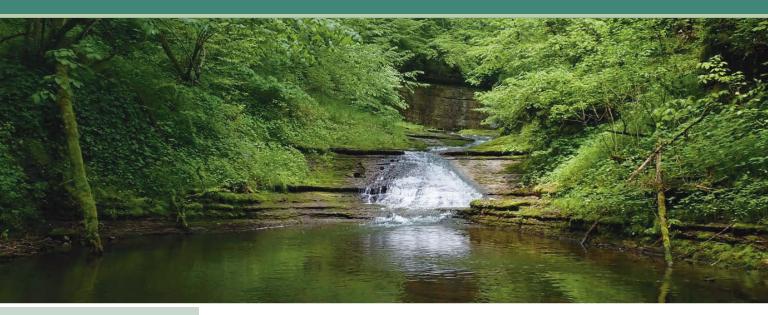


Elk Lick Echo

A Newsletter of Floracliff Nature Sanctuary

Summer 2020



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Protecting, Restoring and Sharing Nature in the Bluegrass

At the start of 2020, we looked forward to a year full of new programs and workshops at Floracliff. Of course, that changed in March. COVID-19 caused us to cancel numerous inperson programs and activities, but it also allowed us to switch our focus to stewardship and citizen science projects.

One of those projects was a complete renovation of the nature center's glade demonstration garden. Floracliff has only one small example of a glade plant community. It is characterized by exposed bedrock, thin soils, and drought tolerant plants. Thanks to a 2019 grant from the Hoe 'n Hope Garden Club and the hard work of Leafhopper Landscaping, our glade garden was redesigned to more closely emulate a rock



outcrop with an easy path for viewing the featured plants. These include prickly pear cactus, widow's cross, fringed petunia, and hispid false mallow, one of Floracliff's rarest plants. The new garden is also excellent for observing our native pollinators and other invertebrates nectaring, foraging, puddling, seeking shelter, and gathering nest material.

While 2020 has not been great for humans visiting Floracliff, it has been very successful for birds visiting our nest boxes. Four of our seven bluebird boxes were occupied by Eastern bluebird families this year. And for the first time in the three years since the Central Kentucky Audubon Society gave us four prothonotary warbler nest tubes, one of the tubes was occupied by a family of warblers.

Prothonotary warblers are the only cavity-nesting warbler in the eastern US. They breed exclusively in forested wetlands and bottomlands. Deforestation and nest site competition have contributed to a decline in their population, but man-made nest tubes can supplement natural cavities and enhance nesting options in suitable habitats.



Discoveries From the Field

Discovering and documenting the sanctuary's biodiversity is always a priority at Floracliff. Species inventories help us better understand our water quality and forest health. They also reveal connections between species, influence habitat management decisions, and inspire people to care for our local environment. Recently, two biodiversity projects added many new species records for Floracliff.

With the leadership and passion of volunteers Betsy and David Lang, over 1500 snail shells were collected, cleaned, sorted, and identified for the Kentucky Land Snail Survey Project, a citizen science project created by Dan and Judy Dourson. Land snails are an important food and calcium source for many animals, including birds and salamanders. They can also serve as indicators of environmental change and ecosystem health. Betsy and David identified 21 new land snail species for Floracliff, bringing our total to 72. The smallest is just 1.1 mm across and the largest is 3.2 cm. New county records include the budded threetooth (*Triodopsis tennesseensis*) and the spike-lip crater (*Appalachina sayana*). Another find, *Gastrocopta holzingeri*, has only been documented on rocky outcrops in Fayette County and nowhere else in Kentucky.



Flamed tiger snail, David Lang

In 2018, entomologist Paul Baker conducted a beetle survey on the Trail's End tract. Like land snails, beetles are important in the food chain. Their order, Coleoptera, the most diverse of all insect orders, represents 40% of the world's documented insects. After countless hours over a microscope, Paul has identified 275 beetle species from at least 51 families. With more weevils, click beetles, and bark beetles still to go, this number will increase significantly. So far, the most diverse beetle families represented are ground beetles, weevils, longhorn beetles, click beetles, and rove beetles. This survey introduced Paul to species like the Wounded-tree beetle he unexpectedly found after collecting slime draining from a wounded tree. Paul notes:



Handsome fungus beetle, Paul Baker

There are over 200 different families of beetles in the world; but I always thought that the vast majority of them are obscure and only found rarely. This survey is pushing me to reconsider that assumption. There can be all sorts of environmental micro-niches within a forest, and one of them is that slurpy, gross slime you sometimes see on the sides of damaged trees. Wounded-tree Beetles have found a way to exploit that niche, although apparently no one has studied them well enough to fully understand how. They are common throughout the world, but only two species are found in the United States, one only in California. I suspect that there are many similar stories to uncover within the Floracliff property.







Private Hikes and Webinar Programs

Until we are able to plan in-person programming months in advance, we are offering private hikes for small groups comprised of a limited number of households. Private guided hikes are available Tuesday and Thursday mornings. Tickets for these tours are available on our website and will be posted month-by-month. **Additionally, we are offering the following webinars to highlight our region's biodiversity and natural history:**

July 28, 7 p.m.: The Myth of "Pre-settlement" Eastern Deciduous Forest: Changing Ideas About its History and the Importance of Humans on the Landscape - Rob Paratley, UK Department of Forestry

September 22, 7 p.m.: Fantastic Fungi & Where to Find Them - Megan Buland, UK Forest Health Lab

October 13, 7 p.m.: Trees for Butterflies: A Tree Week event - Beverly James, Floracliff

November 6, Time TBD: Native Peoples of the Bluegrass: From Hunter-gatherers to Farmers - Gwynn Henderson, Kentucky Archaeological Survey

November 16, 7 p.m.: Lichens 101 - Kendall McDonald, Office of Kentucky Nature Preserves

Visit floracliff.org for more information and to register for webinars and private tours.

