Students will distinguish native foods from those transported here by Europeans.



Grenada National Museum: Teacher Kit

Before You Visit

Background

The Saladoids. While the Saladoids are often thought to represent the movement of Arawak-speaking people into the Caribbean, their actual language and culture is unknown. Based on tools, pottery types, and past studies of ancient plants, however, we know the Saladoids were the first multi-crop cultivators of fruits and vegetables in the Caribbean. They also supplemented their diet with crabs, sea egg/urchins, sea turtles, lambie/conch, and fin fishes. Studies have shown numerous plants and animals to arrive during this time period (500 BCE), including: manioc/cassava, maize, beans, papaya, tobacco, peppers, peanuts, sweet potatoes, dogs, opossum, guinea pigs, shrews, and hutia (large rodents, similar to guinea pigs). They are considered the "parent" culture of later prehistoric Caribbean cultures such as the Taíno, as their way of life was the foundation for subsequent cultural changes.

The Taino. When Columbus arrived in 1492, he met a people that came to be known as Taíno on the island of Hispaniola, in what are now present-day Haiti and the Dominican Republic. The foods they ate were very similar to their predecessors, the Saladoids. The Spanish observed their diet consisting of vegetables, fruit, meat, and fish. While large animals were unavailable in the West Indies, Taíno ate small animals such as hutia, lizards, turtles, birds, and other rodent-like mammals. They often caught fish using nets, spears, poison, weirs (small dam structures to catch fish in rivers), or hook and line. West Indian Manatees were also hunted with spears. The Taíno also used domesticated birds as decoys to lure wild parrots and often extracted iguanas from trees and other vegetation. Small animals were stored livefish and turtles in weirs, and hutia in pens.

Grade	
Levels	

- 4th +
- Extension Activities for Secondary Forms 1+

Duration

- Pre-Visit: 20 minutes
- Visit: 15 minutesPost-Visit: 15 minutes

Topics

- Native plants, animals
- Items transported by migrating groups
- How natural environments are affected by humans

Extensions/Linkages: Beringia route, Paleoindian peoples, ecosystems, species extinction, biology and horticulture, food chains

Entry Skills/Knowledge: Basic understanding of food chains and ecosystems

Materials

- A few printed copies of *Amerindian Foods* handout to pass around class (optional) for pre-visit lesson
- Clipboards or notebooks for students to press on
- Pencils for each student
- Copies of activity worksheet handout (optional) at museum

Amerindian Exhibit Display:

The Things They Carried;

Exhibit Tie-Ins

Objects of Interest

- Maritime objects (canoes,
- fishing nets, etc.)Hunter-gatherer tools

Foods

Foods of the New World. Amerindian groups like the Taíno and Island Caribs relied on agriculture for a majority of their diet. Large fields were cultivated and managed for crops including manioc/cassava, an important staple food. Sweet cassava was often boiled or roasted and eaten as a vegetable, while a poisonous variant (bitter manioc) would be ground, strained, squeezed of its poisonous juices, and cooked into flat breads. Sweet potato (batata) was another important root crop. The fields were prepared by heaping up mounds of soil (conucos) and lining the sides of the mounds with vine plants and other "climbing" crops to improve the soil's fertility, manage drainage, and guard against erosion. Most crops were grown year-round.

Other crops included arrowroot, yam, tannia, varieties of squash, beans, peppers, peanuts, pineapples, and other varieties of local vegetables and fruits. Maize/corn was grown but was considered a treat rather than a staple food crop. Unlike mainland American native cultures, it was eaten entirely off the cob rather than ground into cornmeal and baked into breads. Tobacco, calabashes, and cotton were grown around houses. Finally, palm nuts, guavas, and Zamia roots were among those fruits and vegetables collected in the wild.

Before You Visit

Lesson objectives

SWBAT describe what early Amerindian groups ate in the Caribbean and distinguish between foods transplanted here during Colonial times.

- Students will compare and contrast "New World" plants and animals native to the region and those from the "Old World" that were brought by Europeans.
- Students will describe the diets of pre-Columbian groups in the Caribbean, including the gradual replacement of hunter-gatherer practices with sedentary agricultural practices.
- Students will describe why plants/foods are so important to archeologists when studying a culture.

Procedure

1. Begin by asking students to name their favorite types of "raw foods", or foods derive from plants and do not require a lot of processing or cooking to make. Ask them to think of (1) Fruits, (2) Vegetables, (3) Nuts & Seeds, and (4) Spices. As students call out items, write these on the board, dividing them into these categories.

2. After listing at least 3-4 in each category, ask students to review the list and think aloud whether these items are native to the **New World** or the **Old World**. Place checkmarks next to the native items as they are identified. Ask students why they think this way—do the plants need a lot of sun? Water? Moist, humid environments?

You'll find students will struggle with this activity. Explain that most (or even all) of the items listed grow very well in our environment, regardless of whether they are considered to be from the "New World" or "Old World". This is because non-native plants brought over by Europeans that could *not grow* in our environment would not have lasted so long and become so common in our diets. Bananas and coconuts, for example, are common Caribbean foods introduced by Europeans in the late 15th /early 16th century.

3. Circle or underline the items that are native to the New World. Then, ask the students to think about these items in a "think aloud" activity:

New World Foods (Circle or underline any of these named by students on the blackboard):

Manioc/Cassava	Beans	Maize/corn
Sweet potato	Peppers	Palm nuts
Yam (and other starchy tuber crops)	Peanuts	Guava
Squash	Pineapple	Рарауа

Think-Aloud Questions for Students:

- Describe some of the foods that Island Caribs and other Amerindian groups ate and grew in the Caribbean.
- Do you eat them? Are they filling? Do you feel full when you eat [manioc]? Etc.
- Do you think they were easy to grow? Which of these would you grow if you were a farmer? Do you think these crops can feed a lot of people?
- Would this be all you ate? What else would you need to eat?

Students may not know the answers to a lot of these questions. The key is to get them to actively think about and describe the characteristics of some of these crops using their memory or observational skills (*Note:* the photos in the Amerindian Foods handout are recommended for younger students, or you could ask them to bring in a fruit or vegetable from home before starting this lesson).

Encourage students to think critically about each item's *usefulness* for human survival. Encourage them to think like these early cultures did, evaluating plants as a potential source of food and potential to be farmed as an agricultural crop. Would these plants need a lot of sun? Water? Fresh soil? Flat land? ...and so on.

Take this opportunity to review why manioc is a key staple crop:

Manioc/Cassava:

- Extensively grown/Staple crop
- Starchy; good source of fiber and carbohydrates
- Very filling
- Does not need a lot of water (can survive in droughts)
- Can remain in the ground until needed (doesn't ripen easily) and can be ground and stored for long periods
- Can grow in marginal soils (soil not typically good for farming)
- Juices of bitter manioc used to make thick sauces
- Also used to make alcoholic beverages and fermented beers
- Highly productive crop

Remind students that our earliest migrating groups did not learn to grow their food overnight. It took hundreds (even thousands) of years to develop a sedentary lifestyle sustained by agriculture, so they often relied on fruits and vegetables collected in the wild, as well as hunting small game and fish.

4. Introduce what early cultures ate in the Caribbean:

- Archaic people (5500 BCE-400 BCE) A hunting, gathering, and fishing people; lived along coastal regions; Diet of shellfish, turtles, crabs, birds, and fish.
- *Early-Ceramic Saladoid (400 BCE) and Taino people (1200 CE)* Agricultural cultures; Diets are described in **Background**.
- In addition to agriculture, *Amerindians* often would rely on a mixture of fishing techniques like crabbing/diving for lobsters or conch, using plant poisons to stun fish, using fishing nets, or harpoons to catch sea food.
 - They often enjoyed land crab, which was part of a main dish with manioc and tamali sauce (made from bitter manioc juices)
 - They hunted with bow and arrows and dogs to capture agouti, opossum/manicou, and green iguana. These animals were often boiled in manioc water, roasted, or smoked in a boucan grill.
 - \circ $\;$ Birds like ducks and other water fowl were also eaten

Ask students to think about the major differences between **hunter-gatherer groups** and **agricultural farming groups**. What if our settlers always continued hunting-gathering instead of growing crops in the Caribbean? How did agriculture affect the Amerindian way of life and ability to thrive on islands?

5. Introduce foods brought into the Caribbean by Europeans:

Jump ahead to 1492 and the arrival of the Europeans, starting with Christopher Columbus. Christopher Columbus was initially looking for the East Indies in southern Asia, which was a rich area for unique foods and spices. He knew that sailing west would take him around the world to reach his destination, but he never knew he would find an entire continent this way.

When Columbus and later Europeans explored the Caribbean, they both *introduced* and *encountered* a number of different foods and crops, many of which were brought back to Europe or to other colonies in the Americas. Share a few major examples:

Items encountered by Europeans:

Manioc/Cassava, beans, maize (corn), sweet potato, peppers, palm nuts, yam and other starchy tuber crops, peanuts, guava, squash, pineapple, papaya (paw-paw), plus other important crops like **tobacco**

Items introduced by Europeans:

Bananas, mangoes, oranges, spices (nutmeg, cinnamon, clove, ginger, etc.), garlic, onions (except some wild varieties), carrots, lettuce, peas, coconuts, sugarcane, and livestock (cattle, pigs, goats, sheep)

Fun fact: Potatoes and tomatoes, two important staple crops that were instrumental to the growth of the Europeans throughout modern history were actually discovered by Spanish sailors exploring lands

in Central America, shortly after encountering the Caribbean.

Debriefing

Did students struggle to identify New vs. Old World foods? Remind them that it is hard to determine where a crop came from through observation alone, because most of them share one characteristic: **they can grow and thrive in tropical environments and have thrived in the Caribbean for hundreds of years!**

You can use this opportunity to describe why plants/foods are so important to archeologists when studying a culture:

- We can gain insight into how people in that culture lived. You can understand how much time they needed to spend getting food; how reliable those foods were; the amount of energy (calories) available, and demographic information (health, diet diversity, mortality/life-expectancy, etc.)
- We can determine the nutritional quality of their diet. This can be helpful to modern nutritional science as most traditional diets were well balanced and perfectly suited to the local environment, meaning people got all their nutrients (protein, calories, vitamins, etc.) through local combinations.
- They help us determine where a group may have come from, for example, by determining if the same types of seeds, pods, plants, fruits are found in one region vs. another; (thus, you can trace migrations of groups)
- Sometimes we can date the materials found and study their botanical properties to determine their origins;
- We can identify potential areas where resource competition (food shortages) might have been a problem, causing tension among different groups and neighboring cultures

It's important to note just how *life-changing* it was for societies to be able to grow their own food and domesticate their own animals for food. This eliminated the migrating lifestyle, with small bands of groups traveling great distances to survive, and led to communal, sedentary lifestyles, where people lived in one place for a long time. The development of agriculture and farming practices led to civilizations being built and becoming more advanced in terms of culture, structure, and technological development.

Extension Questions (Secondary)

How did introduction of new plant and animal species affect the ecosystems of the Caribbean islands? Research one instance of a new species being introduced and report on its effect on the local ecosystem and/or food chain. Support your report with credible sources found in books or online (encyclopedias, college or university websites, museum websites, scholarly papers and articles, and other educational websites). This includes modern invasive species like bamboo, (Old World) mosquitoes, or the current Lion Fish problem.

Adaptations for Struggling Students

• If learners struggle with the comparing and contrasting of foods in the first exercise, pick one well-

known food from each category (New vs. Old World) and compare them together as a class. For example, manioc vs. carrots; pineapple vs. mangoes.

At the Museum

Comparing our favorite foods

Overview

Students will explore the Amerindian Room and identify characteristics of native vs. non-native foods that helped migrating groups thrive in their new environments.

Background Information

It is important to understand the foods that enabled cultures to adopt more sedentary lifestyles sustained by agriculture. Climate, land, soil properties, weather, temperature, proximity to water, and other characteristics were important in determining if plant-based foods could be cultivated by settling groups in the Caribbean. It was not just native plants, but plant species that were carried with these groups which helped ensure their survival, changing the landscape of the islands with their arrival.

Some plants were brought to the Caribbean by accident after seed-bearing fruit or flowers were transported with migrating groups. Others were quite intentional, as these groups depended on certain foods. **Lesson objectives**

SWBAT compare and contrast New World and Old World foods available to early Amerindian and colonial groups in the Caribbean, noting their physical characteristics, potential to be cultivated, and perceived 'value' as a food source from the viewpoint of these groups.

Procedure

1. Distribute the Amerindian Foods handout to students before their visit to the museum.

If handouts are unavailable, ask students to choose 2 foods to compare: (1) from Group A and (1) from Group B. Do not explain why they are separated into these two groups, yet. Then, ask students to copy the handout questions in their notebooks to answer at the museum.

2. At the museum, have students investigate the exhibit and displays to find foods on their list, as well as any other characteristics of island life or the Amerindians that can help them answer the questions in the handout. Students may work as individuals or in small groups of 2-3 on this exercise. Encourage active and thorough exploration of the displays and objects shown in the exhibit, looking for clues that can support their answers to the questions.

After Your Visit

Debriefing

In a large group, review some of the key staples that Amerindians relied on for survival on the islands (Grenada and others in the Caribbean). How did advances in agriculture affect these groups' ability to live?

Extensions

Discuss what foods and crops interested the Europeans upon their arrival in the 1400s, and what items were brought with them from Europe to the Americas, and vice versa. Emphasize differences in the environments of Europe (Spain, France), Africa, India, and the Caribbean.

Post-Visit Activities

Ask students to write down the foods and meals they commonly eat, and then work in pairs or small groups to determine how much of their diet is Amerindian. For instance, many people have farine porridge (manioc) and cocoa tea for breakfast; both are Amerindian. Students may also suggest a pepper-pot, of which the idea or concept (but not the actual meat) is Amerindian. Also, people eat fish and lambie all the time. Our national dish, oil down, uses the same breadfruit Amerindian's ate (though everything else is non-native to the region).

Post-Visit Reflection

• How did changes in food/diet affect the overall development of pre-Columbian cultures? What about these early cultures' diets and food customs are still with us today?