In The Summertime!

Summer is off to a great start here at Holmes Educational State Forest (ESF)! Rangers are hard at work maintaining and updating forest facilities. The pollinator garden has exploded with a variety of flowers and last week, the forest received nearly five inches of rain! This rainfall, along with increased humidity and temperature, has triggered a mass fruiting of fungi across the forest. White, yellow and pink slime molds have appeared on rotten logs, colorful mushrooms of all kinds have emerged from the soil and jelly fungi have begun to plump up along tree branches. Outside our office the tree swallows are fledging, the chestnut trees are blooming, and the white walnuts have begun to ripen. Summer at Holmes ESF is truly a magical time.

Photos by Ranger Dwigans

Wood ear (Auricularia auricula-judae)

Hemitrichia slime mold

Elfin saddle (Helvella crispa)

Xeromphalina campanella
Forest Improvements!

Work continues on the forestry center with the picture below showing what the inside looked like before we started in February.

Since then, we have removed the displays to open up the space. We plan on using this as an indoor activity area to educate visitors on different forestry subjects and have teachers use the space to conduct self-guided activities.

Work on the informational kiosks is ongoing.

Photos by Susan Fay

Updates on HESF’s Self-Guided Activities!

iNaturalist project “Holmes Educational State Forest Bioblitz!” has 474 observations that include 268 different species by 64 observers. Visit the iNaturalist website at www.inaturalist.org for more information. Click on “community” then “projects” and search for “Holmes Educational State Forest Bioblitz!” Next goal is to reach 300 species by September 2023!

ecoExplore’s current badge challenges: Entomology Field Season Badge is open until the end of August. Earn a Moth Field Focus Badge if you start by August 31 and finish within one year. For more information on the North Carolina Arboretum’s ecoExplore initiative, visit www.ecoexplore.net.
What’s Wrong With My Oak Tree?

Across the eastern U.S., oak trees that once dominated our forests are showing signs of increasing decline and some populations are shrinking rapidly. The consensus is that this can be attributed to what’s been labeled as “oak decline”. But what is oak decline?

Oak decline is the result of many stressors that can affect a tree’s overall health. Primary stressors can include mechanical damage from mowing, soil compaction from vehicles driving over a tree’s roots, tree age, site conditions, fire suppression and other human caused factors. These primary stressors can make a tree vulnerable to secondary stressors like bacterial and fungal infections. Essentially, it is “death by a thousand cuts.” Early signs that your oak tree may be in decline includes decreasing and sparse foliage, epicormic sprouting (stems sprouting directly from the trunk and main stems), early fall color change and dead branches.

Rangers at Holmes ESF have made the decision to remove a large red oak after noticing it only had roughly 50% of its foliage after leaf out. This tree has shown signs of decline for a few years and dead branches were beginning to fall off. This tree will eventually be replaced with a species better suited to the site such as willow oak.
Free Educational Offerings at HESF

**HESF Inclement Weather Policy**

Hikes may be cancelled in the event of inclement weather such as thunder and lightning. Notifications will be sent out via phone and email. Due to the unpredictability of weather patterns in our area, cancellations may occur as late as the morning of the scheduled meeting date.

**Liability Waver Forms**

Individuals or groups participating in activities and/or programs at HESF will need to sign a liability waiver before or upon arrival.

### 2023 Guided Mushroom Hikes

- **July 22:** 2 p.m.
- **August 5:** 2 p.m.
- **August 19:** 2 p.m.

A guided introduction to the world of fungi. Come explore our temperate forest with Ranger Dwigans in search of various fungi. There will be discussion about the history, toxicity, ecology, biology, medicinal uses and edibility of mushrooms that are common to our area, followed by a moderate hike into the forest! You MUST SIGN UP for this program to participate. Call now (828 692-0100) or email holmesesf.ncfs@ncagr.gov to reserve your spot! Program is limited to 10 participants. However, additional hikes will be scheduled if there is enough interest. It is recommended that you bring comfortable shoes, a water bottle, a camera and a mushroom field guide if you have one. This hike is set to end at 12 p.m., but visitors are encouraged to explore the rest of Holmes ESF on their own time. We offer hiking trails, picnic areas and a variety of educational exhibits. NCEE and CEU credit available upon request.

### Project Learning Tree K-12 Workshop: Fire Focus

Friday, Aug. 18, 10 a.m. to 4:30 p.m. — Join NCFS rangers Susan and EJ for a fun-filled day of environmental education activities that are designed for both formal and non-formal educators working with kindergarten through high school age children. Using the forest as a background, children discover their natural environment and a broader knowledge about the world around them. Participants receive PLT’s “Explore Your Environment K-8 Activity Guide” and activity bundle “Nature of Fire”. To register, visit go.ncsu.edu/ncplt_holmes