

Rice Creek Associates Newsletter

Spring 2014

THANK YOU TO OUR RETIRING RUTH SACHIDANANDAN HERB GARDEN VOLUNTEERS

HELP NEEDED TO CARE FOR THE GARDEN



In the late 1980's the idea surfaced to establish an herb garden at Rice Creek Field Station. This was to be among the first projects of Rice Creek Associates. The site was selected and plans were made. Ruth Sachidanandan designed the garden and with the hard work of many volunteers, the garden became a reality under Ruth's leadership. For 25 years the garden has invited college students, school children, and other visitors to explore the colors, textures, and smells of the herbs. That would not have been possible without the efforts of a group of volunteers who have lovingly and diligently cared for the plants in the Ruth Herb Garden.

Joyce Rice was there at the beginning, working alongside Ruth to plant the first herbs in 1990 and see them through that first year. **Suzanne Stout**

volunteered in the garden beginning a few years later, but her connection goes back to the garden's beginnings when her husband helped with the design and created the rock walls that add so much character to the garden. For over a dozen years, Evie Taylor helped to organize the garden workdays and seldom missed an outing. Marilyn Pirkle joined these volunteers when she returned to her Central New York roots. Nancy Townsend helped maintain the garden as Rice Creek's Grounds keeper and continued as a volunteer following her retirement from the college.

To Joyce, Suzanne, Evie, Marilyn, and Nancy we say thank you for your time, knowledge and friendship over the years as you woke up the garden each spring, tended to it throughout the season and put it to bed each fall. Your efforts have been much appreciated and have enhanced Rice Creek Field Station in many ways. As Gubbi Sachidanandan said at the rededication of the garden last fall, Ruth is looking down and smiling at you all for caring for her garden. Many thanks once again.

With all herb garden volunteers stepping down for various reasons, we are now seeking new volunteers to continue caring for the garden starting this spring. Usually volunteers work a few hours once a month from late April through September. *Please consider volunteering to help with the garden*. Call the Field Station at 315 312 6677.

Thank you Rice Creek Field Station & Rice Creek Associates



Science at Rice Creek

Purple Foxglove (*Digitalis* purpurea) and congestive heart failure.

Dr. Kamal Mohamed Director, Rice Creek Field Station Rice Creek Field Station

Purple foxglove is classified in the plantains family (Plantaginaceae). The plant is native to Europe. It is common in open areas especially woodland clearings and waste places. The plant is biennial, that is, growing vegetatively in the first year and blooming in its second year. It is a popular ornamental plant that can be obtained from nurseries in the local area or it can be grown from seed. All parts of the plant are extremely poisonous if eaten and can also cause skin irritation if touched. The plant can be fatal to pets too, so we have to be careful if the plant is raised indoors.

Foxglove is one of the earliest plants scientifically investigated to cure diseases.

Glycosides isolated from foxglove are now used to cure dropsy– a heart condition also known as congestive heart failure resulting from a weak, irregular, intermittent, and abnormally slow heart. William Withering led the investigation of foxglove in the early 1770's and published his first scientific report on the role of foxglove in curing dropsy in 1785. He knew about the power of foxglove from a woman who used it in a family recipe composed of more than 20 plants including foxglove. It is not unusual for herbalists to include harmless plants in their recipes to cover their secrets and not unusual for someone like Withering to uncover that secret.

It is not until the nineteenth century that Europeans started purifying medicinal chemical compounds from plants. The earliest include morphine from opium poppy, Salicylic acid (aspirin) from willow bark, and quinine (malaria) from the fever bark tree. The isolation of medicinal chemical compounds from plants and their use in pure forms in medicine instead of whole plants led to the birth of western medicine. Naturally, western medicine was based on local plants that were known to the Europeans and plants that they had access to in their colonies and elsewhere. These plants were very valuable at the time and they brought wealth and fame to their traders, such as the giant funnel or silphium (used as a contraceptive), said to have been worth its weight in silver. Because of their value, some of these plants were collected to extinction.

Withering experimented with foxglove and determined that the dried powdered leaf was more effective and that boiling destroyed the active medicinal compounds. He treated more than 60 patients with dropsies, many of whom had heart failure, and he was able to determine the nature of this medicine, including the importance of digitalis' dose response in various patients and its side effects. His work

placed the therapeutic use of digitalis on a solid scientific footing.

Recently, two cardiac glycosides were isolated from foxglove and collectively known as *digitalis* from the plant's Latin generic name. These are *digioxin* and *digitoxin*. This medicine organizes and regulates heartbeat and strengthens the heart, allowing it to perform its regular function. Digitalis is now used as a prescription drug sold under various trade names.



Foxgloves (*Digitalis purpurea*). The generic name digitalis means finger-like, referring to the shape of the flowers that look like you could fit over the fingertips. It has also been said that foxes would wear the flowers on their paws so they would quietly sneak on their prey or avoid being caught by humans if they decided to raid farm chickens. The specific epithet *purpurea* refers to purple, the color of the flower. **Photo by Stacy Snyder**.

Early spring nuances

I wanted to share some things that I have seen during a recent early spring trail walk along

the green trail at SUNY Oswego's Rice Creek Field Station.

Tracks are everywhere since there is mud and wet soil everywhere! The greys of lichens and the yellow and greens of the mosses really catch your eye among the darker hues in the woods. I have not seen many early spring plants.... but will keep looking. Did notice some small leaves of strawberries and of course of poison ivy. Larger ferns that overwintered under the snow are stretching out their fronds.

There are some lovely large [pileated?] woodpecker holes on a tree near the end of the short walkway.

There are several relatively new signs of beaver activity near the walkways of the green trail. Several newly fallen trees, and dam rebuilding near the single bench area at the north end of the long walkway. A new lodge on the west creek bank across from about midway along the long walkway.... interestingly that is the exact spot where there was a lodge many, many years ago.

Frogs have begun calling in earnest. A good location to hear them is the area where the two benches are found near the wet area south of the long walkway.

Waterfowl are enjoying our relatively high water in the creek and the pond. The birds have been frequenting the feeder stations adjacent to the building. Some pairs of wood ducks have been checking out the newly installed nest boxes. Our fingers are crossed that they will be used this nesting season.

When at Rice Creek or elsewhere, look up as there are hawks, vultures, eagles and more migrating north at this time of year. If you find yourself out and about at Rice Creek and notice things along the trails, please let us know and share your Rice Creek photos.

Regards,

Diann

Diann C. Jackson, Ph.D. Assistant Director, Rice Creek Field Station

Book sale at Field Station successful



Bill Reilly speaking about one of his selections

On Saturday, March 8, Rice Creek Associates sponsored a book sale at the field station. Bill Reilly and Mindy Ostrow from River's End Book Store in Oswego presented a number of selections regarding nature and the environment.

These selections included field guides, young children's books, evolution, nature journals, and fiction based on nature observations and events. Bill skillfully explained how some of the books he brought were relevant to nature despite having titles that did not readily suggest that relationship.

Both Mindy and Bill were pleased with the day's results and are willing to hold similar sales for us in the future.



Claire Putala contemplates a purchase

Donations to Rice Creek Associates: How they are used

Through the years RCA has gained a number of loyal supporters. This support has enabled RCA to perform a variety of services to both the field station and environmental education.

Our membership forms contain a number of categories/services to which RCA members can give additional support in addition to membership levels. I'd like to take this opportunity to explain what each category entails. Keep in mind that contributions to any of these funds (with the exception of yearly membership dues) are tax deductible.

General Fund: This is where the bulk of our yearly revenues are deposited. All our operating expenses, including membership mailings, programs, newsletters, field guides, etc. are paid through this category.

Student Research Grants: This is a premier program of RCA that is funded through the general fund. The Small Grants Program has

supported student research on the grounds of the field station for over 20 years. A significant portion of the knowledge of the flora and fauna at Rice Creek has been documented as a result of these grants. Some of the public programs that RCA offers discuss these research findings. In addition, the experience gained by students performing this research prepares their way for further careers in science.

Exploring Nature Program for Students:

Rice Creek Field Station, through Assistant Director Dr. Diann Jackson, administers a two-week summer program for youth in our area to investigate and appreciate the natural world around us. This fund is provided for students of families whose income would normally prevent their children from attending. The scholarships provided to these children may be partial or full tuition. RCA provides the funding for these situations.

Trail improvement: Trails constantly need maintenance. Repairs, widening, trimming vegetation, cutting back overgrowth, and spreading wood chips are routinely performed. Also included is the cutting of the meadows to maintain habitat diversity.

Rice Creek Reflections Spring 2014 offerings:

Save the dates!

Sunday, April 27, 3-4 p.m.

Andy Nelson, emeritus professor of SUNY Oswego and former field station director, will present a program on the flora of Oswego. The program is free and open to the public. Refreshments will be provided.

Sunday, May 11, 3-4 p.m.

Professor **Lytton Musselman** of Old Dominion University in Norfolk, Virginia, will give a presentation and workshop on wild edible plants. He will prepare some of his recipes of wild edibles. The program is free and open to the public.

Memorable moments at Rice Creek

I took a class with Dr. Maxwell in field biology when I attended SUNY Oswego in 1963-1967. I believe he told us that his doctoral research was on grackles. He was an excellent teacher and I still remember much of what I learned in that class so long ago.

When I was in his class, the field station had just been completed. The dam at Fallbrook was opened, and the water rushed in to flood the new field house pond, leaving many fish stranded in the mud.

Another student had a VW Bug. We caught the fish in a big net, which we suspended out the window of the Bug. Then we zoomed from Fallbrook over to the Field Station to release the rescued fish. We made quite a few trips and saved many fish that day.

--Sandy Clift

We encourage all members to submit a favorite memory of Rice Creek Field Station. Send it to Mike Holy at fordlep@yahoo.com or mail it directly to the field station. It will appear in a future newsletter.

EXPLORING NATURE



Since 1983, **Exploring Nature** has been an education program designed to encourage young people's curiosity and concern about their world. Participants explore and investigate life around Rice Creek while discovering nature first hand through nature walks, activities and games.

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Exploring Nature for 2014 registration is now open. The deadline is June 5.

Monday through Friday 9 am to 2 pm July 7 to 11 and / or July 14 to 18

Children ages 5 to 15 as of July 1, 2014

For more information and registration materials, visit www.oswego.edu/exploringnature or call 315-312-6677.

Programs administered by Dr. Diann C. Iackson.

CONSERVATION FIELD STUDIES



Want to attend SUNY Oswego Rice Creek Field Station's summer program but have aged out of Exploring Nature? We are offering **Conservation Field Studies** this summer for teens who are rising 9th graders to teens having completed 12th grade. The focus will be environmental stewardship along with team building.

Conservation Field Studies is an education program designed to investigate the interdependence of Rice Creek's ecosystems through field studies and projects. Participants will examine the importance of stewardship through habitat study, animal habits and real-life applications.

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Conservation Field Studies for 2014 registration is now open. The deadline is July 5.

Tuesday August 12 3 to 5:30 pm

Wednesday August 13 3 to 5:30 pm

Thursday August 14 7:30 to 10 pm

For more information and registration materials, visit www.oswego.edu/conservationstudies or call 315-312-6677.

Programs administered by Dr. Diann C. Jackson.



SUNY Oswego's Rice Creek Field Station

Since program size is limited, we are not able to accommodate groups to these free Saturday programs. An adult needs to accompany children.

Rice Creek Rambles 11 o'clock

Explore the trails and wetlands at Rice Creek to see the latest spring arrivals. Join us for these naturalist-led spring walks. Those planning to attend are asked to call 315-312-6677 on the morning of the hike to check trail conditions.

May 10 Birds, Bugs, Blooms With the warmer nights and days, the trails take on a new appearance in early winter. Birds, bugs, blooms await us on this early spring walk.

Story Hour 11 o'clock

Join us as we share tales of nature, animals' wild ways, and how we relate to our world around us. These programs are designed for elementary aged children though all are welcome.

April 26 *Rainbow Crow* relates the Lenape legend with beautiful illustrations and a lesson of service to others.

May 31 *The Salamander Room* captures your imagination while demonstrating what living things

need to survive

Sharing Science

11 o'clock

Science has less meaning when the processes and outcomes are not shared and communicated. These new programs are designed specifically to share scientific knowledge and perspectives. We will focus on recent work and resources to make that information broadly available to children, families, teachers, and youth leaders.

May 3 Wildlife Games and Activities is a family oriented fun filled session featuring several outstanding hands-on activities from Project WILD and other sources simulating key ecological concepts and the stewardship of our natural resources.

May 17 Rain Gardens are a new addition at Rice Creek. Learn how these important water management areas were created and the many functions that they serve.

Tour the New Rice Creek Visit Rice Creek and learn about the sustainability features of our new 7,200 square-foot energy-efficient main building and facility.

- The building hours are:
 Monday to Friday 9:00 am − 4:30
 pm
 Saturday 9:00 am − 3:00 pm
- FREE programs most Saturdays
- Trails are open during daylight hours.
- Parking is available by the main building and near the gate.



2014 Nature Education Programs

SUNY Oswego's Rice Creek Field Station

Celebrate Alumni Reunion Weekend 2014

Rice Creek welcomes Alumni, family and friends to Reunion Weekend 2014. Stop by to see the new Rice Creek from 9 to 4:40 June 5th & 6th and 9 to 3 June 7th. Check the schedule for when tours or Rice Creek will be leaving campus.

Rice Creek Rambles

JUNE 14, 21, 28 JULY 12, 19, 26 AUGUST 2, 9

What creatures can we find? What do they eat? Where do they live? What happened here? These and more questions will be the focus of these free naturalist-led summer walks at Rice Creek. We will start at main

building at 11 o'clock on these Saturdays. Come dressed for the weather. Those planning to attend are asked to call 312-6677 on the morning of the hike to check trail conditions. Since program size is limited, we are not able to accommodate groups during these free Saturday programs. An adult needs to accompany children.

Registration deadlines for *Exploring Nature* summer program for children is June 5th and *Conservation Field Studies* summer program for teens is July 5th. For more information and registration materials visit www.oswego.edu/ricecreek/programs.

Tour the New Rice Creek visit Rice Creek and learn about the sustainability features of our new 7640 square-foot energy-efficient main building and facility.

- ◆ The building hours are:
 Monday to Friday 9:00 am 4:30
 pm
 Saturday 9:00 am 3:00 pm
- FREE programs most Saturdays
- Trails are open during daylight hours.
- Parking is available by the main building and near the gate.

For more information visit www.oswego.edu/ricecreek or call 315-312-6677.

Help us improve our newsletter!

There are many things that you as members can do to assist us in improving the quality of our newsletter. **Share** your experiences of Rice Creek with us. **Write** a short review on a nature book that you enjoyed. **Send** a digital picture you took at Rice Creek that you think we may enjoy. **Suggest** ideas that we may include, or programs that you would like to see offered to our members and public.

Send these and any other ideas to Mike Holy at fordlep@yahoo.com, or call him at 315-622-1774. We look forward to providing information that would inform and entertain our members.

Current RCA board members

Michael Holy, President Peter Rosenbaum, Vice President Holly Eden, Secretary Paulia Bates Claire Putala

Rice Creek Field Station Staff

Kamal Mohamed, Director Diann Jackson, Assistant Director Wendy Fragale, Secretary Alan Harris, Groundskeeper

Field Guides Available

Guides to the butterflies and invasive plants on the field station grounds are available for sale. They would make excellent gifts for anyone who enjoys walking the trails. Contact the field station office at 315-312-6677 for details.

RICE CREEK IS OPEN on SATURDAY

9:00 a.m. TO 3:00 p.m.

- ENJOY a program
- HIKE or bike the trails
- SEE exhibits inside the building WATCH wildlife from the indoor viewing gallery
- ASK our naturalist questions

www.oswego.edu/ricecreek 315-312-6677

Rice Creek Field Station

Rice Creek Field Station is a part of the State University of New York at Oswego. While its primary function is to provide facilities for field oriented research and courses in the natural sciences taught at the college, facilities are also available for public education and recreation.

The field station houses superb collections, field equipment, and laboratories. It is surrounded by several hundred acres of forest, fields, trails and wetlands, including Rice Pond. School children visit the field station and many individuals and groups use the area for hiking and cross-country skiing.

Rice Creek welcomes dogs. However, to protect sensitive natural features and as a courtesy to other visitors, dogs should be on a six foot leash. Also, be kind and clean up after your pet. Thank you.

Directions: To get to Rice Creek Field Station take Route 104, turn south on Thompson Rd, 100 yards west of the College's main entrance. The field station is 1.4 miles on the right.

Hours:

Monday to Friday 9:00 am -- 4:30 pm **Saturday** 9:00 am -- 3:00 pm

Trails are open dawn to dusk daily. When visiting Rice Creek, please sign in and out at one of the brown registration boxes.

Rice Creek Associates

(RCA) is a support group that was formed in 1986 for the purpose of furthering the goals of Rice Creek Field Station (RCFS). It is the intent of RCA to expand the scientific, educational, and recreational opportunities at the station through community involvement. Over the years, RCA has continued to increase its membership making it possible to fund improvement projects that benefit the station and the community at large.

Board members urgently needed!

Our Rice Creek Associates Board of Directors is presently the smallest it has ever been at five individuals. In order to function at top efficiency we need at least an additional four members. Please, if you have time to spare for a one-hour monthly meeting with a few more hours in the month to assist with our organization (many of which can be done at your convenience in your home), contact me at fordlep@yahoo.com or 315-622-1774 for further information. I will be glad to guide you through our organization and answer any questions or concerns you may have.

I have heard from many of our members with compliments on our newsletters and Rice Creek Reflections lecture series. Seriously consider helping us continue to provide those services to our membership.

Mike Holy, Board President, Rice Creek Associates

Join Rice Creek Associates
Name
Address
City
State Zip
Email
New Calendar-year Membership Membership renewal Level: Student
I/We would like to make a tax-deductible contribution to the General Fund Trail improvement Exploring Nature Program for children in the amount of \$
Total enclosed (membership + contribution) \$
Please make checks payable to: State University College Foundation/RCA Return to: Rice Creek Field Station #23 SUNY Oswego Oswego, New York 13126

Spring Photos at Rice Creek



White trillium (Trillium grandiflorum)



Marsh Marigold (Caltha palustris)



Cabbage White Butterfly (Pieris rapae)



Spring "Rapids" at fish ladders



Leafing out for another season

Rice Creek Associates RCFS #23 Oswego State University Oswego, NY 13126

TO: