SHORTIA
NEWSLETTER OF THE
WESTERN CAROLINA BOTANICAL CLUB
SPRING 2005

Shortia galacifolia
Oconee Bells
The Sandhills region is characterized by a series of flat-topped sandy ridges and relatively broad, flat valleys. This area is the habitat for the longleaf Pine Forests known as the “Pine barrens”. The region is anything but barren! More than 500 species are present in the Weymouth Preserve. A rich diversity of small plants ranging from lichens, mushrooms, mosses and ferns, grasses, wildflowers and woody shrubs nestles beneath the forest understory. February to November the park blooms with a diversity of flowering plants—some spectacular and some loved only by specialists. Species include, wild orchids, Indian pipe, dwarf locust, trailing arbutus, birdfoot violet, wild azaleas, dwarf iris, sundial lupine, pine barrens gentian, asters, Sandhills pixie moss, and the purple pitcher plant which grows in Bower’s Bog and James Creek.

For the birdwatchers in the group Weymouth Woods is haven to more than 160 bird species including the endangered Red cockaded woodpeckers, pine warblers, Bachman’s sparrow, and brown-headed nuthatches. If we are lucky we should see summer tanager, great crested flycatcher, prairie warbler and Kentucky warbler nesting. The great horned owl, barred owl and screech owl also live in the forest of the preserve. There is a bird banding program at the preserve.

This diverse 676 acre preserve is home to many species of amphibians, including the rare pine barrens tree frog, reptiles, mammals, along with a good variety of butterflies and dragonflies. Scott Hartley, one of the preserve’s Naturalists will be with us while we are there. The tentative schedule is as follows:

**Monday, April 4, 2005** – Arrive in time to check in at your hotel, relax and have dinner. At 7 pm there will be a welcome and program with Scott Hartley at Weymouth Woods Sandhills Preserve.

**Tuesday, April 5, 2005** – 9:00 AM – 12 Noon - Walk and program with Scott Hartley
12 – 1 PM Lunch on your own. 1 PM – 4 PM - Walk and program with Scott Hartley
Dinner -- Evening to be decided

**Wednesday, April 6, 2005** – 9:00 AM – 12 Noon – Walk and program with Preserve Ranger. 12 Noon - Lunch. After lunch members may explore the area on their own or start home. Accommodations will be at the Holiday Inn or Hampton Inn in Southern Pines. Call Jeanne Smith (885-2530) for reservation information. Members are responsible for making their own reservations.

Cover: The flower on the cover is *Shortia galacifolia*, Oconee Bells. Our newsletter is named for this southern endemic which is now rare in the wild.
New Members

Bob and Kathy Bachand. The Bachands moved here this last summer after 10 years in Florida. Bob's career was in education; Kathy was a nurse. They are interested in hiking and nature and Bob hopes to pursue his interest in photography during our field trips.

Bill and Anne Dice. Originally from Connecticut, they moved to Hendersonville from Illinois. Both have already been on some of our fall field trips. Bill is doing woodworking here and Anne is active with a book club, Bible study group and Welcome Wagon.

Dianne Hawkins. Dianne has led hikes for the Asheville Recreation Department, the Carolina Mountain Club and the Sierra Club for the last eleven years. She is now a retired state employee and wants to take time to learn about plants and flowers.

Member News

Dues. If you have not renewed your membership, this will be your last issue of Shortia. The membership dues of $15 a year can still be sent to: Larry Avery, 4 Windrush Woods Lane, Flat Rock, N.C. 28731

Indoor Meetings. When the Henderson County Schools are closed, the Sammy Williams Senior Center will also be closed, and our indoor program for that day will be cancelled.

Annual Symposium -- April 22-24

The 2005 South Carolina Native Plant Society will hold its annual symposium at the Riverbanks Zoo and Botanical Garden in Columbia, S.C. from April 22 to April 24. This year's theme will be "The River in the City: Plant, Animal and Human Interactions in the Midlands of South Carolina".

Speakers, workshops and field trips will address the biology of native plant species, natural areas, and the vegetation of the Midlands. Local and national experts will cover a wide range of environmental topics on citizenship and ecosystem management, the history and role of fire in South Carolina forests and grasslands, and the importance of pollination biology in plant conservation. Field trips will highlight significant natural areas in or near Columbia's major river drainages.

A brochure will be mailed to members late in February. For additional details, including registration information, write: SCNPS, PO Box 2293, Columbia, S.C. 29202 or e-mail <symposium_2005@scnps.org> or visit SCNPS web site at www.scnps.org/symposium.html.

Botanical club members have attended SCNPS symposiums in the past, and have found them well organized, informative and fun!
We had a very successful field trip season in 2004. We completed 34 outings with few cancelations. This was noteworthy what with the busy hurricane season that we experienced. In addition to visiting some of our favorite wildflower spots, we walked two new locations.

We spent the day with Tom Goforth at Panther Creek, a location just over the South Carolina - Georgia border where we waded the creek to get to a rich forest full of a wide variety of ferns. The fact that we followed a stream bed most of the way made it quite different from our "normal" walk conditions.

The second new location that we visited was the Kellog Center. Most of us driving through that section of Henderson County see the signs and wonder - "what is that all about?". We found a very nice trail with a wide variety of plants. It was decided that the Kellog Center would provide a good focus site for the 2005 field trip season.

We had a special focus location for 2004 - Bullington Center. We visited there once each month through the field trip season. In addition to checking the plants that were found, members brought native plants from their homes for transplanting to areas at the Center. Other times certain areas were weeded to open up the understory for better wildflower growth and to improve the appearance of the trails. The last checklist used was a compilation of the data from the previous visits so we could see the progressive growing season for each of the species.

This was my first year keeping the Recorder "books". It was quite an experience. Fortunately Betty Jones, my predecessor, turned over a very complete system for data entry and cataloging the results of each walk. I had a few questions during the year about such things as "have we ever seen plant X" or "where did we find plant Y". I thought this might be a good time to let you know a little more about the data that is available to anyone for the asking. The recorder information for each walk is entered into what is called a relational database. The information includes the field trip location, date, the plants identified by common name, scientific name and plant family, as well as condition of the plant (coming, going, in bloom, seed, etc.). This data has been entered for all field trips as far back as we have kept records. I'm sure some might have been missed but the information is very complete. Using the database, we can generate all kinds of interesting information such as:

- What plants were blooming in a specific month - you pick the month.
- Where were all the locations that we found plant X and when did we find it.
- What was in seed during a specific month - again you pick the month.

These are just a few questions that the database can answer. I invite anyone who has an interest or a specific question to contact me by phone or email and I will be glad to work with you to get the answers if they are accessible from our walk information. A lot of effort goes into check listings each field trip and entering the data. It would be wonderful if we can get some use from the data.

Now we look forward to 2005 and what I am sure will be another plant filled experience for us all.
Botanical Internet Favorites .......................................................................................... Ken Borgfeldt

I have been asked on occasion for the Internet addresses for web sites which provide botanical information. Here is a list of some of the sites I have found while looking for the name of that elusive flower that I photographed.

**Integrated Taxonomic Information System (ITIS).** The site we use to obtain the official scientific name for our database.  [http://www.itis.usda.gov/](http://www.itis.usda.gov/)

**Plants Database.** The USDA web site provides lots of information including photos and line drawings.  [http://plants.usda.gov/](http://plants.usda.gov/)

**Connecticut Botanical Society.** The web page of the Botanical Society that includes good photos of flowers and in some cases leaves for loads of plants, many found in this area.  [http://www.ct-botanical-society.org/index.html](http://www.ct-botanical-society.org/index.html)

**Flowering and Non Flowering Plants of Missouri.** Plants are categorized by flower color and/or leaf characteristics and include many species found in our area.  [http://www.missouriplants.com/](http://www.missouriplants.com/)

**Ken’s Outdoor Experiences.** The above are my favorites for finding answers to “What is it called?” but I also recommend this one to keep up with club walks. I’ll post my full list of Botany web links there.  [http://home.mchsi.com/~kenborg/home.html](http://home.mchsi.com/~kenborg/home.html)

---

**Additional Web Sites**

**The Botanic Gardens Conservation International (BGCI).** This is part of an effort to identify plant species grown in the world’s botanic gardens. By September 2004 over 90,000 taxa have been covered. Over 9000 of these are known to be rare or endangered. The BGCI website is [www.bgci.org](http://www.bgci.org).

At this site if you type in a plant name, you will see the number of gardens holding the plant. The database does not reveal the names of the gardens holding each plant. Instead it offers the user a “blind e-mail system” in which he or she can send a message to any garden recorded as holding that species. The sender will not know which garden receives the message and each garden decides whether or not to respond. This protects information about the location of rare and possibly valuable plants from going into the public domain.

There are also links to other web sites and to Google’s image service which seems to find pictures on the Web for a surprisingly large number of the species

**Nature Serve.** A wealth of information about what is going on in the conservation world. Click on “local programs” to find out about state and Canadian nature organizations and see the home page headlines for current news.  [www.natureserve.org/](http://www.natureserve.org/)

-the editor
SCIENCE IN THE NEWS

Nobel Peace Prize

For the first time ever, an environmental activist has received the Nobel Peace Prize. Dr. Wangari Maathai was awarded the 2004 prize for her work in Kenya. Horrified at the loss of forests and the consequent damage to the environment and the lives of local people, she founded the Green Belt Movement. This was a grassroots campaign mostly involving rural women who have now planted over 30 million trees during the last 25 years. She is also the first African woman to receive this prestigious Swedish prize.

Researchers Explore Mystery, and Say "Gotcha"

At least since Charles Darwin, scientists have been puzzled by the carnivorous plant, the Venus Flytrap (*Dionaea muscipula*) which can close its fanged leaves on an insect in a fraction of a second — without any muscle. Using a high speed video camera and computer modeling, a team of scientists led by a Harvard mathematician found that the flytrap employs an ingenious trick of slowly building up elastic pressure in its leaves, like the stretching of a rubber band. It can then snap at the slightest provocation. The Venus Flytrap drawing is by Dick Smith from his book *Wild Plants of America*.

Botanical Magazines

*Wildflower*, North America’s Magazine of *Wild Flora*, ceased publication with the winter-spring 2004 issue. The announcement was made this December by James Hodgins, the magazine editor for more than 20 years. The decision was made primarily because of the rising costs of printing and mailing. Hodgins wrote, “All solutions to remedy this situation would have resulted in a higher subscription cost or a lesser *Wildflower*. Neither of these options were acceptable to Zil (Art director Zil Zichamis) or myself.” Three native plant organizations are currently considering the feasibility of taking on publication.

The publication of *Plant Talk*, the magazine supporting plant conservation worldwide, has been taken over by a consortium of six supporting organizations including the Royal Botanic Gardens, Kew; and the Department of Botany of the Natural History Museum of the Smithsonian Institution, and the US Botanic Garden. Since current subscriptions do not cover the publication costs, an injection of funds and a marketing effort to increase the number of subscribers will, we hope, make it possible to continue *Plant Talk* publication.
Signs of Spring

*Alnus serrulata*, Common or Tag Alder, is a thicket-forming shrub 5-15 feet high. It grows along streams or in wet places. The staminate-bearing flowers are in drooping catkins; the pistil bearing ones are in much smaller catkins. Both are fully developed before the plant loses its leaves in the fall. Because the flowers begin blooming late in February, here is a plant to watch these cold days. If you are lucky enough to find these on your daily walk, watch for the staminate bearing catkins to begin to elongate and turn yellow as the pollen forms. This is a sure sign, spring is coming. Common Alder is not only an interesting shrub to watch, it has also long been a plant used to control stream erosion.

"Color-Canopy" Zone Concept

On May 15, 2003, the North Carolina Department of Transportation (NCDOT) embarked on a rights-of-way project which accomplishes several goals including the use of native grasses and forbs. The working title for this project is "Color-Canopy".

"Color-Canopy" is defined as a zone of varying widths located behind the "clean-up" mowing limits. It will combine colorful low-growing trees and native plants within an area that is managed to control undesirable species.

One of the Department's primary goals is to find a viable solution to the encroachment of over-story trees that shade the roadway and tend to fall into the roads as a result of severe weather. At the same time, the color-canopy transition zone will be both environmentally sustainable and aesthetically pleasing.

------

Books

Gary Kauffman, who gave an indoor program on "Grasses, Sedges and Rushes" on February 11, will follow this up with a field trip to Kanuga Conference Center on Friday, June 7th. Two books he recommended are:

*How to Identify Grasses and Grasslike Plants: Sedges and Rushes*
by N.D. Harrington

and

*Agnes Chase's First Book of Grasses: The Structure of Grasses Explained for Beginners*
(A Smithsonian publication)
The North Carolina Plant Society

The North Carolina Wild Flower Preservation Society was established in 1951 and has served for the last 53 years to keep us informed about wildflowers in our state. At their fall 2004 meeting they made an important decision to change their name to the North Carolina Plant Society (NCPS). The new name expands their interest and activities to promote and enjoy all of North Carolina’s native plants. This will include all of the state’s native flora including flowering trees, grasses, rushes and the rich world of non-flowering plants such as mosses, liverworts, ferns and fern allies and gymnosperms.

In *wild flower* the journal of the NCPS, President Alice Zawadzki writes. “Our new name emphasizes to the public the importance of ‘native plants’, the need for their protection and the conservation of their habitats and the challenges of the new millennium on protected areas brought on by the introduction of invasive alien plant and animal species...”

Besides the journal which is published twice a year, there is also an annual pilgrimage available to members. For more information go to www.ncwildflowers.org. Membership is $25 annually for individuals and $35 for a family. Click on “membership information” on that web site for a printout of a membership application form or send your membership fee to: NCPS, Inc, Tom Harville, Treasurer, 104 Birklands Drive, Cary, N.C. 27511.

∞∞∞∞∞

MARSHES

“In attaching a value to the land, we have often considered the marshlands as wastelands. In places, this soggy, energy rich real estate has been 'reclaimed' in vast quantities through ditching, draining and filling. We might be constructing man’s cemetery on nature’s nursery.”

-A sign along a marsh boardwalk at Bodie Island, Cape Hatteras National Seashore, N.C.

∞∞∞∞∞

In his book, *The Private Life of Plants*, David Attenborough comments: “For most of the time their lives remain a secret to us, hidden private events. The reason is merely a difference of time. Plants live on a different time scale from ours...We only need to learn to look.”

p.7
Wild Orchids in South Carolina: The Story
by Lucy Dueck

For you orchid lovers who would like to observe them close at hand in the wild, the South Carolina Native Plant Society (SCNPS) is offering a beautiful, informative 18-page booklet all about the wild orchids that grow in South Carolina. And if only a few species come to mind, you will be as surprised as I was that the checklist on the back page lists fifty-three. Of these, forty-two are illustrated with gorgeous photographs.

Additional information includes a family tree organized by the classification based on genetics, a checklist by genus, “A Selected Orchid Vocabulary” reviewing the orchid terminology and a bibliography (references) section. A fascinating tidbit is that a relative of the showy orchis in Turkey is used to make an ice cream called salep from the orchid’s dried and ground tubers. It has been reported that the “ice cream orchid” is now seriously threatened.

This booklet emphasizes conservation so it does not list specific geographic locations for finding the orchids. However it does describe the habitat of each genera or subfamily. It might be a challenge to take the checklist on a series of field trips to the different habitats and see how many of the 53 species a serious orchid lover could find. Even if your field trip starts and ends in a recliner, this is a lovely booklet to own.

“Wild Orchids in South Carolina: The Story” is available for $5 from John Brubaker, SCNPS, P.O. Box 21223, Charlotte, SC 29413.

-Jeanne Smith

The South Carolina Francis Beidler Forest in Four Holes Swamp was visited in October several years ago by the Botany Club. Among the many interesting plants we saw were two rare S.C. orchids: *Ponthieva racemosa*, the green-flowered late-blooming Shadow-witch orchid which we found in bloom, and *Epidendrum magnoliae*, the Green-fly orchid, the only epiphytic orchid in S.C. which we saw hanging on trees along the swamp boardwalk.

Shadow-witch orchid
*Ponthieva racemosa*

Green-fly orchid
*Epidendrum magnoliae*
SHORTIA

c/o Anne Ulinski
1212 Chanteloupe Drive
Hendersonville, N.C. 28739

SHORTIA

Vol. XXVII. No. 1

SPRING 2005

A quarterly publication of the Western Carolina Botanical Club

Editor: Anne Ulinski
Editorial Assistants: Pat Arnett and Jean Lenhart
Art Work: Pat Arnett
Member News: Ruth Anne Gibson

Please submit contributions for the next issue by May 15, 2005 to: Anne Ulinski
1212 Chanteloupe Drive, Hendersonville, N.C. 28739

The purpose of the Club is to study the plants of the Southern Appalachian Mountains
and the Southeast through field trips and indoor meetings. Membership is open to
all. Individual/family memberships are $15. New members joining from the period
July 1-December 31, pay $8. All memberships are renewable on January first of each
year. Send dues to: Larry Avery, 4 Windrush Lane, Flat Rock, N.C. 28731