

THE DUKE FOREST

LOG

A bulletin from the
Office of the Duke Forest

Fall 2012



Restoring our Trails, Protecting our Environment

Trail system improvement to commence in Korstian Division

Whether it's a crisp, autumn stroll underneath the changing maple leaves or an early spring jog past familiar pines, the Duke Forest draws more than 170,000 recreational visits per year. In close proximity to Duke and Durham, the Forest is an oasis for outdoor recreation on the doorstep of an urban environment. However, as use of the Forest has increased, some unintended, negative consequences have become more prevalent.

The most popular destination in the Duke Forest is the trail system along New Hope Creek in the Korstian Division. Many of these trails fall within a Significant Natural Heritage Area (SNHA) because of the unique animals and diverse plant communities that are present. Identified by the NC Natural Heritage Program, this area is one of twelve SNHAs in the Duke Forest that are set aside from harvesting

and regularly monitored to ensure their protection.

Unfortunately, the combination of heavy foot traffic, off-trail use, and a lack of proper signage has led to severe erosion and ecological disturbance in several areas within the New Hope Creek SNHA. Most users share the familiar experience of staring down at their feet rather than taking in the sights and sounds of the creek to avoid tripping over exposed tree roots. It is also not uncommon to find soil and sediment chutes leading directly into the creek.

These problems are compounded by the fact that none of the trails were intentionally developed and designed to withstand long-term use. Given these conditions, the trails are extremely difficult to maintain. Without attention, they will continue to degrade, resulting in more negative impacts to the ecosystem and increasing hazards for users.



The Red Salamander (*Pseudotriton ruber*) is a "noteworthy" species found in the Rhododendron Bluff area. Photo courtesy of Jeffrey S. Pippen.



A degraded trail along New Hope Creek. The degree of root exposure and soil compaction shown here is not uncommon. Photo courtesy of Duke Forest Staff.

THE DUKE FOREST comprises over 7,000 acres of land in Durham, Orange, and Alamance counties and has been managed for research and teaching purposes since 1931. The mission of the Forest is to facilitate research that addresses fundamental and applied questions concerning forested and aquatic ecosystems and to aid in the instruction of students so that they will be informed citizens and effective stewards of our natural resources. In addition to supporting education at local universities, the Forest also participates in community outreach through tours and other events.

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www.dukeforest.duke.edu

The LOG - Love it or leave it? In print or PDF?

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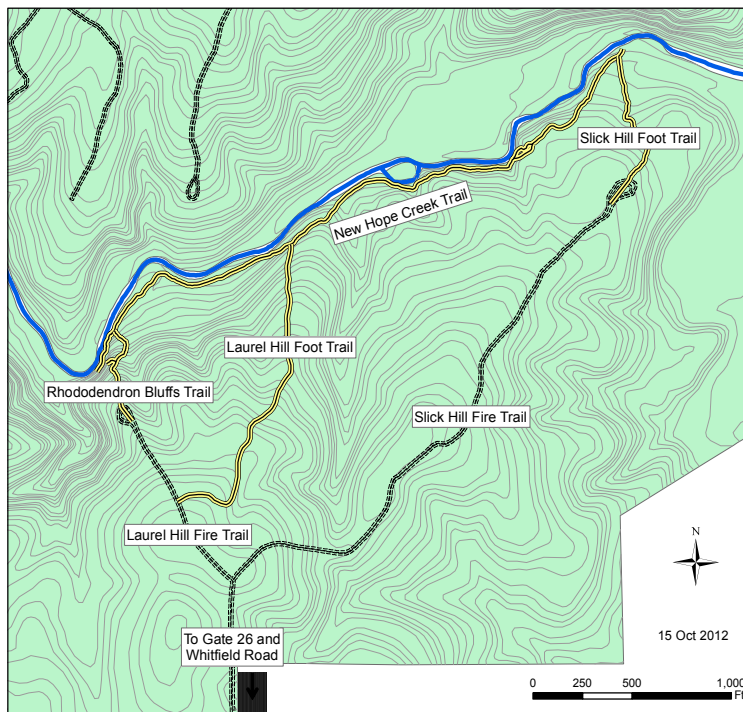
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A special thanks to this year's Education and Outreach Team for their contributions to this edition of the Duke Forest LOG:

Betsy Cook
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Marissa Ponder

The map shows the project area inside Duke Forest Gate 26 along the south banks of New Hope Creek. Trails highlighted in yellow will be closed, rerouted, or rehabilitated. A portion of the Laurel Hill Fire Trail will be abandoned and revegetated. Phase 1 of the project will focus on the area between and including the Rhododendron Bluffs Trail and the Laurel Hill Foot Trail. Phase 2 will continue downstream along the New Hope Creek Trail to the Slick Hill Foot Trail.



To address these issues, the Duke Forest will implement a trail rehabilitation and ecosystem restoration project along the south banks of the New Hope Creek trail system – a high priority area because of the unique Rhododendron Bluffs found here. Planning for this project has been an extensive and thorough process. Since March of 2012, the Duke Forest has engaged local forest users and natural resource experts to discuss the project, its design, and its implications for both the environment and for recreation. It has also worked closely with Stewart Bryan of Native Trails, Inc., a local trail contractor who has been instrumental in creating the design and who will be responsible for much of the on-the-ground work.

Through these collaborative efforts, the Duke Forest has finalized a plan that it hopes will provide long lasting, effective protection of the area's natural resources while enhancing the recreational user's experience. The first phase of the project will focus on the Rhododendron Bluff area, and Phase 2 will extend further downstream toward the Slick Hill Foot Trail. The work is scheduled to begin in January 2013.

Unsafe and eroded trails will be closed to create new, official trails that traverse a greater mix of forest types; other trails will be rehabilitated or rerouted – all will continue to provide access to New Hope Creek and the popular bluff rocks that overlook it.

Signage to announce the project will be posted soon, and new trail blazes and other educational information will be installed as the project unfolds. Users can support this effort to protect the environment and improve their trail experience by following all posted signs, staying on authorized trails, and keeping dogs on a leash. To learn more about the project or to comment, please visit: dukeforestproject.wordpress.com.

UPCOMING TRAIL WORK

Beginning January 2013



Trails throughout this section of the Korstian Division lie in a Significant Natural Heritage Area. To create a trail system that protects our natural resources and provides a better experience for users now and in the future, trails will be rehabilitated, rerouted, and/or closed.



Please do your part to protect the Forest and improve your visit:

1. Follow signs for authorized trails *
2. Stay on authorized trails
3. Keep dogs on leash

*Look for blue blazes and new signage as the project unfolds...

To learn more about the project and what makes this area so special, please visit dukeforestproject.wordpress.com. Also, for opportunities to volunteer, donate, or comment, see the website or contact dukeforest@duke.edu.

An example announcement sign that summarizes the objectives of the project and what users can do to support Duke Forest's efforts to protect natural resources and improve the trail system.

Creature Feature

Who's in the Duke Forest this winter?

While many of the Duke Forest's spring and summer avian visitors have migrated to points south for the winter, several species are just arriving from the north to spend the winter here. Here are just a few to look for:

Golden-crowned Kinglet (*Regulus satrapa*)

IDENTIFICATION: Very small; orangeish-yellow crown; black eye-stripe.

WHEN TO LOOK: October-April

WHERE TO LOOK: Conifers. Usually high in trees or near the tips of branches.

BEHAVIOR: Extremely active and frequently forages upside-down on branches.



Photo by Christopher Wood

Hermit Thrush (*Catharus guttatus*)

IDENTIFICATION: Brown above with a rufous tail; large dark spots on the breast; white eye-ring; relatively long legs.

WHEN TO LOOK: October-April

WHERE TO LOOK: Forest understory where it regularly hops along the ground or on fallen branches.

BEHAVIOR: Often skulks in the understory, sometimes bobbing its tail.



Photo by Christopher Wood

Yellow-rumped Warbler (*Setophaga coronata*)

IDENTIFICATION: Yellow patch on rump visible year-round; mostly brownish with whitish underparts; brown streaking on the breast and some yellow on the sides of the breast.

WHEN TO LOOK: October-May

WHERE TO LOOK: During the winter, found in open woodlands and shrubby areas.

BEHAVIOR: In winter, actively feed on fruiting plants.



Photo by Nick Bonomo

Check out these great web resources for learning about and identifying birds:

The Cornell Lab of Ornithology: www.birds.cornell.edu & www.allaboutbirds.org

The Audubon Society: birds.audubon.org

And for a quick list of birds found in the Duke Forest and other local resources: www.dukeforest.duke.edu/forest/wildlife



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UPCOMING EVENTS

Forestry Week - November 5th - 9th

The Duke student chapter of the Society of American Foresters is excited to announce the First Annual Forestry Week - a week-long celebration of forestry intended to provide many different perspectives on forestry and the forestry profession. Don't miss the capstone event on Friday, November 9th - the 6th Annual Duke Forestry Symposium on "Establishing Roots: Incorporating Community Values into Forest Management." For a complete listing of events and to register, check out: forestryweek.blogspot.com

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Annual Gathering

Thursday, November 15th, 6 - 8 pm



An evening of food and drink to learn about and discuss activities on the Forest, including special presentations on the role of fire and a spotlight on a local artist.

Annual Research Tour

Friday, December 7th, 1 - 4 pm



An afternoon tour around Duke Forest to visit active research sites and learn about the wide variety of topics being investigated by researchers at Duke and beyond.

For more information and to register, please visit the Duke Forest website:
www.dukeforest.duke.edu/events