

Junior Mill Tour

At Historic Yates Mill County Park!



This Educator Guide Contains:

- Program overview and description
- Correlated NC DPI Social Studies Standards
- Vocabulary list
- Resources for further learning

Overview

In this program students will explore history by learning about some of the foods, technologies, and people of Yates Mill, which has been the site of a grist mill since the 1760s. By asking students to notice what they see inside and outside of the historic mill and participate in hands-on demonstrations, students are encouraged to think historically about the differences between now and then and to observe how the environment, technology, and North Carolina society has changed over time. This program changes slightly according to the curriculum standards, developmental needs, and interests of the participating grade level, but is recommended for grades 2-4. This program entails walking outside over dirt trails and rocky surfaces, and takes place majority outdoors.

Program Description and NC DPI Essential Standards for Social Studies

Goals

- Students will be able to define grist mill and understand the basic function and mechanics of a grist mill.
- Students will learn about change over time by comparing historical foodways processes involving gristmilling to modern foodways.
- Students will practice thinking historically by observing and exploring a historic site.
- Students will be able to exemplify how diverse groups of people contributed to the creation and history of Yates Mill.

1st Grade

1.B.1: Understand how culture, values, and beliefs shape people, places, and environments

- 1.B.1.1: Identify cultural practices and traditions in local communities and places around the world
- 1.B.1.2: Summarize ways that culturally, racially, and ethnically diverse people help shape a community

1.E.1: Understand the role of basic economic concepts in the decisions people make

- 1.E.1.2: Recognize the relationship between supply and demand

1.G.2: Understand interactions between humans and the environment in different places and regions around the world

- 1.G.2.1: Explain the various ways the physical environment impacts people in different regions around the world
- 1.G.2.2: Explain the various ways people impact the physical environment in different regions around the world.

1.H.1: Understand how people and events have changed society over time

- 1.H.1.1: Explain how the experiences and achievements of people throughout history have helped contribute to the changes in various local communities and communities around the world over time

2nd Grade

2.E.1: Understand how the availability of resources impacts economic decisions

- 2.E.1.2: Explain how the availability of resources impacts the production of goods

2.G.1: Understand how interaction between humans and the physical environment is impacted by movement and settlement

- 2.G.1.2: Explain how the environment has impacted settlement across America

- 2.G.1.3: Interpret how the movement of people, goods, and ideas has impacted the regional development of America

2.H.1: Understand how various people and events have shaped America

- 2.H.1.1: Summarize contributions of various women, indigenous, religious, racial, and other minority groups that have impacted American history
- 2.H.1.2: Explain ways in which various historical events have shaped American history

3rd Grade

3.B.1: Understand how values and beliefs of individuals and groups influence communities

- 3.B.1.1: Explain how the values, beliefs, and cultures of various indigenous, religious, racial, and other groups contribute to the development of local communities and the state

3.E.1: Understand how economic decisions and resources affect the local economy

- 3.E.1.2: Explain how the natural resources of a region impact the production and consumption of goods in local communities

3.H.1: Understand how various people and historical events have shaped local communities

- 3.H.1.1: Explain how the experiences and achievements of women, indigenous, religious, and racial groups have contributed to the development of the local community
- 3.H.1.2: Explain the lasting impact historical events have had on local communities

4th Grade

4.H.1: Understand the role of various people, events, and ideas in shaping North Carolina

- 4.H.1.1: Explain how the experiences and achievements of minorities, indigenous groups, and marginalized people have contributed to change and innovation in North Carolina
- 4.H.1.2: Summarize the changing roles of women, indigenous populations, and racial groups throughout the history of North Carolina

Pre/Post Visit Suggestions and Activities (Optional)

Make Your Own Waterwheel!

- Learn about the forces of physics and an ancient source of energy by making your own waterwheel out of cups, plates, spoons, and other things around your house! There are many different ways to create and test a miniature waterwheel, check out the sources linked below for some examples and for more information.

Recommended web resources:

- [Little Bins for Little Hands: DIY Waterwheel for Kids](#)
- [Waterwheel Work: Energy Transformations and Rotational Rates](#)

- [Glasgow Science Centre: Make Your Own Waterwheel](#)
- [Science Sparks: DIY Waterwheel](#)

Practice Looking Slowly and Thinking Historically

- Visit one of the many free museums and historic sites in Wake County and practice your historic observation skills! Try one of these slow looking activities:
 - Don't read the label on an object or work of art immediately. Instead, see what you notice about it first! How old do you think it is? Who do you think created this item and why? When you're satisfied with your historic thinking, check the label and compare what you noticed to what you learn.
 - Find a historic photograph of a familiar place, or similar to a familiar place. Take some time to compare and contrast what you see in the photograph and what you think you would see today. Are the people dressed the same or different? How are the people in the photograph traveling? What technology do you see?
 - Pick one detail to look for as you explore a museum or historic site. For example, look for all the nails! Do they have round heads? Or square? Are they made of metal or wood? What might this detail tell us about who constructed a building and how?

Recommended web resources:

- [Thinking Museum: 5 Simple Slow Looking Activities For Summer](#)
- [Thinking Historically for Kids: Colonial Williamsburg Video Series](#)

Water and Dams

- Did you know all the major bodies of water in Wake County are human-made? Find a nearby lake by visiting in person or looking at a satellite map. See if you can find the dam holding the water in place.
 - What materials is the dam made of? Do you think people 200 years ago would have been able to build using those materials?
 - What animals have made the lake their home since it was created?
 - Why do you think people chose to create this lake? How do people use the water?

Discussion Questions:

How do you think the place you live might have looked 100 years ago, before your grandparents were born? Does nature look different? Do the same people live there?

Why is food important to you?

How many people do you think help get our food from the fields to our plates? What sorts of jobs do they have? Why are these jobs important? (Examples: farmer, fieldhand, factory worker, truck driver, grocery store worker, cook, waitress/waiter)

Look through your pantry and find something with corn or wheat in the ingredients! Can you see the corn or wheat in this food item? Does it look or taste like what you'd expect?

Discussion questions like these can be used to encourage students to think critically and curiously about how food and technology change over time, as well as to check their understanding of the concepts they learned during our program.

Vocabulary List

Corn: Also called maize, corn is a tall grass plant that results in cobs of grain known as corn kernels which can be used to cook many different foods. Originally grown in North America, corn is today eaten all over the world.

Wheat: Wheat is a thin grass plant that results in small wheat seeds which can be ground to create flour. Originally grown in the Fertile Crescent area of the Middle East, wheat was brought to North America by European settlers.

Waterwheel: A large wheel which turns due to the flow of water from above or below that can transfer the energy of that movement using gears in order to power machines.

Grain Elevator: An automated device that moves grain around in a mill, typically using a series of small buckets attached to a belt, turning on a wheel and pulley connected to the mill's power source.

Millstone: A stone intended for grinding grains into smaller and smaller portions in order to make flour or meal.

Farmer: Anyone who takes care of plants or animals which will be used in some way by humans.

Foodways: A way of thinking about food that asks us to question where our food comes from, how it is created, and why it is important to our cultures, economy, and diet.

Goods: Things that can be bought and sold. Examples include clothing, food, and toys.

Services: An task that someone does for someone else in exchange for money. Examples include walking a dog, mowing a lawn, and painting a house.

Gristmill: A special type of building where machines crush and grind grains (such as corn and wheat), creating something new (cornmeal and flour).

Enslaved: Someone who is legally owned by another person, meaning they are not able to make choices about their own life and are not paid for their labor and skill. In the context of this program, this term refers to Black people from Africa or descended from Africans enslaved in a system of total ownership by white European colonists.

Indigenous People: The first people to live in a certain place. In the context of this program, “Indigenous peoples” refers to Native Americans/American Indians.

Colonists: People who come on a large scale to live and start businesses in another place. In the context of this program, “colonists” refers to European settlers.

Colonization: When one country takes control of another place’s resources and government.

Learn More

Recommended Children’s Books:

The Secret Garden of George Washington Carver written by Gene Barretta, illustrated by Frank Morrison

Following the story of George Washington Carver from a curious young boy born enslaved to a prominent scientist, inventor, and botanist, this book uses one historic life to explore the environment, science, and race in America during Carver’s lifetime.

Freedom’s Howl: Song of the Red Wolves written by Eileen Heyes, illustrated by Steven Petruccio and Anne Marshall Runyon

A family of red wolves (today a critically endangered species) living near the family of a young widow and her two children in 1776 experience changes in the world around them in different ways.

Bountiful Red Acres: Two Farms, Two Families, and a Year on the Land written by Eileen Heyes, illustrated by Dare Coulter

Two families, one Black and one white, navigate friendship, farming, and community while sharecropping in the North Carolina piedmont in the year 1900.

This Land: The History of the Land We're On written by Ashley Fairbanks, illustrated by Bridget George

Who lived in your house before your family? Who lived on this land before a house was built here? This book encourages historical curiosity and makes a connection to the Indigenous nations whose land modern America is built on.

Recommended Resources on the Web:

Smithsonian National Museum of the American Indian Resources

- [Educator Guide: The Impact of Words and Tips for Using Appropriate Terminology: Am I Using the Right Word?](#)

SLPC Learning for Justice

- [Celebrating African and Indigenous Cultures](#)
- [Talking to Children about the History of Slavery in the United States](#)

Questions or Concerns?

Please contact Park Technician of Education DeLayne Jolly at delayne.jolly@wake.gov or 919-609-7451 with any questions, concerns, or special requests you have concerning this program. Thank you for your interest!