



Elk Lick Echo

A Newsletter of Floracliff Nature Sanctuary

Summer 2018



Protecting, Restoring and Sharing Nature in the Bluegrass

Citizen Science at Floracliff

Floracliff staff and volunteers have been expanding our participation in various citizen science projects. In addition to contributing data to local, regional, and national programs, these projects have greatly benefitted our work. Through wildlife counts and sampling events, we have found more efficient methods for monitoring species and water quality and have documented new species for Floracliff. These projects also help us evaluate the quality of various habitats within the preserve. Here are highlights from the first half of the year:

- On May 5th, we participated in the **Global Big Day**, an international effort to count and document as many birds as possible in one day. At Floracliff, we documented 65 species, including 17 warblers, with the help of our leaders Ben Leffew and Mark Tower. This was the highest number we have counted at Floracliff. Many of the species we saw depend on forested areas for breeding or for food and shelter along their migratory route.
- Floracliff Board Member Ellen Tunnell added **two stream sampling sites to the Kentucky River Watershed Watch** program, bringing our total number of sampling sites to five. KRWV has provided invaluable information on the water quality of our streams.
- In June, volunteers John Baggerman and Dan Patrick collected ants for the **Kentucky Arboreal Ant Survey** conducted through the University of Louisville. This study is investigating the influence of habitat, tree species, and tree size on ant diversity.
- On June 30th, Floracliff coordinated the **Central Bluegrass Butterfly Count** throughout much of Fayette County. Large greenspaces with meadows and flowering plants harbored the greatest diversity. This included Hisle Park, Raven Run, Floracliff, and the Arboretum. We are hoping our pollinator habitat installation near the nature center will further improve butterfly abundance and diversity at Floracliff in the coming years.



Summer tanager (Beth Oleson)



Common wood-nymph (B. James)



Elk Lick Creek (Doreen Maloney)

Research Projects

This year, there are two ongoing research projects focused on surveying groups of species that have not been well documented in this region:

- Paul Baker, a Graduate Research Assistant at the University of Kentucky, has been surveying **beetle diversity** on the Trail's End addition. Beetles, in the order Coleoptera, are the most diverse group of insects in the world. Paul has long been impressed by beetle diversity and how well beetles have been able to exploit almost every environmental niche. With Trail's End being mostly forested, he is primarily finding wood-feeding beetles including bark beetles, longhorn beetles, click beetles, and May beetles.
- Dr. Allen Risk, Professor of Biology at Morehead State University, has recently begun a survey of **lichen and bryophyte** (mosses and liverworts) diversity at Floracliff. This is part of a larger research project to document the distribution and diversity of these species throughout Kentucky. Allen plans to use arborist techniques to explore lichens of the forest canopy in addition to ground-based explorations.



Ash Tree Conservation

Thanks to a **generous grant from Kentucky American Water, we were able to protect and treat 102 white and blue ash trees from the Emerald Ash Borer (EAB)** this Spring. We could not have completed this project without our partners at the Kentucky Division of Forestry, who donated a week of assistance from their Forest Health Crew (120 hours!). LFUCG Environmental Services, SiteOne Landscaping, and ArborJet also loaned equipment and donated their expertise to train all field crew members. Our Stewardship Volunteers will soon be completing an inventory of all treated trees using the TreeSnap app to promote continued monitoring.

We have been treating ash trees at Floracliff since 2011 in an effort to protect healthy trees and maintain native diversity in high-priority areas. We also hope to reduce the impact of losing multiple large canopy trees in a relatively short amount of time. Our ash tree protection efforts began soon after EAB was first documented in Fayette County. Since its accidental introduction into North America, EAB has killed millions of ash trees, including a number of untreated trees at Floracliff. Although many ash trees have already died throughout the region, we hope visitors to Floracliff will continue to learn from and enjoy the ash trees along our trails for many years to come. We are grateful for all of our partners, whose donations of time, funding, and expertise have helped to make this possible.



Revisiting Floracliff's Old Oaks

Floracliff is home to some of the oldest known trees in Kentucky. This Fall marks the 10th anniversary of the research project that "discovered" these old chinkapin oaks through dendrochronology, the study of tree rings. Led by Dr. Neil Pederson, 21 trees were cored and cross-dated in 2008. Of those trees, 10 date to the 1600s. The oldest dates to 1611, making it at least 408 years old. This was a surprising find for an area that has long been settled, logged, and significantly modified by humans.



(Chinkapin oak dating to 1695, B. James)

Since 2008, we have led countless hikes and programs highlighting many of these trees and the characteristics that led Dr. Pederson to think they might be old. **On October 9th, we plan to revisit our old trees for a workshop and TreeSnap training.** Using the TreeSnap app, participants will remeasure, record observations, and share data about some of Floracliff's most treasured trees. For more information, visit floracliff.org.

Leopold Education Project

On September 21st, we are **partnering with Kentucky State University to offer a Leopold Education Project Workshop**. Targeted to formal and non-formal educators, this workshop uses the writings of Aldo Leopold to raise awareness of the natural world and deepen the personal relationship people have with land and nature.

Known as the "father of conservation," Aldo Leopold promoted the concept of the "land ethic," which emphasizes care for the land and other species alongside care for other people. Interacting with nature is critical to developing one's personal land ethic. In this workshop, we will spend some quality time on the trails of Floracliff to

connect our experiences and observations to various essays in Leopold's *A Sand County Almanac*. For more information, visit floracliff.org.



Calendar of Events

All events require pre-registration. To register, email info@floracliff.org and provide your name, phone number, and the number of people in your party. For more information, visit floracliff.org.

August:

1st: Mid-week Creek Walk

4th & 5th: Beetles of Kentucky: A Floracliff Field Studies Workshop

September:

13th: Magic Hour Hike

15th: Caterpillar Hunt

21st: Leopold Education Project: An Educator Certification Workshop

22nd & 23rd: Birds of Kentucky: A Floracliff Field Studies Workshop

October:

7th: Oaks and Hickories of the Palisades: A Tree ID Hike

9th: Revisiting Floracliff's Old Oaks: A TreeSnap Training and Citizen Science Workshop

11th: Magic Hour Hike

November:

10th: Fall Long Hike

We regularly add new programs to our calendar. To stay up to date on additional events, sign up for our email announcements at floracliff.org or follow us on Facebook.



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Cover Photo:
Wild hyacinth along Elk Lick Creek (B. James)

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Founded in 1987, Floracliff is a non-profit nature sanctuary. Its mission is to care for the sanctuary property, ensure its protection as a nature preserve, and promote public education of the natural history of the Inner Bluegrass Region.