SMYRNA SETTLEMENT - TROUBLES FROM THE START (1768)

Dr. Turnbull had only planned to bring 500 people to Florida. He needed A LOT more money to transport 1,400 people across the Atlantic Ocean. His two business partners had each agreed to provide 9,000 pounds to help pay for food, tools, and ships. What's a "pound"? It's like a dollar. (The symbol for pounds is £, just like the symbol for dollars is \$.)

18,000£ wasn't going to be nearly enough money. Dr. Turnbull had to buy lots of extra food and arrange for extra ships to carry the huge number of colonists. To make matters worse, when his ships crossed the Atlantic Ocean, the weather was awful. The six-week trip ended up lasting three whole months! 148 Minorcans died during this rough trip. When the ships finally reached Florida in June of 1768, the people discovered that Dr. Turnbull hadn't built enough houses or stored enough food for so many people. They all worked hard to build houses thatched with palm leaves, but the winter was cold and miserable. Some of the Minorcans stole a ship, hoping to escape to Cuba, but the British caught them and brought them back. Life was very difficult. The long days they worked in the fields and the poor living conditions caused more than 300 Minorcans to sicken and die.

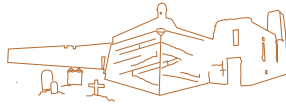
Dr. Turnbull was very upset, but he didn't have any more money to buy food, medicines, or warm clothing. He wrote many letters to his partners back in London, begging them for help. Finally, they agreed to give him 24,000 £ to help with the costs. Over the years, this money ran out quickly. Dr. Turnbull used it to pay for food, tools, seeds, clothing, building materials, and anything else the colonists needed to survive in wild Florida. Eventually, Turnbull's partners got tired of his letters asking for extra money. They refused to send any more.

THE NEW SMYRNA SETTLEMENT - PROBLEMS TO THE END (1777)

Dr. Turnbull decided to ask for help from Florida's governor, James Grant. For years, Governor Grant did his best to provide emergency food and clothes for the Minorcans when they ran out of supplies. The colony had some good years and some bad years. During good years, they produced enough indigo dye to make some money. They also grew enough corn to give the people something to eat. Of course, people need to eat more than just corn. So, even on a good year, Dr. Turnbull had to beg grocery money from his partners and the governor. On a bad year, things were really bad. The indigo crop was frequently damaged by drought or eaten by caterpillars. Droughts also killed the corn crop. During these years, the Minorcan workers had little food. They grew weak, and many died from diseases like malaria.

Dr. Turnbull did try to solve these problems. **DROUGHT SOLUTION:** He had the Minorcans dig miles of irrigation ditches lined with coquina stone. These coquina canals carried water right to the corn and indigo fields. **CATERPILLAR SOLUTION:** Dr. Turnbull asked his workers to dig trenches around any indigo plants infested with caterpillars. The trenches helped the Minorcans to see and capture the caterpillars before they crawled to another indigo plant. **FOOD SOLUTION:** Dr. Turnbull tried raising cows for beef, but the Creek Indians stole them. (The Creek Indians would later become the Seminole.) He even tried buying and storing extra corn for emergencies, but weevil insects got into the corn and ruined it. Dr. Turnbull's plantation was hit by disaster after disaster.

When Governor Grant decided to leave Florida, the situation got worse. The new governor believed the New Smyrna Settlement would never succeed. He didn't want to put any more government money into a failing project. Dr. Turnbull's partners in London didn't want to spend any more money either. The Minorcans continued to work hard, building a coquina wharf (dock) so that ships could easily drop off food for the colony. They dug more canals to improve their crops. They planted more fields and went a whole year without new clothes to save money. In spite of this hard work, the plantation suffered another drought year, and they had no money to pay the plantation's bills. Dr. Turnbull decided to sail back to London for help.



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While he was gone, several Minorcan people deserted the plantation and walked to St. Augustine to speak with the new governor. They told him that Dr. Turnbull was forcing them to work as indentured servants longer than they had agreed. They said he had not given them the land or the pay he had promised. They also stated that Dr. Turnbull and his overseers treated the people terribly, beating them, and in some cases, killing workers who stood up for their rights. Based on this information, the governor decided to free the Minorcan people from their contacts. When Dr. Turnbull returned from London in November 1777, all of his workers had disappeared.

WAIT A MINUTE. Did Dr. Turnbull really treat his workers that badly? Historians have lots of Turnbull's letters, and almost every one is begging for money to buy food, medicine, and clothes for his Minorcan workers. So, what was really going on? We know that some of the plantation's overseers had once worked on slave plantations. They were probably treating the Minorcans as badly as they had always treated slaves. But what about Dr. Turnbull? Did he treat them horribly too? It's a mystery. And we may never know the answer – unless historians find more old documents to tell us.

We do know what happened to the Minorcans. Only 419 of the original 1,403 settlers had survived. They walked the 75 miles to St. Augustine, where the governor provided each family with a small piece of land and some food. Descendents of these Minorcan families are still an important part of St. Augustine today.

What happened to Dr. Turnbull? He and his wife decided to move to Charleston, South Carolina. He worked there as a medical doctor for the rest of his life.

WHY WAS INDIGO AN IMPORTANT CROP?



Indigo Plant



Indigo Sketch

(Courtesy of www.plantcultures.org)

Indigo is a deep blue dye made from the leaves of an indigo plant. While many kinds of wild plants can be made into red, yellow, and brown dyes, only one or two plants make blue. That's why indigo was so important. Anyone who wanted blue cloth needed indigo plants. Unfortunately, indigo doesn't grow well in Europe's cool climates. The Europeans tried to solve this problem by growing indigo in their North and South America colonies. The 1768 Turnbull Colony was one of many indigo plantations in the New World.

COOL FACT 1:

Before European colonies started growing indigo plants, most of Europe's blue dye came from India. That's how the plant got its name. In-di-a...In-di-go.

COOL FACT 2:

In 1887, scientists discovered a method for making indigo dye in a laboratory. This meant that people no longer needed to grow indigo plants to get blue cloth. This synthetic (man-made) blue dye is used to color blue jeans today.

Indigo plantations in South Carolina were very successful, but the Minorcans had a difficult time growing indigo in Florida. They started planting indigo seeds in March. In about ten weeks, the plants bloomed, and it was time to cut the stalks. Workers bundled the stalks and carried them to the processing vats. These square vats could be made of brick or wood. They were big – about 16 feet wide and three feet deep. Workers loaded indigo leaves and stalks into the first vat, filled it with water, and pounded up the leaves. After about 12 hours, the plants would start to rot. This bubbling mess turned the water a yellowish-green color. The smell was so bad that the indigo vats had to be located far from the workers' houses. What was the next step? The colored water was



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transferred to another vat. Here, the workers added lime (made from oyster shells), and stirred the water until a blue-colored mud sank to the bottom. This muddy dye was allowed to dry in the shade until it could be cut into small squares for shipment. The dye could be purple, blue, or copper-colored. If the weather was perfect, the indigo plants grew quickly and could be harvested five times each year. Unfortunately, extreme heat and drought could kill the indigo plants. When this happened, the entire crop was lost and the whole field had to be replanted.

IS THERE REALLY A FORT IN OLD FORT PARK?

If you visit Old Fort Park in New Smyrna Beach, you can see (and even climb on) a HUGE coquina foundation. A foundation is a hard surface that builders install over the natural ground. Houses built on strong foundations last a long time, and the low walls of this coquina foundation are five feet thick! That's a sturdy foundation. But what kind of building did it support? Over the years, people have had a number of different ideas. For a while, they thought it was an old Spanish Fort. In 1937, when many people were out of work, the U.S. government started a job program called the WPA (Work Projects Administration). In New Smyrna, they paid 21 workers to excavate the Old Fort foundation, fix cracks in the coquina, and repair the northeast wall. WPA projects like this helped many people earn money during difficult times. However, the changes they made to the old coquina foundation destroyed many important archaeological clues.

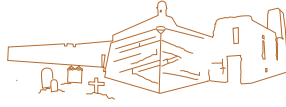
The archaeologists haven't given up though. By paying close attention to detail, they've managed to date this coquina foundation to Florida's British period. (So it couldn't have been a *Spanish* fort.) Some archaeologists think it was the foundation for Dr. Turnbull's mansion. However, the foundation isn't located on Turnbull's property. Why would he have built his mansion on someone else's land? A different archaeologist thought the foundation might be part of the Turnbull colony's church, but no religious artifacts turned up. Another archaeologist thought the thick coquina foundation looked like the base of a heavy-duty work building. Maybe it was the storage building for food, supplies, crops, and tools for the New Smyrna colony. The foundation was located right next to the wharf where ships docked to unload supplies. This supports the storage-building hypothesis. Archaeologists really aren't sure what the building was. But they ARE sure of one thing - it wasn't an old Spanish fort.



Old Fort Park

WHO ELSE BUILT ON THIS COQUINA FOUNDATION?

Historians tell us that three different structures may have been built on this old coquina foundation after the Turnbull Colony failed. When the British gave Florida back to Spain, the Spanish government gave Mr. Ambrose Hull 2,600 acres of land. He decided to farm the land as a cotton and sugar plantation. In 1805, he may have built his 2-story home on top of the old coquina foundation. His house was destroyed during the Patriot's War of 1812. Later, in 1830, Thomas Stamps built his home on the same foundation. Only five years later, it was destroyed in the Second Seminole War. Finally, from 1854 to 1859, John Sheldon built a 50-room hotel on the old foundation. This was the largest hotel south of St. Augustine! Can you guess what happened? If you said it was burned down in another war, you're right. This time, it was the Civil War. After the war, Mr. Sheldon's wife rebuilt the hotel. It wasn't as fancy as before, but it housed many important businesses: a general store, hotel rooms, a shoe shop, a post office, and a print shop where New Smyrna's first newspaper was printed. After Mrs. Sheldon died in 1903, the hotel was torn down. Several different people owned the property after that. They excavated parts of the coquina foundation, added steps so people could climb up, and built a protective wall around this important historical structure.



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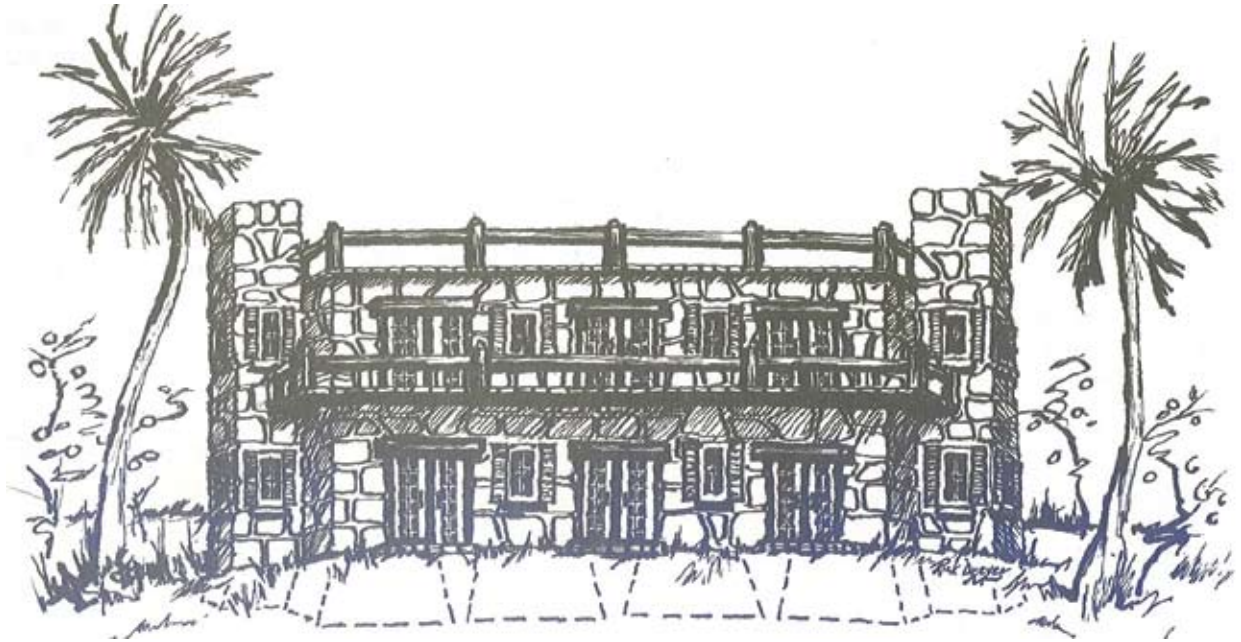
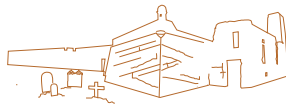


Image 1: Drawing of Ambrose Hull's House
(Courtesy of Rick Dryer)



Image 2: John Sheldon's Hotel
(Courtesy of Southeast Volusia Historical Society)



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WHAT OTHER COQUINA STRUCTURES DID TURNBULL BUILD?

Dr. Turnbull and the Minorcan workers built a long coquina wharf so that supply ships could dock nearby. You can still see this wharf at low tide. They also dug several canals to help drain swamplands and irrigate crops. They lined the main canal with coquina blocks to make it sturdier. Today, most of this canal is covered by sidewalks. However, you can get a peek at the old canal if you drive west on Canal Street and look down into the roadside ditch. Underneath the dark layer of leaves and dirt, you’ll find coquina stone! The New Smyrna settlement had plenty of buildings too, ranging from houses and blacksmith shops to churches and hospitals. Many of these buildings had coquina floors and chimneys. It’s hard to see these coquina features today because many have been covered by parking lots and other structures built by Florida’s modern people.

ACTIVITY - USING ARCHAEOLOGY AND HISTORY TO DATE THE “SETTLERS’ HOUSE” SITE

BACKGROUND: A car dealership in New Smyrna Beach decided to expand its business. The property they bought had been identified as an important historical site. Archaeologists Roger Grange and Dorothy Moore asked for permission to excavate the area. Her team found five separate archaeology sites. They combined evidence from archaeology and history to figure out the age of these sites.

SITE NAME: Settlers’ House

SITE NUMBER: 8VO7051

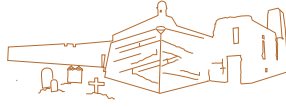
ARCHAEOLOGY: ARTIFACTS	DATES
Broken Wine Bottles	1760-1780
Earthenware Pottery Pieces	1700-1799
Slipware Mug	1750-1775
Wrought Iron Nails	Before 1790

HISTORICAL EVIDENCE	DATES
A Historical Document Describing Standing Coquina Chimneys at this Location	Some Time Before 1887
John Funk’s Map of the Area, Showing 2 Houses at this Location	1767

DIRECTIONS: Use the information collected by Dorothy Moore’s archaeology team to decide which time period the Colonist’s House belongs to. Mark each date range on the timeline at the bottom of the page. (The date range for Broken Wine Bottles has been marked as an example.) Where do these dates overlap the most? On the list of A to E, circle the time period that best matches the Colonist’s House Site.

- A. First Spanish Period (1565-1763)
- B. British Period (1763-1783)
- C. Second Spanish Period (1783-1821)
- D. U.S. Territorial Period (1821-1845)
- E. Florida Statehood Period (1845-present day)





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COOL FACT:

What is a Site Number? Each archaeology site gets its own identification number. These numbers, along with good descriptions of each site, are recorded in a Master Site File. By using this filing system, an archaeologist can find any site he or she wants to study. But how do archaeologists decide what each site number should be?

Each site number follows a pattern. For example, the site number for the Colonist's House described above is 8VO7051. 8 stands for the state of Florida. Every archaeological site in Florida has a site number starting with 8. VO stands for Volusia County. This tells the archaeologist which Florida county the site is located in. And 7051 tells us that the Colonist's Site was the seven thousand fifty-first site found in Volusia County. Wow! That's a lot of archaeology in just one county!