

# The Talking Forest

Holmes Educational State Forest

Volume 3 Edition 1. Spring 2018

## Partnering with Fellow Educators

Holmes Educational State Forest is a 235 acre demonstration forest in the Blue Ridge Mountains of North Carolina. Three educational rangers conduct environmental and forestry education to schools, scouts, families and adult audiences of various ages and backgrounds. We recently assisted the N.C. Forest Service Transylvania County Rangers in a Field Days event, sharing forestry tools and encouraging students to dress like a wildland firefighter. We participated in Career and Science nights at local schools including Edneyville and Etowah Elementary.



Andy Rogers, Transylvania Co.



Pictured Smokey Bear at DSRF

We recently cooperated with DuPont State Recreational Forest to encourage visitors to be aware of fire hazards during March due to high winds, lack of rain, and low fuel moisture, each contributing to hazardous burning conditions. We engaged middle and high school students in discussions of forest management and tree identification in the annual Future Farmers of America (FFA) fall regional competition, as well as the regional and state Envirothon Program with N.C. Soil and Water Conservation Districts. This winter we conducted a tree identification workshop for fellow educators, including AmeriCorps Project Conserve



Pictured Susan Fay, Envirothon

interns. We introduced participants to activities they may use with their audiences, discussed habitat needs for trees, and practiced identifying leaves and twigs with a dichotomous key along a hike to high falls.



Tree ID workshop, High Falls DSRF

We also participated in the annual Earth Day Celebration at Chimney Rock State Park to help educate the public about significant natural resources land managers work to protect natural ecosystems. We plan to conduct interpretive hikes at DuPont SRF in the future about ecosystems, prescribed fire and tree identification.



Pictured Amy Kinsella, Earth Day Chimney Rock Village

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## Buds are Breaking, it's Finally Spring!

Next time you walk outside, take some time to notice how the flower and leaf buds break to reveal new growth. When your daffodils and crocus are blooming, take a hike into the forest to observe the very first emerging wildflowers such as trout lily, bloodroot and spring beauty in March. Soon, you will see bright purple flowers of the eastern redbud, or white flowers of understory trees such as serviceberry and Carolina silver bell. Later, large white flowers of the flowering dogwood and clusters of white flowers on Rhododendron minus, and red and orange crowns of maple will unveil.

Have you ever noticed when the leaves emerge from their buds on the twig they are a tiny version of themselves? This spring, I encourage you to observe the emergence of leaves more closely, this observation is the study of Phenology, or seasonal changes. You will notice that some species of trees quickly break buds such as tulip poplar and locust. These are early successional plants, they do not require a special photoperiod (longer day length) to break buds. This is somewhat risky because of the threat and damage of late frosts. Other trees like oak and beech require a chilling period, or a number of cold days and a specific photoperiod before they break bud. Take some time to observe how trees on a warm south facing slope tend to break bud before trees on a colder, more damp north facing slope. Also notice which miniature leaves emerge with green chlorophyll and which reveal pinks and reds that will soon be cloaked by the chlorophyll. Happy Spring!



Sweet Gum

Red Maple

Northern Red Oak

Hickory

Black Locust

## Featured Fungi

This time of year you may have noticed what look like orange blobs hanging in your local cedar trees. First off, let me assure you this is not something from outer space. It's called Cedar-apple Rust and it is a fungal plant pathogen that affects certain susceptible species of the rose family. This fungus has little effect on the health of juniper trees but it can severely damage apple trees. I always enjoy seeing these colorful additions to our cedar trees and oddly enough, the fungus smells just like pumpkin guts!

*Author and photo credit Ranger EJ Dwigans*



Cedar-apple Rust (*Gymnosporangium juniperi-virginianae*)

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## Prescribed Fire and the Community Protection Plan (CPP)



Prescribed fire, DuPont State Recreational Forest.  
April 20, 2018

If you would like to obtain or maintain wellness, you may go to the doctor and receive a prescription for health and well-being. In the same planned and calculated way, land managers can determine the condition of the land, and write a prescription for applied fire to accomplish a desired goal. Common goals for prescribed fire include wildlife habitat enhancement by improving forage for game or improving habitat for endangered and threatened species. Hazard

fuel reduction, which reduces or removes fuels and thus protects human communities from extreme unplanned fires. Timber stand improvement can help minimize the spread of disease and insects, and helps remove unwanted invasive species that may compete with native species. Fire in the forest helps recycle nutrients back to the soil, and can promote the growth of trees, wildflowers, and other plants, especially in fire adapted species communities. Additional considerations and goals for prescribed fire include the restoration and maintenance of fire adapted species and fire dependent ecosystems within North Carolina. Shortleaf pine is an example of a declining forest type, reestablishing this species along with pitch pine and various hickories and oaks can help enhance the overall species richness and diversity of the forest with the use of controlled burns.

Rangers from Holmes ESF assisted rangers from DuPont State Recreational Forest with prescribed fire operations in the winter of 2017 and spring of 2018. Prior to burning, rangers must complete a prescribed burn plan that indicates the appropriate weather parameters, goals and objectives of the burn, operational considerations and outlines smoke management guidelines that will be followed. Private and public land managers can each create a burn plan for their land according to desired goals and objectives. Lands within a 10 mile radius of National Forests may be eligible to participate in the Community Protection Plan (CPP) to help protect surrounding communities from wildfire hazards. The National Fire Plan emphasizes collaborative planning between the U.S. Forest Service and the N.C. Forest Service, and provides funding to conduct fuel reduction burns. Additionally, interested landowners should contact their local N.C. Forest Service county ranger to learn about this helpful opportunity and to possibly become a Firewise community. The Firewise USA program teaches communities and homeowners how to protect their home in case of a wildfire.



Showy Orchis flower after prescribed fire in DuPont DSRF

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## Volunteering

We would like to thank all our volunteers this year for donating their time to help improve the forest. We especially appreciate the work in the pollinator garden and along the five miles of trails in the forest. If you are interested in helping us with various tasks associated with forest and recreation management, please email [holmesesf.ncfs@ncagr.gov](mailto:holmesesf.ncfs@ncagr.gov) or call 828-692-0100.

## 2017 Program Schedule

All programs require an RSVP, please call 828-692-0100 or email [holmesesf.ncfs@ncagr.gov](mailto:holmesesf.ncfs@ncagr.gov) to reserve your space. These programs are FREE and meet N.C. Environmental Education Category II criteria.

### Guided Mushroom Hike

10am-noon

Saturday, June 30

Saturday, July 21

A guided introduction to the world of fungi. Come explore our rich cove forest with Ranger Dwigans in search of various fungi. First, we will discuss the history, toxicity, ecology, biology, medicinal uses, and edibility of mushrooms that are common to our area followed by a foray into the forest.



### Fall Tree Identification Hike

Saturday, Oct 6

10am-noon

Experience the beauty of fall foliage on a short ranger led hike. We will identify 10 trees, and discuss the basics of photosynthesis, biochemistry and the process of leaf change. Wear comfortable hiking shoes, and clothing appropriate for the weather.



Stay tuned to the N.C. Forest Service website [www.ncsf.org](http://www.ncsf.org), and/or the N.C. Office of Environmental Education calendar for any special events.

**All programs require an RSVP**



For more information contact Holmes Educational State Forest (828) 692-0100  
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