

“Man living  
in harmony  
with nature.”

– B.W. Wells



# Rockcliff Farm Quarterly

THE B.W. WELLS ASSOCIATION NEWSLETTER

## PRESIDENT’S MESSAGE

It is quite startling to realize how quickly the year has slipped by. While we have welcomed the rains that have ended the six years of drought in this area, they have put a damper on outdoor activities. The water in Falls Lake has reached the highest levels seen since the floods caused by hurricane Floyd in 2000. We hope that the moisture will have beneficial effects on the native plants in our state.



We have two major activities scheduled for the coming month. First is the annual meeting of our Association, which we hold at Rockcliff Farm on the third Sunday of September, the 15th, starting at 1 pm. Jimmy and Alice Ray have again graciously offered to provide a barbecue lunch for attendees. Last year’s event was great fun despite the rain. It would be a great help to Jimmy to have an estimate of how many people will be attending, so please send an RSVP email titled “Annual Meeting” indicating how many people will be in your group to [bwwells01@aol.com](mailto:bwwells01@aol.com).

The second event will be twelve days later when we host the meeting of the NC Friends of Plant Conservation at the Wake Forest Historical Museum.

Lectures and presentations will be given in the Museum on Friday September 27th. There will be a tour of the Mitchell Mill Nature Preserve on Thursday afternoon the 26th, while on Saturday the 28th there will be visits to the nature preserves in Durham County. Members of our Association are welcome to attend. Since there will be catered meals on Friday, pre-registration is requested. See the website [www.ncplantfriends.org](http://www.ncplantfriends.org).

Hope to see you at the annual meeting.

—Hughen Nourse



Photos by Hugh Nourse

Porter’s sunflower (left), *Helianthus porterii*, and Ladies Tresses (right), *Spiranthes ovalis*, blooming prolifically at Mitchell Mill Nature Preserve in late September.

## UPCOMING EVENTS

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### BW WELLS ASSOCIATION ANNUAL MEETING

BBQ lunch provided.  
(Please RSVP)

SEPT. 15, 2013  
SUNDAY, 1 PM – 3:30 PM  
Location: Rockcliff Farm

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### NC FRIENDS OF PLANT CONSERVATION MEETING

(Pre-registration is required)

[MITCHELL MILL NATURE PRESERVE TOUR]  
THURSDAY, 2 PM  
SEPT. 26, 2013

### [LECTURES/PRESENTATIONS]

SEPT. 27, 2013  
FRIDAY, 8:30 AM – 3:30 PM  
Location: Wake Forest Historical Museum

### [VISIT THE ENO DIABASE PRESERVE – DURHAM]

SEPT. 28, 2013  
SATURDAY, 10 AM  
(Directions provided to registrants.)

<http://www.ncplantfriends.org/Pages/AnnualMeeting2013.aspx>

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## UNUSUAL TREE AT THE LOWERY HOMESITE

Last winter, Brian Bockhahn mentioned that the State Parks Rangers had noticed a large, odd tree at the old Alfred Lowery homesite. This abandoned homesite is located within the B.W. Wells State Recreation Area, about a mile from Rockcliff Farm. It is far back from the road to Rockcliff Farm, off an old road that has become a trail. The tree was fairly easy to find as it is quite large and is evergreen. It has grown up and through adjacent trees and is entangled with them, making its form distorted and unnatural. An end branch and a few cones were brought out for identification.

The tree turned out to be *Cunninghamia lanceolata*—the Chinese Fir, an unusual find for Falls Lake. Brian checked the State Parks database and found records of only a few in North Carolina State Parks. There is one growing near the superintendent's residence at Eno River State Park, one at an old homesite at Jordan Lake, and eight growing at an old homesite at Stone Mountain. The tree is a

native of China and was introduced into the United States in the early 1800s as an ornamental.

The needles are graceful and arching but gradually taper to a sharp point, which makes them very prickly and difficult to handle. (See a.) They are dark green above and have two very distinctive white bands on the underside. (See b.) The cones are small, about 2 inches or less across, and the scales are reflexed and pointed. (See c.)

It would be interesting to know how the Alfred Lowery family came to pick this particular tree to plant at their home. They are still used in landscaping today but do not seem to be widely grown.

The old Lowery homesite is also an example of how domestic plants can become invasive and dominate an area of forest. An accompanying photo, taken in mid-winter, at first appears to be an evergreen tree. But the leafy evergreen foliage is actually English Ivy



A nearby tree at the Alfred Lowery homesite has been completely overtaken by English Ivy.



Photos by Herb Amyx

(*Hedera helix*) that has colonized the entire canopy of the tree. The ivy in the canopy is supported by huge vines which cover the trunks of the trees. (See d.) Also present at the site is a huge *Berberis vulgaris*—European Barberry, whose limbs spread upward into the lower branches of the surrounding trees and shrubs.

We welcome any information that members or friends might have that could add to the history of this old homesite. —Herb Amyx

## YELLOW PASSIONVINE (*Passiflora lutea*)

Five years ago while wandering along a new greenway, I spotted an unusual vine with a tiny blossom that was such a pale yellow that it was almost white. Whipping out my little camera, I pointed it at the blossoms only to find that the camera preferred to focus on the background rather than on the blossom. At that point my mother's advice of always carrying a clean handkerchief, proved valuable, as I spread the handkerchief as a backdrop forcing the camera to focus on the inconspicuous blossom. Thus began my fascination with *Passiflora lutea* or the yellow passionvine.

A year later, the N.C. Botanic Garden had one of the plants for sale, and I snatched it up with delight. You see, to my disappointment, the maintenance workers clearing along the greenway had killed the original find. Determining a suitable location in my sunny garden was tough. Finally, I settled on a spot alongside a wooden fence between a Redbud and a Winter honeysuckle bush, hoping this would be shady enough while providing a spot where the vine could climb rampantly. Then the wait began. Each summer I would check for blossoms and there were none. Meanwhile the vine grew longer and longer, growing out on those impossibly thin stalks that looked

so dead each winter. After four years, success! One morning this July, as I walked down the drive to fetch the newspaper there was an unusual fragrance. It took a little searching to find the source—the first blossom on this native passion vine. It has bloomed continually since then, opening just a few blossoms each day.

Then two seedpods appeared, launching me on the next quest. What had pollinated the blossoms? At that point I had not spotted any insects visiting the plant. Delving into the scientific literature through Google, I came across a paper from the University of Arkansas that stated that the primary pollinator in Little Rock was a tiny ground-dwelling bee, *Anthemurgus passiflorae*, while in Texas the primary pollinators were other larger bees. Well I had never seen any bees around the vine. Could each blossom be self-fertile? Again the scientific literature suggested not. But I did spot a wasp flitting about that was too fast to photograph. David Stephan, extension entomologist of NCSU, suggested the wasp most likely to pollinate the vine would be a potter's wasp, named *Monobia quadridens*.

Since most of the blossoms appeared high on the vine, I set a step ladder in place, to provide a perch for photographing. Just like the

Note the distinctive shape of the flower parts with the stamens held above the stigmae and the nectary.

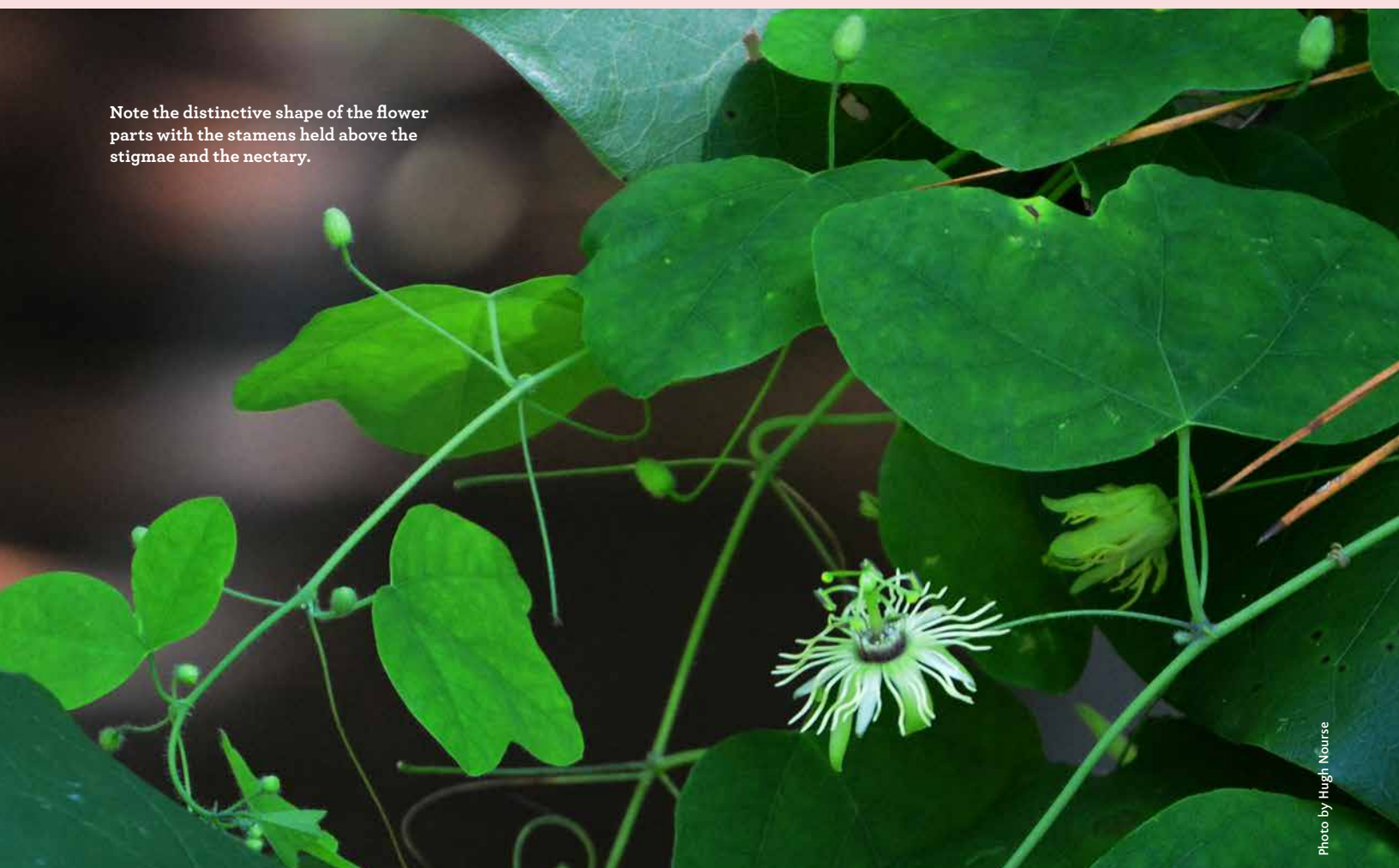


Photo by Hugh Nourse



A Potter's wasp spreads pollen as it pushes its head against the stamens and stigmae.

photos by Hughen Nourse

canopy researchers in the Costa Rican jungle, I was able to observe the insects that visited. David Stephan was correct that the most prominent visitor was *Monobia quadridens*, whose head became covered in pollen as it sipped at the nectary.

The structure of the reproductive parts of the blossom is quite intriguing. The nectary forms a ring around a structure that I liken to an umbrella handle holding first the five stamens with anthers and then at the topmost level branching into three stigmae. This arrangement suggests that it would keep the stigmae from being accidentally pollinated from its own stamens. A larger object such as a wasp head would have to push the stamens aside to spread pollen onto a stigma. You can plainly see in the photo how the wasp does just that. Another observation is that the pistils grow during the course of the day so that the stigmae spread lower and lower till they reach the same level as the anthers, as if the blossom in a last desperate effort to be pollinated, will finally accept its own pollen.

Now to my delight, at least one seedpod is maturing and turning purple, just like the purple fruits of the bigger passion fruit cousins.

—Hughen Nourse



A close up of the yellow passionvine (*Passiflora lutea*).

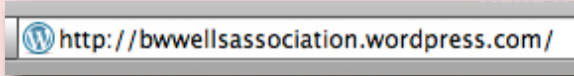
## MAKING CONNECTIONS

Be sure to check us out at the new website and blog. “Like” us and you will get the latest news, events and updates from the association as well as shared pictures of B.W. and Maude Wells from our archives.

We’d love to hear from you, so please pass along any stories and/or pictures you may have of Rockcliff Farm and B.W. Wells.



See our blog at:



### MEET SUPERINTENDENT KERSHNER

Scott Kershner is the superintendent of the Falls Lake State Recreation Area and our primary contact with NC State Parks and issues involving the B.W. Wells homesite.

A native of Toronto, Canada, he came to Falls Lake in 2003 after being at Goose Creek and at Kerr Lake.



### CALLING ALL GROUNDS COMMITTEE MEMBERS



After some heavy pruning, a small mock orange, *Philadelphus coronarius*—died and was removed during the wiring of the B.W. Wells house. Also, a type of an olive in front of the Ray House in a brick circle died, and the common fig won’t last much longer; the spirea could use some pampering.

The B.W. Wells Association would love to have these replaced and replanted. If anyone would like to donate the plants and/or help with the replanting, please let Hugh Nourse or Brian Bockhahn know. Any help would be much appreciated.



**BWWA, P.O. Box 1901  
Wake Forest, NC 27588**

***Benefits include:***

- Organized walks and lectures pertaining to ecology, geology and botany
- Maintained hiking trails
- Interpretive displays
- Meetings and newsletters
- Environmental Education projects for students of all ages

**STUDENT AND SENIOR (60 years old) \$10**

**INDIVIDUAL \$15**

**FAMILY \$30**

**PATRON \$50**

**CLUB/PARTNER ORGANIZATION \$75**

**LIFE MEMBERSHIP \$100** (limited to individuals only)

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**B.W. WELLS ASSOCIATION**

**EXECUTIVE COMMITTEE**

President, Hugh Nourse  
Vice President, Gerard Hayes  
Treasurer, Joe Paulonis  
Secretary, Susan Trombley  
Membership, Pamela Andrejev

**BOARD OF DIRECTORS**

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Herb Amyx (Education and Events)  
Carmen Samples (Membership)  
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Sanford Bailey (At large)  
Vickie Cumbee (Newsletter)

**ADVISORY BOARD**

Margaret Pridgen  
Ken Moore  
Benson Kirkman  
Brian Bockhahn  
Johnny Randall



**MISSION STATEMENT**

The B.W. Wells Association will strive to educate the public about B.W. Wells, North Carolina's first plant ecologist, and promote his conservation ethics. The Association will achieve its mission primarily by assisting the N.C. Division of Parks and Recreation and the U.S. Army Corps of Engineers to preserve, restore and interpret the unique cultural and natural resources at Rockcliff Farm, the site of Wells' retirement.