The Pawpaw Tree

Recommended Grades: 6-8

Subjects:
- History/Social Studies, Geography, Science, and Technical Subjects

In these lessons, students will:
- Analyze
- Examine
- Connect
- Create
- Explore
- Discuss

Essential Questions for Lesson:
- Why are Pawpaw trees important to American history?
- How did past communities use Pawpaw trees as folkways of American culture?

Objectives:
- Students will examine the history of the Pawpaw tree.
- Students will analyze how Pawpaw trees influenced the creation of American folkways and community traditions.
- Students will learn scientific facts about the Pawpaw tree species.
- Students will research and create their own folk song based on Way Down Yonder in the Pawpaw Patch.
- Students will learn how to bake desserts using pawpaw fruit, or other fruit that grow on trees like apples, bananas, or peaches.

Materials for Students:
- Scientific readings about the Pawpaw tree
- Historical readings and summaries about the Pawpaw tree
- Folkways of American culture readings
- Images and map of the Pawpaw tree
- Folk Song Activity
- Activity with recipes for making desserts using Pawpaw fruit, or other fruit that grow on trees such as apples, bananas, or peaches.

Introduction
Trees are effective primary sources for learning about the past because they are living witnesses to key events in American history. The following lesson plan focuses on the Pawpaw tree species, which is located in the Butterfly Habitat Garden of the National Museum of Natural History (NMNH). They are included in the Smithsonian collection because they are native to the Washington, D.C. region. Smithsonian horticulturalists also grow pawpaw trees in the Butterfly Habitat Garden to provide visiting butterflies and birds with a food source. Pawpaw trees have an extensive history that can teach students about community traditions, customs, and folkways of American culture along the Eastern Seaboard and Appalachia through the centuries.

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Getting Started: Inquiry Questions

1) Examine the photograph for ten seconds. How would you describe the photograph?
2) Where is the pawpaw tree located?
3) What details do you notice about the image?
4) What questions do you have about the photograph?
5) How might you find answers to these questions?

Getting Started: Predictions Related to the Focus of the Lesson

The teacher will ask the following questions to determine students’ prior knowledge:

1) Why are trees significant to communities?
2) How do individuals interact with trees in American culture?

The purpose of this section is to get students to think about trees in terms of history and folkways of American culture. Once students have thought about the questions, the teacher will facilitate a five-minute class discussion. Students might respond to the first question by stating that trees provided fruit for Native Americans, explorers, and settlers to eat during times of famine. Early Americans also used wood to build ships, houses, and furniture. Similarly, students may reply that trees help eliminate carbon monoxide and pollution from the air. With respect to question two, students may think about folktales such as Johnny Appleseed, maple or apple tree festivals, recall images of initials carved into tree trunks, and folk songs with trees or bushes mentioned in the lyrics.

The teacher will transition to the next section, “Setting the Stage,” using students’ responses from the discussion.
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Setting the Stage: What is the Definition of American Folkways?

What are American folkways? Folkways are a traditional way of life for a particular community or group. Communities often create stories, legends, superstitions, and myth to celebrate and pass down traditions to younger generations. Folkways are primarily, though not exclusively, retold as an oral tale by an elder community member. Unfortunately, great folk stories and songs are often lost with the passing of the elderly narrator.

When a local narrator passes on, other members of the community continue to retell folk stories and songs left behind. Heroic frontier stories of Davy Crockett and Johnny Appleseed, names of streets and baseball teams, oftentimes originate from oral folkways. Accordingly, folkways represent a community’s culture as seen through changing stories, legends, traditions, and song. American culture is brimming with examples of past folkways!

The teacher will transition students to the next sections by encouraging them to explore the scientific and historical facts about the pawpaw tree. In addition, students will learn how communities create folkways about pawpaw trees.

Locating the Site: Maps

The teacher will provide students with copies of the map. Students will spend a few minutes answering the questions. The purpose of this section is to develop students’ map reading skills.

Map 1: Distribution of Pawpaw Trees in the United States

Questions for Map 1

1) Where are pawpaw trees distributed in the United States?
2) Why do you think pawpaw trees are absent from the Western United States?
The Pawpaw Tree

Reading 1: Determining Scientific Facts About the Pawpaw Tree

The pawpaw tree is the only temperate-climate member of the custard apple family (*Annonaceae*) of more than 2,000 species living in tropical habitats. Located between Indiana and Georgia, Southern Louisiana and Northern Michigan, pawpaws extend across the United States. Unlike the tropical members of the custard apple family, pawpaw trees thrive in harsh conditions of snow and ice. Despite this resilience, pawpaws struggle to reproduce. Scientists believe the tree is ineffective at attracting flies and beetles to pollinate the pawpaw’s flowers.

The scientific or Latin name for the pawpaw tree is *Asimina triloba*. Pawpaws grow to about twelve feet and have a slender tree trunk with branches covered in long, green leaves. Each branch has three or more flower buds that eventually produce clusters of pawpaw fruit. Pawpaw fruit are moderate to large in size, with a thick green skin that offers great protection. Inside the fruit, people find a yellow-orange custard flesh speckled with dark brown seeds the size of lima beans.

Scientist Neal Peterson, who became a present-day Johnny Appleseed for the pawpaw, states that pawpaw fruit are nutritious for humans. Compared to common fruits found at the grocery store, such as apples and peaches, pawpaws have high levels of vitamins, minerals, and amino acids to keep the human body healthy. Recently, doctors and scientists started studying the dietary qualities of the pawpaw in an attempt to develop medicine to fight cancer. Scientists believe pawpaw compounds have the ability to heal some human maladies!

Questions for Reading 1

1) Name two states where you can find Pawpaw trees.
2) Why are pawpaw trees and fruit resilient to harsh weather conditions?
3) Describe four scientific characteristics of the pawpaw tree.
4) What health benefits do pawpaw fruit offer individuals?
Spanish explorers first discovered the pawpaw tree in the sixteenth century. In 1541, Hernando de Soto observed Mississippi Valley Native American groups growing and eating pawpaws. According to scientist Neal Peterson, the Spanish mistakenly named pawpaw fruit “papaya.” Spanish explorers selected this name because they observed pawpaw fruit to have a similar green skin and orange flesh to a papaya. Over time, the English language transformed the fruit and tree species name from “papaya” to “pawpaw.” Some people even nicknamed pawpaw fruit the “Indiana banana,” “dog-apple,” or “Michigan Banana” because Pawpaw trees are abundant in the Midwest.

A Treatise on the Pawpaw (1905)
By: James A. Little

Indians were frequently in camp on the river and they were great lovers of the pawpaw. Nature seems to have been generous in providing the Indians with one of the most delicious fruits which has not required so many years of patience and toil to improve as it did with the apple, pear, and peach. A similar condition as above stated existed in Indiana during the Pioneer days. We can never realize what a great blessing the pawpaw was to the first settlers while they were clearing the great natural forest and preparing to build cabins. Planting fruit trees was rather an experiment for a number of years. The paw paw and a few other wild fruits of less value, were all their dependence so far as fruit is concerned.
Thursday 11th Sept 1806. A Showery morning. we Set out and procd. on verry well untill about 11 A. M. we then halted to hunt a Short time. found pappaws and grapes in this bottom which is covred with cotten Honey Locus Seckamore timber &C. the rushes thick. Drewyer killed a large deer. we then proc. on. one of the hunters killed a deer from his canoe. at dusk we Camped on a Sand beach on the N. Side.—

Wednesday 17th September 1806. We went on early and had a pleasant day, but very warm. One of our party last night caught a large catfish, supposed to weigh 100 pounds. We got a great many pappaws on our way to-day: a kind of fruit in great abundance on the Missouri from the river Platte to its mouth; and also down the Mississippi. About 11 o'clock we passed through a bad part of the river, where it was so filled with sawyers that we could hardly find room to pass through safe. About two in the afternoon we met a large keel-boat, commanded by a Captain M'Clanen, loaded with merchandize and bound to the Spanish country by the way of the river Platte. He intended to go by land across the mountain, and get the Spaniards to bring their gold and silver on this side, where he could take his goods and trade with them. He had fifteen hands, an interpreter and a black. He intends to discharge his men on this side of the mountain, and to get some of the Ponis, who live on the river Platte to accompany him to the Spanish country.

Questions for Reading 2

1) Who discovered pawpaw trees in America?
2) Where does the name “pawpaw” come from?
3) How did Native Americans use Pawpaw trees?
4) On Thursday 11th of Sept. 1806, what did Sergeant John Ordway find at 11:00 am?
5) In his journal entry on Wednesday 17th September 1806, why does Patrick Gass stop to collect pawpaw fruit?
6) According to Patrick Gass, where are pawpaw fruit located in the United States?
Way Down Yonder in the Paw-paw Patch Lyrics

Where, oh where is dear little Nellie?
Where, oh where is dear little Nellie?
Where, oh where is dear little Nellie?
Way down yonder in the paw-paw patch.

Come on boys, let’s go find her,
Come on boys, let’s go find her,
Come on boys, let’s go find her,
Way down yonder in the paw-paw patch.

Picking up paw-paw, puttin’ ’em in your pocket,
Picking up paw-paws, puttin’ ’em in your pocket,
Picking up paw-paws, puttin’ ’em in your pocket,
Way down yonder in the paw-paw patch.

The importance of pawpaw trees for the survival of early communities was ingrained in American culture by the nineteenth century. Midwestern and Appalachian mountain communities, in particular, created pawpaw folkways. According to scientist Neal Peterson, these communities celebrated the valuable constructive and nutritional benefits of the pawpaw through games, poems, and even the naming of geographical places. All across the United States, from Paw Paw, Illinois to Paw Paw, West Virginia, towns are named after the great pawpaw tree. Perhaps the most important folkway to celebrate the pawpaw tree is the children’s song *Way Down Yonder in the Paw-Paw Patch*. Pioneers who settled in the Southern Appalachian Mountains region sang this song to celebrate the importance of pawpaws in their daily lives.
Community folkways also honor pawpaw trees through traditional, regional recipes. Pawpaw eaters describe the taste of this forgotten fruit as a combination of the smoothness of a banana with a hint of pineapple and dash of honey and vanilla. James A. Little, in “A Treatise on the Pawpaw,” writes of the various ways people consume pawpaw fruit. For example, bakers make splendid pawpaw breads and custard pies. Little believed that pawpaws, like peaches, are an excellent fruit to boil down into a marmalade or jam. Finally, Little exclaims that the best way to eat a pawpaw is with cream and sugar right out of your hand!

### Questions for Reading 3

1) Name two types of communities that established pawpaw folkways by the nineteenth century.
2) Give three examples of how these communities celebrated the constructive and nutritional benefits of the pawpaw.
3) What are some ways people consume pawpaw fruit?
Visual Evidence: Print of Birds with Pawpaw Fruit

Questions for Drawing 1

1) Examine the print for ten seconds. How would you describe the print?
2) What details do you notice in the image?
3) Describe three scientific characteristics of the pawpaw tree.
4) What questions do you have about the photograph?
5) How might you find answers to these questions?

Putting It All Together: Pawpaw Tree Activities

The following activities will help students learn about how communities integrate pawpaw trees into folkways of American culture.

Activity 1: Write a Folk Song about a Tree

After completing the lesson, teachers will have students separate into groups of two or three. Students will then spend approximately ten to fifteen minutes writing a folk song about a local type of tree. Teachers can assign the type of tree to each group, or let the students choose after a class brainstorming session. When ten to fifteen minutes are finished, teachers will have each group share their song with the class. Those students who do not wish to sing their song aloud may recite the lyrics as a poem.
Activity 2: Baking with Pawpaw Fruit

After completing the lesson, teachers will assist students in making a pawpaw dessert using one of the recipes listed below. As a safety precaution, teachers are encouraged to ask students about any food allergies before baking. In addition, teachers must remind students of safety procedures when working around ovens and stovetops. Students will wash their hands and separate into small groups while baking. If pawpaw fruit is unavailable at the local grocery store or farmer’s market, teachers may substitute other types of fruit that grows on trees, like apples, bananas, or peaches. Enjoy!

### PAWPAW CHIFFON PIE

| ½ cup Brown Sugar | 1 Envelope Unflavored Gelatin |
| ½ tsp. Salt | 2/3 cup Milk |
| 3 Eggs, separated | 1 cup Pawpaw Pulp, strained |
| ¼ cup Granulated Sugar | 1 9-inch Graham Cracker Crust |

In a saucepan, mix brown sugar, gelatin and salt. Stir milk and beaten egg yolks into mixture. Cook and stir the mixture until it comes to a boil. Remove from heat and stir in strained pawpaw pulp. Chill until it mounds slightly when spooned (20-30 minutes). Shortly before mixture is sufficiently set, beat the egg whites until soft peaks form, then gradually add granulated sugar, beating until stiff peaks form. Fold the partly set pawpaw mixture thoroughly into the egg whites. Pour into a 9-inch graham cracker crust and chill until firm.

### PAWPAW ICE CREAM PIE

| 2 cups Pawpaw Pulp, strained | 1 cup Brown Sugar |
| 1 quart Vanilla Ice Cream, softened | 1 9-inch Graham Cracker Crust |

Stir brown sugar into the pulp until it completely dissolves. Now fold the mixture into the softened ice cream. Pour this concoction into crust and place in freezer. Remove about 30 minutes before serving.

### PAWPAW COOKIES

| 1 ½ cups Mashed Pawpaw Pulp | 2 cups Flour |
| 1 tsp. Baking Soda | 1 tsp. Salt |
| ½ cup Butter | 1 cup Granulated Sugar |
| 2 Eggs | 1 tsp. Grated Lemon Rind |
| 1 cup Chopped Walnuts |

Pawpaw Tree Lesson Plan: Image Resources

Pawpaw Tree, Florida, U.S.A. [Paw Paw Baum] (1868-1910)
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Map of Range of Pawpaw Trees in the United States
© USDA Plants Database

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Pawpaw Tree Lesson Plan: Image Resources

Pawpaw Tree and Fruit, U.S.A. (1891)
© Smithsonian Institution Archives, National Museum of American History

Yellow-Billed Cuckoo in Pawpaw Tree
© The New York State Historical Society
Pawpaw Tree Lesson Plan: Works Cited

Primary Sources & Images


Secondary Sources


Further Reading: Power of Place
