

Historic Yates Mill County Park

EDUCATOR'S GUIDE



Historic Yates Mill County Park

4620 Lake Wheeler Road

Raleigh, NC 27603

919.856.6675

www.wakegov.com/parks/yatesmill

(March 2020 Edition)



YATES MILL
ASSOCIATES

“Escape the Daily Grind” *at Historic Yates Mill County Park*



Located just 5 miles south of Downtown Raleigh, **Historic Yates Mill** was established before the City in the mid-1700s and is now the last operating water-powered mill, out of 70 or so mills that once existed in the Wake County area. The mill ground corn into meal, wheat into flour, sawed logs, and carded wool for the local community for over 200 years. Today it serves as a one-of-a-kind historic site and a center of education for all ages.

Mill Tours: Fully restored through a partnership among NC State University, Yates Mill Associates, and Wake County Parks, Recreation and Open Space, the historic mill is open for guided tours from March through November, with costumed corn-grinding demonstrations taking place on the third weekend of every month. Other tour times are also available. The mill is listed on the National Register of Historic Places and is a Raleigh Historic Landmark.

Park Features: The mill is the centerpiece of a 174-acre park which is managed as a native wildlife refuge (dogs are not allowed) and is part of the North Carolina Birding Trail. Park amenities include over 3 miles of hiking trails, picnic areas, boardwalk fishing, viewing scopes, and wayside exhibits, among other features. The park center features 2,200 square feet of interpretive exhibits including hands-on activities and a historic dress up corner.

Organized Group Programs: Please call the Group Programs Coordinator at **(919) 856-5638** to schedule your customized field trip. Reservations are taken year-round by phone on a first call basis. Schedule at least one month in advance to ensure dates and programs of your choice. Choose from a variety of mill tour types, classroom discovery labs, and environmental field experiences to complete your park visit and meet your curricular goals.

Before contacting park staff, please have the following ready:

- Your name and organization
- Phone numbers, email address and fax number for your organization
- Mailing address and zip code
- Requested trip dates (*have alternative dates in case your first choice is unavailable*)
- Grade level, class size, number of adults, and special needs requests.

Table of Contents

Historic Yates Mill Tours - <i>Description and Fees</i>	p. 2
Classroom Discovery Labs - <i>Description and Fees</i>	p. 3
Environmental Field Experiences - <i>Description and Fees</i>	p. 4
Discovery Boxes – <i>Free Park Resources</i>	p. 5
Self- Guided Activities – <i>Free Park Resources</i>	p. 6
Curriculum Correlation – <i>NC Department of Public Instruction Standards</i>	p. 7
Planning Your Visit – <i>We’re Happy to Help! & What Other Educators are Saying</i>	p. 8-9

Historic Yates Mill Tours*

Description & Fees



TOURS ARE AVAILABLE FROM MARCH THROUGH NOVEMBER EACH YEAR.

***Due to the limited capacity of the historic mill, group sizes are restricted as defined below.**

Mill Tour	Description	Rates and Information
Little Red Hen Tour For Ages 4-7 (Grades K-2)	Get your preschoolers excited about Yates Mill! Relive the beloved story of the Little Red Hen. Then take a trip to the mill to gather ingredients for an imaginary loaf of bread. 1 hour.	\$65.00 for groups of 16 people or less \$100.00 for groups of 17 to 30 people Required Chaperone Ratio: 1 Adult for every 8 Children (ages 16 & under)
History Detective Tour For Ages 8-13 (Grades 3-8)	Earn your history detective badge! Take a guided hike to Yates Mill to discover how the mill operates. Try your hand at corn shelling and bartering as you solve history mysteries. 1 hour.	\$65.00 for groups of 16 people or less \$100.00 for groups of 17 to 30 people Required Chaperone Ratio: 1 Adult for every 10 Children (ages 16 & under) <i>Upon completion of the tour, all students receive a "History Detective" gold badge sticker.</i>
Mill Heritage Tour For Ages 14 & Up (Grades 9 & Older)	Learn about mill operations and our global mill heritage. Explore local community history and discover how simple hand mills gave rise to complex machines like Yates Mill. 1 hour.	\$65.00 for groups of 16 people or less \$100.00 for groups of 17 to 30 people Required Chaperone Ratio: 1 Adult for every 10 Children (ages 16 & under)

Historic Yates Mill County Park is a partnership that includes Wake County Parks, Recreation and Open Space, Yates Mill Associates and NC State University. Yates Mill Associates, a non-profit group, is responsible for the maintenance and operation of the historic building, which is Wake County's last remaining water mill. The fee associated with the tour helps to preserve and operate the mill for future generations. For more information on how to become a member of Yates Mill Associates or ways to donate, please visit www.yatesmill.org.

Classroom Discovery Labs*

Description & Fees



***These classroom programs are only available as a bundled package with guided mill tours.
Exceptions will be made for returning groups that have already taken a mill tour within the same year.**

Classroom Discovery Lab	Description	Rates and Information
Little Red Hen Classroom Activities For Ages 4-7 (Grades K-2)	Discover the connection between Little Red Hen and farm products through interactive and hands-on activities. Also make a chicken hat craft to take home. 30 minutes.	\$FREE Required Chaperone Ratio: 1 Adult for every 8 Children (age 6 & under) 1 Adult for every 10 Children (ages 7 & older)
A-Maize-ing Grains For Ages 6-13 (Grades 1-8)	Put on your Grain Brain and investigate the grains in your favorite foods. Use a mortar and pestle to get inside and find out what makes whole grains so healthy to eat. Then, sprout a living necklace to wear home! 30 minutes.	\$FREE Required Chaperone Ratio: 1 Adult for every 8 Children (age 6 & under) 1 Adult for every 10 Children (ages 7 & older)
Artifact Discovery For Ages 7-13 (Grades 2-8)	Go back in time to the 18 th century. Compare life then and now. In a guided inquiry, discover the purposes of several unusual objects from yesteryear. 30 minutes.	\$FREE Required Chaperone Ratio: 1 Adult for every 10 Children
Simple Machines For Ages 8-14 (Grades 3-9)	Simple machines are all around us, doing work every day. Learn how they power Yates Mill. You'll get to use gears, pulleys, wedges and more! 30 minutes.	\$FREE Required Chaperone Ratio: 1 Adult for every 10 Children
Hand-Mills and Millstones For Ages 8 & Up (Grades 3 & Older)	Your teeth can't crack grain! Find out how people made meal long ago. Try out a variety of hand mills: Survey milling history and equipment from around the world. 30 minutes.	\$FREE Required Chaperone Ratio: 1 Adult for every 10 Children

Environmental Field Experiences

Description & Fees



Field Experiences	Description	Rates and Information
Guided Nature Hike For Ages 4 & Up (Grades K & Older)	Take a hike to explore the park's natural communities and diverse wildlife. Want a specific topic covered, such as habitats, animal tracks, geology, birdwatching, or watersheds? Let our staff know in advance. 30 minutes to 1.5 hours.	\$FREE Required Chaperone Ratio: 1 Adult for every 8 Children (age 6 & under) 1 Adult for every 10 Children (ages 7 & older)
Peek into the Pond For Ages 7 & Up (Grades 2 & Older)	Use dip nets and hand lenses to study the macroinvertebrates of Yates Mill Pond and get a peek at microscopic critters, too! Learn the important roles these critters play in our pond's busy ecosystem, how they interact, and what they can tell us about water quality. 1 hour.	\$FREE Required Chaperone Ratio: 1 Adult for every 10 Children
Animal Adaptations For Ages 7 & Up (Grades 2 & Older)	How do animals survive in the wild? Study the behaviors and body parts that make animals successful. Examine animal specimens in our science classroom and observe wildlife in action on a short hike. 1 hour.	\$FREE Required Chaperone Ratio: 1 Adult for every 10 Children
Geology Rocks! For Ages 8 & Up (Grades 3 & Older)	Explore the rocks of Yates Mill! Learn the three rock types and play a rock cycle game, then test the physical properties of rocks to discover the identity of mystery rocks. Also learn how rocks have been used to support mills and grind grains. 1 hour.	\$FREE Required Chaperone Ratio: 1 Adult for every 10 Children
Animal Tracks and Signs For Ages 9 & Up (Grades 4-8)	Hark! Who goes there? Learn to read the tracks and signs animals leave behind. Find out what animals are eating, where they are going, and what they've been up to! Then observe wildlife in action on a short hike. 1 hour.	\$FREE Required Chaperone Ratio: 1 Adult for every 10 Children

Discovery Boxes

Free Park Resources



Best for groups of 12 participants or less.

These are self-guided program boxes that contain lesson plans and materials for students of diverse ages.

Advanced request for materials use is required.

Discovery Box Title	Description	Reservation Information
Birds of a Feather	Birds come in many shapes, sizes and colors, and have many neat behaviors. Explore the birds found around the millpond and their diverse habitats.	\$FREE
Farming Fun	Goodness grows in NC. Explore the state's agricultural history and crops, test your healthy eating habits and learn about buying local agricultural products.	\$FREE
Geology Rocks!	The rocks that underlie NC tell a story of almost 2 billion years of Earth history. Explore the state's geology and dig into its ancient past.	\$FREE
Going Green	Our actions are impact the natural environment. Explore some actions you can take to lessen our impact on the Earth's natural resources.	\$FREE
History Hike	Learning about the past and exploring the mill's history can help us to understand how we can live better lives and support our communities.	\$FREE
Neighbors in Nature	Meet the park's neighbors in nature by learning about the wildlife that lives in its diverse habitats and help to build the park's natural resources database.	\$FREE
Discovering Pond Life	Pond life comes in many shapes and sizes. Learn about different species found in various habitats in and around the pond.	\$FREE
The Waterworks	Water is found in many forms, from liquid and solid to gas. Conduct a hands-on water experiments to explore water's characteristics and values.	\$FREE
Bugs, Slugs, and More!	Creepy crawlies are all around us! Learn all about them with fun, hands on activities. Explore insect habitats around the park.	\$FREE
Trees	Explore the trees around our mill pond trail. Learn how to identify tree fruits and leaves through different activities.	\$FREE

Self-Guided Activities

Free Park Resources



Advanced request for materials use is required.

Self-Guided Activity	Description	Reservation Information
Exhibit Hall Scavenger Hunts Junior: Best for Ages 6 & under Advanced: Best for Ages 7 & up	Search our exhibit hall to discover Historic Yates Mill. Two scavenger hunts are offered. Youngsters can use a collection of pictures to find, while older children are given questions and photographs to hunt for artifacts. Get a prize for participating! 30 minutes.	\$FREE <i>Upon completion, students receive a temporary waterwheel tattoo.</i>
Exhibit Hall Kids' "Corn"-ers For All Ages	Explore seasonal activities at our activity table or access our kids' library books for independent study. Get into the act and try on some 18 th century clothes in our dress up corner. 30 minutes.	\$FREE
ABC Hike For All Ages	Help your students focus their powers of observation as they search for the ABC's in nature. Use our laminated game sheets to get started! 1 hour.	\$FREE
Mill Trail Tree and Shrub Guide Best for Ages 7 & Up	Head out to the trailhead on the path to Historic Yates Mill and grab this guide to take with you along the way. Learn to identify the plants as they appear on the trail. 30 minutes.	\$FREE
Tree Trail Best for Ages 7 & Up	What kind of tree is that? Why is it growing where it's growing? Go on a 1-mile hike around the pond and answer these questions and more with our Tree Trail guide! 1 hour.	\$FREE
Bird Bingo Game Best for Ages 7 & Up	Grab a Bingo card and get out into the park for a birding adventure! Also explore the birds of the park using our seasonal birding checklist. 1 hour.	\$FREE
Exploring NC's "Fords and Mills" Video Best for Ages 8 & Up	UNC TV's series "Exploring North Carolina" focuses on the historical and social importance of stream crossings and mill sites with a special emphasis on Yates Mill. 30 minutes.	\$FREE

Curriculum Correlation

North Carolina Department of Instruction Complementary Objectives



Tour or Program	NCDPI Essential Standards
Guided Mill Tours	
Little Red Hen Tour	<u>Social Studies</u> Kindergarten – KC & G.1.1; K.G.2.2; K.H.1.1; K.E.1.2; 1st Grade – 1.G.2.2, 1C & G.1
History Detective Tour	<u>Science and Social Studies</u> 2nd Grade – 2.G.2.1; 2.G.2.2; 2.H.1.3; 2.E.1.1; 3rd Grade – 3.H.1.1; 3.H.1.3; 3.H.2.1; 3.G.1.2; 3.G.1.3; 3.G.1.4; 4th Grade – 4.H.1.3; 4.H.2.1; 4.G.1.1; 4.G.1.4; 5th Grade – 5.G.1.1; 5.G.1.2; 6th Grade – 6.H.2.3; 6.G.1.1; 6.G.1.2; 6.E.1.1; 6.E.1.2; 7th Grade – 7.P.2.17.G.1.1; 7.G.1.3; 8th Grade – 8.H.1.4; 8.H.3.1; 8.H.3.2; 8.H.3.4; 8.G.1.3
Mill Heritage Tour	<u>American History</u> – AH1.H.3, AH2.H.3
Classroom Discovery Labs	
Little Red Hen Classroom Activities	<u>Social Studies</u> Kindergarten – KC & G.1.1; K.H.1.1; K.E.1.2
A-Maize-Ing Grains	<u>Science and Social Studies</u> 1st Grade – 1.G.2.1; 1.G.2.2; 3rd Grade – 3.L.2.1; 3.L.2.2; 3.L.2.3; 4th Grade – 4.L.2.1; 4.L.2.2; 6th Grade – 6.L.1.1
Artifact Discovery	<u>Social Studies</u> 2nd Grade – 2.E.1.4; 2.G.2.1; 2.H.1.3; 3rd Grade – 3.H.1.1; 3.H.1.3; 3.H.2.1; 3.H.2.2; 3.G.1.3; 4th Grade – 4.H.1.3; 4.G.1.3; 4.G.1.4; 4.E.1.4; 6th Grade – 6.H.1.3; 7th Grade – 7.H.1.3
Simple Machines	<u>Science</u> 3rd Grade – 3.P.1.1; 3.P.1.2; 3.P.1.3; 3.P.3.1; 5th Grade – 5.P.1.1; 5.P.1.4; 7th Grade – 7.P.1.2; 7.P.2.1; 7.P.2.2; 7.P.2.4
Hand-Mills and Mill Stones	<u>Social Studies</u> 3rd Grade – 3.H.2; 3.H.2.1; 3.G.1.3; 3.G.1.4; 4th Grade – 4.H.1.1; 4.H.1.3; 4.G.1.1; 4.G.1.3; 4.G.1.4; 5th Grade – 5.G.1.3; 5.C.1.2
Environmental Field Experiences	
Guided Nature Hike	<u>Science</u> 1st Grade – 1.L.1.1; 1.L.1.2; 1.L.1.3; 1.L.2.1; 1.L.2.2; 4th Grade – 4.L.1.1; 4.L.1.2; 4.L.1.3; 4.L.1.4; 5th Grade – 5.L.2.1; 5.L.2.2; 5.L.2.3; 8th Grade – 8.L.3.1 <u>Pond Focus:</u> Kindergarten – K.L.1.1; K.L.1.2; 1st Grade – 1.L.1.1; 1.L.2.2; 1.L.2.1 <u>Animal Adaptations Focus:</u> 1st Grade – 1.L.1.1; 1.L.1.2; 1.L.2.2 <u>Geology Focus:</u> Kindergarten – K.P.2.1; 1st Grade – 1.E.2.1 <u>Animals Tracks and Signs Focus:</u> Kindergarten – K.L.1.1; K.L.1.2; 1st Grade – 1.L.1.1; 1.L.1.2
Peek into the Pond	<u>Science</u> 2nd Grade – 2.L.1.1; 2.L.1.2; 2.L.2.1; 4th Grade – 4.L.1.1; 4.L.1.2; 4.L.1.4; 5th Grade – 5.L.2.1; 5.L.2.2; 5.L.2.3; 6th Grade – 6.L.2.1; 8th Grade – 8.L.3.2; 8.L.3.3; 8.E.1.3; 8.E.1.4
Animal Adaptations	<u>Science</u> 2nd Grade – 2.L.2.1; 3rd Grade – 3.L.1.1; 4th Grade – 4.L.1.1; 4.L.1.2; 4.L.1.3; 4.L.1.4; 5th Grade – 5.L.2.1; 5.L.2.3; 5.L.3.1 7th Grade – 7.L.2.3; 8th Grade – 8.L.3.1; 8.L.3.2; 8.L.4.2
Geology Rocks!	<u>Science</u> 4th Grade – 4.P.2.2; 4.P.2.3; 4.E.2.3; 6th Grade – 6.E.2.1; 6.E.2.2; 6.E.2.3; 8th Grade – 8.P.1.2; 8.E.2.1
Animal Tracks and Signs	<u>Science</u> 4th Grade – 4.L.1.2; 4.L.1.4; 5th Grade – 5.L.2.1; 5.L.2.3; 5.L.3.1

Planning Your Visit

We're happy to help!



Pre- and Post-Visit Materials

Educational lesson plans and fun theme-based activities that complement your field trip experience are available on the park's Group Programs webpage:
www.wakegov.com/parks/yatesmill/Pages/groupprograms.aspx

Hours of Operation

The park is open seven days a week from 8 a.m. until sunset, which varies by season. Please call 919-856-6675 for the exact closing time for the date(s) of your visit. The A.E. Finley Center for Education and Research (i.e., the park center) is open 7 days a week from 8:30 a.m. to 5 p.m. The Mill is open for tours by appointment for groups and at scheduled times for the general public.

Parking

Parking for cars is located outside the Finley Center; we also have three school bus parking spaces available. Students may be dropped off in front of the Finley Center at the bus loop, before parking.

Group Check-In

Your group should remain on the bus while your group leader registers at the Information Desk located inside the Finley Center. Park staff will greet the group outside and review rules and other pertinent information. You will receive a timed schedule for your visit, plus a field trip feedback form.

Lunch

You may bring lunch to eat at the picnic tables in the park. In the event of rain, it may be possible for your group to eat inside the park center and/or under the Finley Center's covered back porch. Lunch items may be temporarily stored in the park's break room, with staff permission. Please note that refrigeration is not available and the park does not have ice, drink, or snack machines.

Invoicing and Payment

Invoices will be sent within one week of your contact with the Group Programs Coordinator. Program fees are due within 2 weeks of the invoice date unless an alternate arrangement is agreed upon with park staff. We accept cash, paper, electronic check, and credit. Checks should be made out to "Wake County Parks".

Cancellations

All cancellations of organized group programs and mill tours require a written notice no less than one month prior to the date of the scheduled visit to qualify for a refund.

Weather

Rain or shine, the weather is fine! Please come prepared to be outdoors regardless. Trip cancellation for weather, and related refunds will be authorized by park staff only. In the case of school delays, early releases, or school closures, we will work with you to reschedule your group's visit.

Planning Your Visit

What Other Educators Are Saying



“Excellent! We learned a lot today from your staff. Students loved the trip...Your hands-on activities were engaging and exciting for them. We had a wonderful time!” – *West Lake Elementary School*

“Excellent instructors! Affordable.” – *Sterling Montessori*

“Students were able to be actively involved! FANTASTIC. Really supports school curriculum...Great grains was great! We love this field trip.” – *Oak Grove Elementary School*

“The students learned a lot. They loved everything. It was great and went well with our curriculum. It was very fun for the students.” – *Holly Springs Elementary School*

“It was awesome! Lots of learning took place!” – *Creech Road Elementary School*

“This program was a fantastic resource for our science concepts motion and design. It reinforces the standards taught. There was a lot of vocabulary explained. The demonstration was interactive, easy to understand. There was a lot of history and connection.” – *Ballentine Elementary School*

“Very happy with the facility and professionalism of the program.” – *McGee’s Crossroads Classical Conversation*

“Wonderful! My kids were so engaged! Very linked to our change over time curriculum. Thank you! Good management very prepared all materials ready.” – *Root Elementary School*

“The programs worked well even with our broad age ranges in our groups.” – *Ledford Homeschool Group*

“Very kid oriented; loved the hands on stations. Great hands-on engaging and high interest vocabulary development. Simple machines set up for all learning styles.” – *Combs Elementary School*

“I will highly recommend this program to other educators.” – *Timber Drive Elementary School*