

# **Knobs and Knolls**

### February 2015

In This Issue

Steele Creek Park Herbarium

Research at Steele Creek Park

Spring Break Nature Camp

Park and Lake Cleanup Day

**Tree Keepers Program** 

**Friends Annual Meeting** 

Website and Facebook Page

Welcome to the first edition of the electronic rebirth of our organization's newsletter, Knobs and Knolls. It's been several years since our last print edition, and we look forward to doing a better job of keeping you informed and up to date.

You can also keep up with what's going on at the Park and with Friends by following our webpage at <a href="http://www.friendsofsteelecreek.org">http://www.friendsofsteelecreek.org</a>.

We appreciate feedback about our communication. Let us know if you find these newsletters interesting and/or useful. If you have suggestions for topics to be covered, or other formats that we could use, let us know by e-mail at <a href="mail@friendsofsteelecreek.org">mail@friendsofsteelecreek.org</a>.

If you prefer to not receive these newsletters, simply let us know at our e-mail address above.

### **Steele Creek Park Herbarium**

<u>Herbarium</u>: 1) a collection of dried plant specimens usually mounted and systematically arranged for reference; 2) a place that houses an herbarium. (Merriam-Webster Free Online Dictionary)

Thanks to the inspiration and hard work of a small, committed group of volunteers and the work of a recent ETSU graduate student, Steele Creek Nature Center is now the repository of a truly outstanding herbarium.

### Steele Creek Park Herbarium (continued from page 1)

Several years ago, Ruth and Mary Clark, Adrianne Hess and Sharon Foster approached our Board with a proposal to establish an herbarium at the Nature Center comprising plants of Steele Creek Park. With financial support from Friends and the botanical knowledge of Ruth and others, this dedicated group of individuals began their volunteer efforts. To date, they have collected and preserved over 450 specimens, most of which have been specially mounted for long term preservation.

This past year, we were excited to learn that Phillip Klahs, a graduate student in the Department of Biology at ETSU, was focusing his Master's thesis on the vascular plants of Steele Creek Park. As part of his project, he had collected and was preserving herbarium specimens of his documented species. To help him accomplish this, Friends provided Phillip with financial support for a custom plant press and the materials needed for preserving and mounting the plants. The plant press is now kept at the Nature Center for ongoing use. Complete sets of his preserved specimens were contributed to both our herbarium and the ETSU herbarium. Additional specimens of interest were donated to the University of Tennessee Herbarium in Knoxville.

Phillip documented the presence of 547 species within Steele Creek Park, vastly increasing the known records within the Park. Of those he documented, 216 were newly reported for Sullivan County, six are considered Tennessee Special Concern Species and one is a Tennessee Threatened Species. His complete thesis (including a listing of all species identified) is available online: http://dc.etsu.edu/cgi/viewcontent.cgi?article=3837&context=etd.

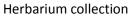
Thanks to the vision, dedication and hard work of Ruth Clark and the other herbarium volunteers, the Steele Creek Park Herbarium is now a reality. With the specimens they have contributed, combined with those donated by Phillip Klahs, it is perhaps the finest herbarium in the entire region outside of an academic institution. It will serve as a valuable research and educational resource for years to come. Those interested in viewing the collection may do so by appointment, under the guidance of one of the Park naturalists.

Much more remains to be done. Ruth indicates that their collecting will resume in late winter. In the meantime, they are in need of volunteers to help classify plants and print computerized labels. If you are interested in helping as a volunteer, you can contact her directly at <a href="mailto:buckfolk@aol.com">buckfolk@aol.com</a>, or let us know at <a href="mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mailto:mail

(See photos on page 3)

### Steele Creek Park Herbarium (photos)







Phillip presents specimens to Ruth and Adrianne



Clubmoss specimen



Phillip, Adrianne, and Ruth examine a specimen



Bloodroot specimen



Fern specimen

### Spring Break Nature Camp - March 16 - 20

For the first time in several years, the Nature Center Staff will be offering a Spring Break Nature Camp. The camp will be held each morning (8:30 to noon), March 16<sup>th</sup> through 20<sup>th</sup> for children in grades 3 through 6.

The plan is to have a "sampler" format, rather than a specific focus as is the case with the summer camps. A variety of topics will be covered and all three of the wonderful and talented Nature Center naturalists (Jeremy, Don and Larry) will be involved.

Registration is \$50 if paid by March 6<sup>th</sup>, or \$60 after that date.

Given the popularity of the Summer Nature Camps, there's a good chance that the spring activity will fill up fast. If you know of children who may be interested, call the Nature Center today (423-989-5616) to learn more or sign up for what should be a fun, exciting and educational opportunity!





Nature Camp at Steele Creek Park – always an exciting and educational adventure!

## Tree Keepers - March 14<sup>th</sup>

This year's Tree Keepers program, sponsored by the Bristol Tennessee Parks and Recreation Department is set for Saturday, March 14<sup>th</sup> at the Steele Creek Park Lodge. This has become a popular annual event focused on the planting, care and preservation of trees.

The program will run from 8:30 am until 2:00 pm. The cost is \$10 per person, with a light breakfast and lunch provided. Preregistration is required no later than March 11<sup>th</sup>. To learn more, or to register, call the Bristol Tennessee Department of Parks and Recreation at (423) 764-4023.

#### Research at Steele Creek Park

The 40+ year tradition of natural history research continues at Steele Creek Park. In addition to Phillip Klahs' herbarium project described elsewhere in the newsletter, Friends has been supporting two other research projects at the Park.

Caleb Corona, a biology major under the direction of Dr. Han Ong at King University, has been studying the diversity of algae species in Steele Creek Lake using specialized DNA sequencing techniques. By collecting specimens from a variety of locations within the lake, they hope to better define what algal species are present in the Lake, something that has never been systematically undertaken. Friends provided support for the equipment used to collect water samples, and for materials used for growing and transporting the microorganisms. (Per Friends policies, the equipment now belongs to Friends and will be available to any researchers who may want to use it in the future.) This past October, their preliminary findings were presented at both the Appalachian College Association Summit in Knoxville and the University of Maryland Baltimore County Undergraduate Research Symposium in Baltimore. A layman's version of their research project and findings will be presented at our Friends Annual Membership meeting this coming May.

In addition, Dr. Laura Ong (Assistant Professor of Biology at King University) has been awarded a research support grant from Friends to begin a longitudinal study of arboreal (forest) growth in the Park, with an emphasis on how diseases and other pests impact the health and growth of trees. She will systematically follow the growth of plants in well defined plots (well off the beaten path) within the Park. Her findings will be included in a nationwide database being collected by the <a href="Ecological Research as Education Network (EREN)">Ecological Research as Education Network (EREN)</a>. Not only will her study be of direct benefit to our own Park and City staff, it will contribute to the broader knowledge of arboreal growth across the country. She, too, will be presenting information on her project at our Annual Membership meeting in May.

Friends continues to support natural history research within Steele Creek Park as an important part of our mission. Let us know if you're interested in learning more.

# Park and Lake Clean Up Day - April 25<sup>th</sup>

The Steele Creek Park staff and Friends will once again be sponsoring a Park Clean Up day in conjunction with the Great American Cleanup, sponsored locally by Keep Bristol Beautiful. We will provide volunteers, logistical support and healthy snacks for all who come out to participate.

Park Cleanup Day this year is Saturday, April 25<sup>th</sup>, 9 am until noon. Mark your calendars now and plan to come out and help with our annual "spring cleaning" at the Park!

### **Friends Annual Membership Meeting**

Plan to attend the Friends Annual Membership meeting this May. In addition to electing Board members for the coming year, we anticipate there will be one or more Bylaws amendments on the business agenda. The program will be focused on recent and current research activities in the Park, in particular the lake algae study conducted by Caleb Corona and Dr. Han Ong, and the arboreal growth study conducted by Dr. Laura Ong. More details concerning date and time as well as the agenda for the business meeting will be forthcoming.

### Stay in Touch!

Don't forget to check out <u>our website</u>. In addition to current information regarding park activities and what Friends is up to, you can find in depth information about the natural history of the park, lots of photos and video links, and much, much more.

For those especially interested in learning more about the natural history of the Park, we host Larry McDaniel's "Recent Sightings" blog, complete with Larry's wonderful photographs and commentary.

And if you use Facebook, be sure to "Like" us to keep up with what's going on!

#### Most importantly, get out, enjoy the Park, and visit the Nature Center!





