### **HISTORIC YATES MILL COUNTY PARK**



## Dear Educator,

Thank you for choosing Historic Yates Mill County Park for you field trip destination. We hope it will be both educational and fun for your students. The following are suggested pre and post visit activities for students visiting the mill. The activity suggestions were created to make their field trip to the park more meaningful and focused.

We would be interested in any feedback you can provide us as to how to make your visit, and these materials, more valuable and useful. Please feel free to contact us at any time.

Sincerely,

The Staff at Historic Yates Mill County Park

# Milling Vocabulary

Grain A hard seed of a plant

Wheat The grain [hard seeds of a plant] of wheat can be ground into flour to create

breads, cereal, and pasta

Flour Ground up grain (like wheat). Bread, cereal, and pasta are made from flour

Gristmill A building with machines that grind grain into flour or meal

Miller A person who grinds grain into flour

Harvest To gather a crop that is ripe in a field

Product Something made, created, or produced

Millstone Big stones used for grinding wheat

Artifact An object that was used by people in the past

Barter The trading of goods and services without money

Energy The capacity to do work

Miller's Toll A portion of the grain or meal taken by the miller as

payment for his services

Waterwheel A large wheel made to be turned by moving water

A waterwheel powers Yates Mill

Cornmeal Freshly ground kernels of corn, either white or yellow, into the texture of

meal

## Pre-visit: Got Grains?

<u>Goals:</u> Before exploring the concept of grains in milling, students need to understand the definition of grain.

<u>Objectives:</u> As a class, students will brainstorm a list of different grains. Students will identify which foods they eat that are made out of different grains by collecting labels from foods they eat for a day and bringing them to class to share.

Time: 20-30 Minutes

#### **Materials:**

Pencil
Chalk/Chalkboard or markers/paper
Food labels collected from home
Wheat plant

#### **Introduction:**

Hold up the wheat plant. Can anyone tell me what this is?
On the ends of this wheat plant, you will see something. Can you tell me what you see?
Seeds. Another word for these hard seeds is grain. Have you heard that word before?
Discuss. A grain is a hard seed of a plant. Let's make a list of grains that you can think of. Brainstorm list of grains.

#### **Main Activity:**

Have the students collect labels from foods they eat during the day that they think are made from grains. The next day have students present what grains they think they ate that day. *Get Answers and discuss what grains those foods might be made of.* 

#### **Conclusion:**

As a class, discuss the findings of what grain each food is made from.

## Pre-visit: Corn Connection

<u>Goals:</u> The word "mill" is a hard concept to grasp. If students are going to visit Yates Mill, they need to know what a mill is. There are many concepts connected to a mill. This activity will help to develop the concepts regarding the interactions between milling, people, and the natural area. Webbing will help students organize and clarify concepts. They will begin to see interconnections and relationships between people, waterpower, and corn.

<u>Objectives:</u> As a teacher led activity, students will list ideas connected to the definition of a gristmill. Students will create their own corn web to organize their own definition of a gristmill. Students will brainstorm the answer for the "who, what, where, when, and why" of a gristmill.

Time: 1 hour

#### **Materials:**

Large piece of paper
Markers (different colors)
See through container with cornmeal in it
Pencils
Corn Connection Worksheet
Dried Corn Cob

#### **Introduction:**

Hold up the corn cob. Does anyone know what this is? Discuss. What do you eat that is made out of corn? Ideas: bread, cereal, etc. Pull off a kernel from the cob. But how does a small kernel of corn become part of a piece of bread? Discuss ideas. The corn has to get ground up and made into... (show container of cornmeal) Cornmeal! These kernels of corn become cornmeal.

Soon we will be visiting a place called Yates Mill. It is a gristmill. A gristmill is a place where grains of wheat and kernels of corn are ground up into flour. Gristmill...Has anyone heard that word before? *Get responses.* 

## Pre-visit: Corn Connection Continued

<u>Main Activity:</u> Make a web as a class. This web will be open ended as a model for the corn web in their worksheets. It may be helpful to read some of the books and articles included in the resource list guide to introduce students to the main concepts.

Some of the ideas:

**Who**: Farmers growing the corn, the people take the corn to the mill, the millers operating the gristmill, the bakers, grocers, and people of the community

**What:** Corn is taken to a gristmill to get ground into cornmeal. The corn is made into many of the foods we eat such as cereal and bread. Gristmills were built because of the huge amount of power that could be generated from the water at the dam.

**Where:** Yates Mill is found in Raleigh, North Carolina. Yates Mill is the last fully operating gristmill left in Wake County.

**When:** It is thought that Yates Mill was built around 1756. Milling was a large part of life in the late 1700s and still continues today!

**Why:** Milling brought people products and an easier way of life.

Draw a circle with ideas radiating from it on the piece of paper. Write "gristmill" in the middle. Ask students to contribute ideas, which relate to a gristmill and have each idea illustrated coming from the topic.

#### Now it is your turn to create your own corn web!

Pass out the worksheets. Students will create their own corn connection, answering the question who, what, where, when, and why of a gristmill. They may take ideas from the classroom web or create their own. Students can illustrate ideas.

#### **Conclusion:**

What is a gristmill?
Why do people grind corn up? What does it become?
What is something that you eat that is made from corn.

# Pre-visit: "9 am history, don't destroy please"

Inside of Yates Mill, someone inscribed these very words, "I am history, don't destroy please". Yates Mill is a very important part of history because of the story it tells us about the people that lived in the area surrounding the mill and the clues they left behind.

Visit this link and read about the history of Yates Mill:

http://www.wakegov.com/parks/yatesmill/history/default.htm

While you are reading see if you can answer these questions:

The mill is thought to have been built in what year?

What was the name of the first owner of the mill?

What was the name of Raleigh's first newspaper?

Thomas H. Briggs, one of the mill's owners, became rich from what war in American history?

What university obtained the mill in 1963?

What is the name of the group that helped restore and preserve the mill?

What was the name off the hurricane that damaged the mill in 1996?

Answer in a short essay what history means to you!

## Post-visit: Somewhere 9n Time

<u>Goals:</u> Photographs are valuable primary resources that can reveal information about the people, places, and events of the past. In this activity, students will learn how to read pictures, they can make conclusions about the subject matter.

<u>Objectives:</u> Students will study photos from the past. Students will list three things that they see in the photo. Students will describe what is different in the photo compared to the time that they live in today. Students will describe what is the same in the photo compared to the time that they live in today.

Time: 30 minutes

#### **Materials:**

Somewhere in Time Worksheet Photograph of the School Children circa 1915

#### **Introduction:**

Show students the photo of the School Children.

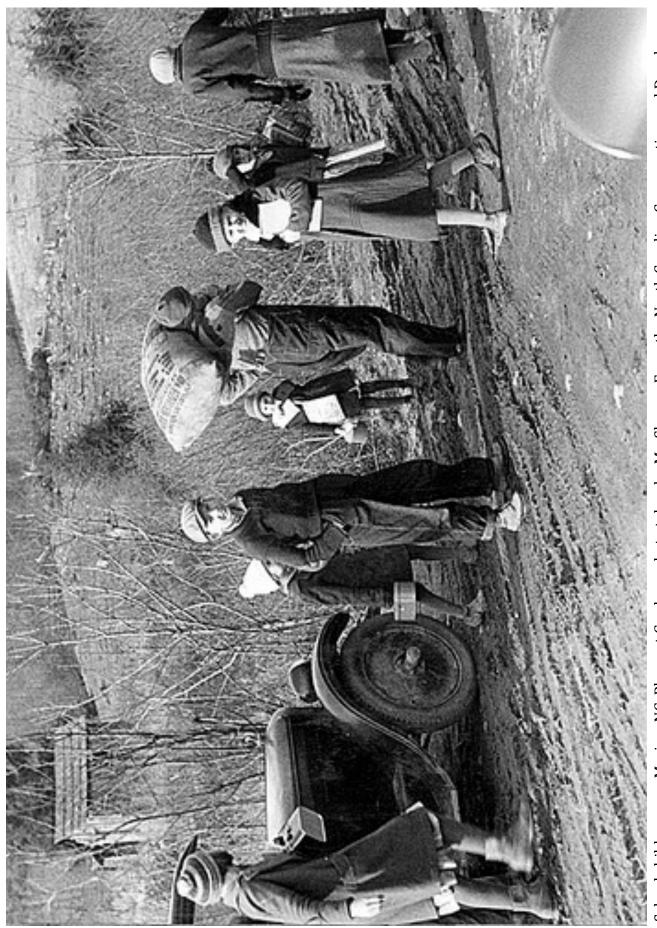
Ask questions regarding the photo such as:

- What is happening in the picture?
- What objects in the picture do you see?
- Is there anything in the photograph that you do not understand? If so, what is it?
- What do you see that tells you that this took place sometime in the past?
- What would be the same or different if the photograph where taken today?
- How are people dressed?
- What are they doing?
- Where do you think the photograph was taken?
- Why do you think this photograph was taken?

<u>Main Activity:</u> Isn't this amazing? Just by looking at a photo, you can learn so much about a time period, people, and places!

Please look at your worksheet. After looking at the photo, please write your answers to the questions below. Students may work individually or in groups.

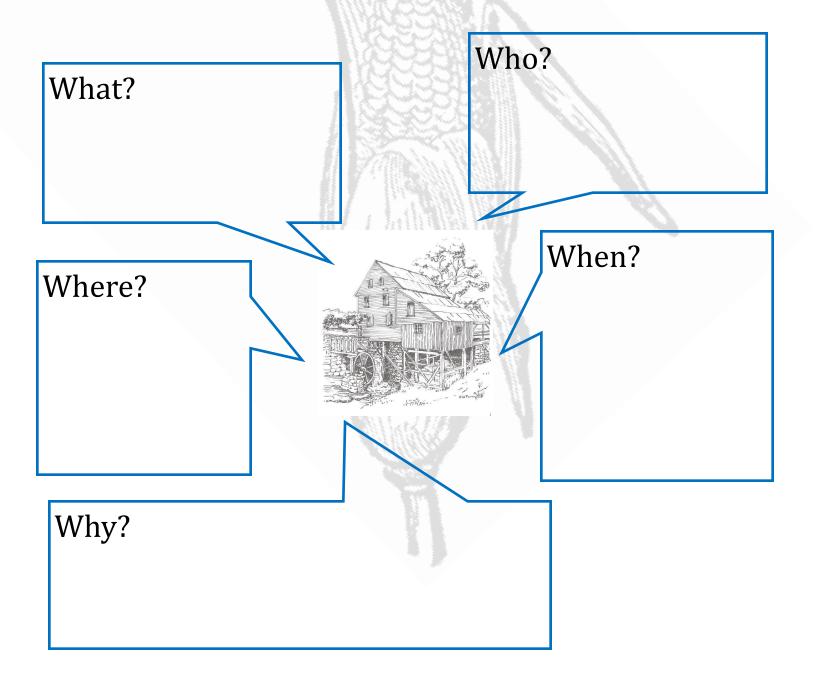
**Conclusion:** Students will share their findings with the rest of the class.



School children near Marion, NC, Pleasant Gardens, photo taken by Mr. Sharpe. From the North Carolina Conservation and Development Department, Travel and Tourism Division photo files, North Carolina State Archives, Raleigh, NC. Circa 1915



Please answer the questions of who, what, where, when, and why of a gristmill.



# Somewhere 9n Time

Please look at this photograph and answer the questions below.

List three things that you see in this photograph.



Yates Mill Circa 1890-1920

What is different about this photo compared to the time you live today?

Are there some things that are the same in this photograph compared to the time that you live in today? If so, what are they?

## Resources

#### **Books:**

Arnosky, Jim. Raccoons and Ripecorn. New York: Mulberry Books, 1987.

Barton, Byron. The Little Red Hen. New York: Harper Collins, 1997.

Carle, Eric. Pancakes, Pancakes! New York: Simon & Schuster, 1990.

Carle, Eric. Walter the Baker. New York: Simon & Schuster, 1995.

Czernecki, Stefan and Timothy Rhoades. *The Sleeping Bread*. New York: Hyperion Books for Children, 1992.

Franks, Katie. Corn Up Close. New York: The Rosen Publishing Group, Inc., 2008.

Gibbons, Gail. Corn. USA: Holiday House, 2008.

Hall, Donald. Ox-Cart Man. New York: Puffin Books, 1979.

Harbison, Elizabeth. *Loaves of Fun: A History of Bread with Activities and Recipes from Around the World*. Chicago: Chicago Press, 1997.

Jacob, H.E. Six Thousand Years of Bread. New York: The Lyons Press, 1997.

Kalman, Bobbie. The Gristmill. New York: Crabtree Publishing Company, 1990.

Nelsen, Robin. From Kernel to Corn. Minneapolis: Lerner Publications Company, 2003.

Santucci, Barbara. *Anna's Corn*. Grand Rapids: Eerdmans Books, 2002.

#### Websites:

http://www.wakegov.com/parks/yatesmill/

http://www.ncga.com/

http://www.kycorn.org/kycgaprojects/education/education.htm

http://www.agry.purdue.edu/Ext/corn/culture/classroom.html

http://www.wheatfoods.org

http://www.kswheat.com

http://www.wakehistory.com/

http://www.ncsu.edu/project/yates-mill/home.htm