



Summer 2007

Inside this issue:

- Featured Species: 2
Northern water
snake
- Featured Species: 2
Water strider
- Schedule of Events 3

Bush Honeysuckle Research Project

For the past two years, EKU grad student Troy Evans has been working on research for his Masters' at Floracliff. In August, he will be finishing his field work for a project that will offer land managers much insight on the best ways to attack the invasive bush honeysuckle. There is a general consensus that bush honeysuckle has a detrimental effect on native plants, but what happens when it is removed? Troy is looking to answer this question by studying the ecological impacts of its removal, specifically looking at changes in the following: native tree and shrub density, herbaceous cover, presence of other invasive plants, and light availability.

His research began in August of 2005 by setting up 30 plots within the preserve. Honeysuckle was removed that winter from half of these plots, while the remaining 15 were left alone for comparison. The past year and a half, many hours have been spent examining his plots to see what is coming back up and setting up control plots offsite. While it's still too early to know specific changes to woody species, Troy has noticed an immediate recovery of the herbaceous layer and an increased availability of light a year after honeysuckle was removed. Over the next few months, he will be finishing his field work and analyzing his data for his thesis.

Research such as this is very valuable to all of us fighting exotic species. To those battling large patches of honeysuckle, Troy recommends killing as much as possible in the dead of winter by cutting the stems at the base and treating them with an herbicide. Continual maintenance is necessary, as other invasives may show up.

Floracliff has enjoyed working with Troy for the past couple of years and we wish him the best of luck!



Help us save on printing and postage cost by receiving your newsletter via email. Send an email to Floracliff@aol.com and include your name and address so that we can make the changes. Thank you!

Our Wish List

If you have any of the following items to donate, please contact Beverly James at 859-351-7770 or floracliff@aol.com. Thank you for your support!

- Laptop
- Tools
- Printer cartridges for Lexmark Z31
- Regional field guides
- Office supplies
- Gift certificate to hardware or office supply store
- Birding binoculars



The coloration of Northern water snakes is usually lighter when they are young, like the one above.

**“Wildness
reminds us what
it means to be
human, what we
are connected
to rather than
what we are
separated from”
-Terry Tempest
Williams**

Featured Species: Northern Water Snake - *Nerotia sipedon*

In the summer months, it is common to see Northern water snakes basking in the sun along Elk Lick Creek. The snakes can be spotted throughout Kentucky near any source of water. Appropriately named, they are great swimmers, sometimes spending more than an hour under water. While their coloring can vary, they are generally 2-3 feet long with a grayish brown background and darker bands. They often get darker with age, sometimes becoming almost completely black.

Northern water snakes mate from April through June, giving birth to live snakes in the late summer. The female may have as many as 30 young at one time that are 6-12 inches long when born. After birth, the baby snakes are on their own. They feed mainly on small fish, frogs, worms, crayfish, and other aquatic life. On the other hand, they often become prey for birds, raccoons, opossums, foxes, snapping turtles, and other snakes. They spend the winter months in rock crevices.

While northern water snakes are nonvenomous, they can be very aggressive snakes if approached. Their saliva contains an anticoagulant, which causes bite wounds to bleed heavily. They can also flatten their heads out to make them look like snakes that are venomous, such as copperheads and cottonmouths. The best tactic when a snake is spotted is to just leave it alone.

Featured Species: Water Strider - *Gerris sp.*

The water strider is a fascination to many due to its ability to glide on top of water. In Kentucky, they can often be seen on the surface of still or slow moving water. In the order Hemiptera, they are considered to be “true bugs” along with assassin bugs and bed bugs.

The water striders ability to stay on top of the water is because of thousands of microscopic hairs on their legs which are scored with miniature grooves. This allows the hairs to trap air bubbles, increasing the insect’s water resistance and giving it more buoyancy. This also allows them to support 15 times their own weight without sinking.

Like other true bugs, the water strider has piercing and sucking mouthparts that allows them to kill and suck on their prey. They cannot detect motion above or below the water, so they feed on live or dead insects and larvae that land on the surface of the water. Its short front legs are used to catch the prey, while the long middle legs are used for paddling and the back legs are used for steering and braking.

Another remarkable quality of the water strider is its quickness. They can dart at speeds of 100 body lengths per second. In comparison, a 6-foot tall human would have to swim over 400 miles an hour to match their speed!



The water strider’s ability to stay afloat is due to microscopic hairs on their legs.

Schedule of Events

All events require advance registration. Cost is \$4 per person or \$10.00 per family unless otherwise noted. Call 859-351-7770 to register or for more information.

Interpretive Hikes

July 21st @ 10:00 a.m.: Pollinators with Blake Newton

Join Blake Newton, Extension Specialist for 4H and Youth Entomology as we search for insects and discuss their important relationship with plants.

July 28th @ 10:00 a.m.: Macroinvertebrates

Cool off near Elk Lick Creek as we discuss different macroinvertebrates that can be found and how we use them to determine water quality.

August 18th @ 10:00 a.m.: Forest Ecology at Floracliff with Rob Paratley

How have differences in habitat helped create different plant communities in the preserve? How have past disturbance and forest history shaped the woods that we see today? Join Rob Paratley, Research Specialist and Herbarium Curator from UK as he discusses the ecology of the Kentucky River Palisades and answers these questions.

September 15th @ 1:00 p.m.: Native Alternatives to Invasive Plants

On this hike we will walk down to Elk Lick Creek and discuss ornamental plants that have become invasive in Central Kentucky and look at some natives that would make great alternatives in the garden.

Volunteer Days - free

July 7th @ 10:00 a.m.

August 4th @ 10:00 a.m.

September 1st @ 10:00 a.m.

** Our volunteer days have been moved to the first Saturday of each month to avoid conflicting with similar volunteer opportunities in the region. For the summer months the time has been changed so that we will be working in the cooler hours of the morning. Volunteer activities usually involve removing exotic plants from the preserve. This is part of an ongoing effort to protect our native species and we rely on the help of volunteers. Other activities may involve trail work or general maintenance. Please call ahead to register and receive more information. Tools and snacks will be provided.

*“Rest is not idleness, and to lie sometimes on the grass on a summer day listening to the murmur of water, or watching the clouds float across the sky, is hardly a waste of time.”
-John Lubbock*

**THE MARY E.
WHARTON NATURE
SANCTUARY AT
FLORA CLIFF**

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Floracliff is a non-profit organization. We rely on support from community members like you. Please support preservation in your region.

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