

The BogHaunter

the newsletter of the Friends of the Cedarburg Bog

Volume 7, Number 3

SUMMER 2012

WATER LILIES IN THE BOG

Water lilies put on a beautiful show in the Bog from their beginnings, as green and red leaves unfurling underwater and growing toward the surface; through mid-life, when their flowers bloom on the water; through their demise, when their deteriorating leaves may turn a deep red. Their leaves, seeds and rhizomes provide food for a large number of animals (mainly insects, but also waterfowl, deer, muskrats, turtles, and humans), and they modify their habitat both in life and in death.



Emerging water lily

White Water Lilies and Yellow Bullhead Lilies thrive in the still waters of Mud Lake, near the stream bridge along the UWM boardwalk, and at the north end of the Bog in Watts Lake. The two species have similar life styles and grow side-by-side, with Bullhead lily blooming first. Part of the floating-leaved plant community, they grow alongside water milfoil, bladderwort, and Potamogeton, with emergent cattails not far away.

In order for water lilies to grow, the water must be shallow enough so that the sunlight can reach to the bottom of the pond as their leaves emerge. In clear water, sunlight can penetrate to about 12 feet, but most sources say that eight feet is the maximum depth that water lilies are found in. Their leaves are attached by a petiole (leaf stem) to a rhizome buried in the soft muck.

The petiole that anchors leaf to rhizome is specially designed. To prevent its weight from pulling the flower underwater, the stem has a series of air pockets that make it lighter and function in the exchange of gasses. A waxy, water-repellant cuticle covers the upper surface of the leaf (aquatic plants don't need help hanging onto water; they need to avoid getting water-logged), and the lower surface and stem are coated with a slick, mucous-like covering that protects against grazing insects and damage by abrasion. Despite these strategies, water lily leaves are on the menu of many aquatic insects and provide platforms for others to hunt or to rest (and yes, frogs do sit on lily leaves).

It is said that "every lake is a dying lake," and water lilies can accelerate the process. Lily leaves are one of the most popular microhabitats in a pond, providing shelter for fish and other animals. But water lilies can be aggressive, and a dense growth of vegetation prevents the sun from reaching submerged aquatic plants and lowers the oxygen content of the water. When the growing season ends, the dead plants sink and decompose, making "soil" and filling in the basin.

Bullhead lily (*Nuphar variegata*) is also called Spatterdock or Yellow pond lily. Its leaves form an elongated heart with the edges of the notch often overlapping. The large rhizome was an important starch for early Native Americans,



Yellow water lily

and the seeds were also eaten. Yellow-Bullhead lily was used medicinally for treating skin inflammations, swellings, bruises, and wounds.



White water lily

White water lily (*Nymphaea odorata*) has a smaller leaf that is round, and a fragrant, white flower that opens and closes daily. Its rhizome was used as a compress, but was not as used as widely for food as the Bullhead lily. Henry David Thoreau wrote that the flower reminded him of "a young, country maiden -- wholesome as the odor of a cow." Thoreau smoked a water lily stem once and declared it "the most noxious thing I ever smoked."

INTERNATIONAL BOG DAY

For the past 20 years, International Bog Day has been celebrated on the last Sunday in July, and this year, the holiday falls on July 25. The date is set aside to remind us to celebrate the beauty of bogs and work for their preservation. In Northern Ireland, the celebration includes competitive "Bog Snorkling" events, and celebrations at a bog in British Columbia will include a 1, 5, and 10km "Jog for the Bog".

Have you thanked a Bog today?

PHOTO CONTEST LAST CALL

Deadline for the Friends of the Cedarburg Bog Photo Contest is August 15. For details, please check bogfriends.org/bog-friends-blog. Prizes will be awarded at the Fall Potluck (and Annual Meeting) on September 23.

Please join us for the

Annual Fall Potluck

(and mini-annual-meeting)
at the UWM Field Station
September 23, 2012

3:00 – hikes

5:30 – eats

6:30 very short meeting (optional)

We supply brats, rolls and beverage.
Join us for the walk or the potluck or
both.

If your last name starts with
A to M, please bring a dessert to
share.

If your last name starts with
N to Z, please bring a side dish to
share.

No dogs, please

Please RSVP at 262-675-
6844, at fieldstn@uwm.edu, or
at bogfriends.org (events)

BIRD WALKS AT THE BOG

Over the last 30 years, nearly 250 species of birds have been identified at the Cedarburg Bog.

Birds found at any location can be categorized as migrants temporarily passing through, winter or summer residents, or rarities that are most often vagrants far off their usual migratory route or far away from their usual place of residence.

Although rarities can occasionally and unpredictably occur in the Cedarburg Bog and its adjacent upland woods at any time of the year, the Bog almost always delivers during spring migration -- and Sunday, May 27, 2012 was no exception! The 15 participants and two leaders on this walk, sponsored by the Friends of the Cedarburg Bog and led by board members John O'Donnell and Carl Schwartz, were able to observe and/or hear 45 species in approximately two hours.

Highlights included seeing and/or hearing eight different species of flycatchers, being able to compare and contrast two different species of nuthatches, observing a Wood Duck deftly winging her way through the forest into an overhead nest cavity, having good views of a prowling coyote seemingly oblivious of our presence, and getting close looks at both the Yellow lady's slipper and the uncommonly beautiful Showy lady's slipper orchids as a bonus.

What really made the birdwatching exceptional on this morning were the close-up views provided by some very

special birds. Photographic whiz and group participant Allan Block captured stunning images of a very uncommon Olive-sided Flycatcher -- no doubt still on his way in migration to a more northern bog -- and this picture of a stunning and unusually cooperative male Scarlet Tanager



Scarlet Tanager

The Friends of the Cedarburg Bog usually offers four to six bird outings every year. Next up on the calendar is an early morning fall migration bird walk on September 16. On October 19, the Friends will offer its popular evening "Owl Prowl" where as many as six different species of owls are possible along with other night creatures. For more information about these and other natural history outings, and to register to attend, check the Friends of the Cedarburg Bog website, bogfriends.org, or phone 262-675-6844 as the dates get closer.

**The Cedarburg Bog:
designated a Wetland Gem
and an
Important Bird Area**

WILD FOODS PROGRAM

On August 4th, the Friends of the Cedarburg Bog will sponsor two programs on edible wild foods. The program will be presented by Mike Krebill, a wild foods forager, writer, editor, and educator from Iowa. Mike's participatory programs are in demand throughout the Midwest and the eastern US.

From 9 till noon, we'll search for Summer's Wild Edibles as we explore the trails and grounds of the UWM Field Station. Near the end of the morning session Mike will pass around copies of a wild berries and fruits field guide, and what he considers to be the three best edible wild plant references ever written. He'll offer a reduced price on them, so bring a checkbook if you think you might be interested.

From 1:30 to 4:30 p.m., Mike will be at nearby Riveredge Nature Center, where his focus will change to Edible Plants Worth Knowing. We'll take a nibble

hike with Mike. Back indoors, we'll make and sip sumac lemonade, sample shagbark snickerdoodles, and devour a dish of dandelion root ice cream while Mike shows slides of other nutritious and delicious wild edibles and easily identified fall mushrooms.

After the show, he'll answer questions and provide free handouts and recipes, and offer discounts on his favorite reference books. In addition, he will let us know more about the Midwest Wild Harvest Festival, a wild food weekend coming up August 24 – 26 at the Wisconsin Badger Camp south of Prairie du Chien. (To learn about it now, and download a program flyer and registration form, go to <http://wildharvestfestival.org>.)

The morning session at the Field Station is limited to 20 participants, and the afternoon session at Riveredge is limited to 30 people. A \$10 donation to the Friends is suggested for the morning program, and a \$10 donation per family is suggested for the afternoon session. **Pre-registration for each part of the program is required**, and you must register for the morning and the afternoon sessions separately. Register by emailing fieldstn@uwm.edu, calling 262-675-6844, or online at bogfriends.org (click on the Events tab).



Dandelion

Mike suggests wearing a hat to discourage deer flies (unless you have your own trained squadron of dragonflies), and don't forget insect repellent and a water bottle.

LIGHTNING BEETLES

Lightning bugs float silently (but brilliantly) over the Bog's dark fields and wetlands in late spring and early summer. Also called Fireflies, they are neither flies nor true bugs, but are more correctly called lightning beetles. And their ethereal light show is all about sex.

Their path to the skies starts in late summer of the previous year. In mid-summer, eggs hatch into carnivorous larvae that eat insects, snails and other small critters, subduing their prey by

injecting a paralyzing fluid. They are considered important controls on snails and slugs, and the earth-dwelling larvae of the common genus *Photinus* may hunt for earthworms in packs, like subterranean wolves.

They overwinter as larvae, buried in the soil, and when spring comes, they wake up and keep on eating. Then they pupate underground and emerge in late spring to begin their brief-but-dazzling stint as adults. Adult lightning beetles are common on vegetation in the Bog in late spring.

Actual light production is an uncommon talent in insects. Some species achieve luminescence "passively" because they harbor photogenic (light-generating) bacteria, but lightning beetles actually generate light, and their light is a "cold" light. It's produced at the end of the abdomen in a photogenic layer that is located beneath a white, reflecting layer.

In a reaction between an enzyme called luciferase and a substance called luciferin, chemical energy is converted to light energy. Less than 8% (some say less than 3%) of the energy the firefly expends making light is lost as heat; they're far more efficient than a light bulb.



Lightning beetle larva

Day-flying lightning beetles don't glow - producing light would be a waste of energy for a diurnal insect - but for reasons that are not understood, all lightning beetle larvae, some pupae, and even some eggs also glow. Lightning bugs don't just gleam, they emit controlled flashes of light, and the various nocturnal species of fireflies divide their landscape by altitude, habitat, light color and intensity, time of evening, and duration of flight. Each species has its own particular "Morse Code," although male and female "codes" may be different.

Males signal from the air, and females, often wingless, respond from on or near the ground (females and luminescent larvae are called glowworms).



Adult on Equisetum

Females of some species of fireflies resume flashing after mating, adopting the code of a different species. If she is successful in luring a "foreign" male, she will eat him. This practice is called "aggressive mimicry," but females generally do not eat males of their own species.

Members of the lightning beetle family (Lampyridae) have poisonous blood and ooze toxic droplets from the base of their wing covers. This may explain why soldier beetles like the Pennsylvania leatherwing mimic them. The thorax of a lightning beetle is flared like a flat shield which hides its head; soldier beetles have a shield, but it's much smaller.

ANOTHER PERFECT DAY IN PARADISE

Writer-scientist-songwriter-monologist Roger Kuhns has lived and worked around the world and has witnessed the collision of new worlds with ancient ones. He will share stories about his travels to islands of the Pacific and the Mediterranean, where the perfect climate and warm ocean sometimes runs into volcanoes, storms, development pressures, unusual bugs and curious health dilemmas. But the surf's up, and the ecosystems are magical, and Roger will talk about how nature is changed both naturally and by people, and how a volcano or a beach may lead to a sustainable path to paradise.

Roger Kuhns presents his monolog on Friday, July 6 from 7 to 8:30 PM at Riveredge Nature Center, Newburg. Fee: \$7, Members \$5

BAT MONITORING UNDER WAY AT THE BOG

After the Wisconsin Energies Foundation (WEF) awarded the Friends of the Cedarburg Bog \$4,900 to begin monitoring bat populations at the Bog and

in surrounding areas, a number of bat ecology presentations and training sessions have taken place.

The Friends are working in partnership with the Western Great Lakes Bird and Bat Observatory (WGLBBO), which is headquartered at the Forest Beach Migratory Preserve near Belgium, Wis. The grant not only funded the purchase of a \$3,000 ANABAT acoustic bat monitoring unit, it also allowed research scientist William P. Mueller to hold a number of bat ecology presentations, along with the associated coordination, demonstration and training of volunteers to use the bat monitor.



Bats with white-nose syndrome

Presentations and training sessions have already been held at the Schlitz Audubon and Riveredge Nature Centers and the UW-Milwaukee Field Station. An additional training workshop is scheduled for July 11 at the Mequon Nature Center, and follow-up events are planned later this summer at the Field Station. They will be posted on the Friends of the Cedarburg Bog web site, www.bogfriends.org.

The Friends' mission includes supporting stewardship efforts in the Bog and its uplands, and that includes knowing just what it is we're taking care of. The ANABAT unit can record and identify bats' nocturnal calls because, unlike bird calls, most bat calls can't be heard by the human ear.

Data collected by the project will supplement information gathered by the Wisconsin Bat Monitoring Program, a project run by Wisconsin Department of Natural Resources ecologists aimed at studying the numbers and distribution of the seven species of bats that call Wisconsin home for part or all of the year. A lethal fungus infection called "white-nose syndrome" is decimating hibernating populations of Eastern bats. As the disease gets closer to Wisconsin, it's urgent to have baseline data.

Mueller, a member of the WGLBBO staff, is principal coordinator for the project, which enabled the Friends of the Cedarburg Bog to acquire valuable equipment for the Field Station. The Friends will work with other organizations (nature centers and Ozaukee Washington Land Trust) to educate the public about the intricate lifestyles and ecological importance of bats.

CALENDAR

The Friends calendar presents a small selection of outdoor events offered by our partner organizations. For a more complete list, check: <http://treasuresofoz.org/> and click on the calendar tab.

Friends of the Cedarburg Bog

Quarterly meeting
July 12, 7 - 9PM
Members welcome
UWM Field Station

Bat Monitoring Workshop

July 11, 7:30 PM
PieperPower Education Center. Weather permitting, a hike will follow.
No fee--\$5 donation suggested.
Mequon Nature Preserve, 8200 W. County Line Rd, Mequon

Discovering Dragonflies

July 21, 10 AM - 3 PM
Join us for all or part of the day.
Learn to identify the dragonflies and damselflies of Riveredge Nature Center. Bring a pair of close-focus binoculars if you have them, wear old shoes and pack a bag lunch.
Adults, children 10 and older accompanied by adults.
Fee: A \$5 donation is requested to support Riveredge research and stewardship efforts.
Riveredge Nature Center, Newburg

Edible Plants Workshop

August 4:
9 to noon (UWM Field Station)
1:30 to 4:30 PM (Riveredge Nature Center).
See the write-up in this newsletter.

Knee Deep in Prairies

August 8, 8 AM - 4:15 PM
Enjoy a day of fun and learning on the prairie.
For information or to register, visit www.Riveredge.us or call 800-287-8098.
Adult Program
Riveredge Nature Center, Newburg

Wading in the River

August 11, 1 - 2:30 PM
Join a naturalist and explore the wonderful, watery, world that is the Milwaukee River. Bring shoes to wade in (old sneakers work best), a towel and a change of clothes.
Call 800-287-8098 to register.
Fee: Adult \$6, 12 & Under \$4
Member: Adult \$4, 12 & Under \$3
Riveredge Nature Center, Newburg

Monarch Tagging

August 25, 1 - 3 PM
Help catch, tag and release Monarch butterflies as part of the Monarch Watch migration research project.
Children under 12 must be with an adult.
Call 800-287-8098 to register.
Fee: Adult \$6, 12 and under \$4, 3 and under are free.
Member: Adult \$4, 12 and under \$3,
Riveredge Nature Center, Newburg

Ozaukee-Washington Land Trust 20th Annual Fundraising Dinner

August 25, 4 - 10 PM
4 PM - self-guided walks
5:30 PM - dinner and Preservation Awards.
Dine on delicious local foods, bid on unique auction items, and enjoy live music by Sawdust Symphony.
Reservations required. Contact the Land Trust at 262-334-1794 or register at www.owlt.org.
At Forest Beach Migratory Preserve (the former Squires Golf course), Co. Hwy P, north of Port Washington.

This Old Barn

September 14, 6 PM to 10 PM
6 PM - Brats, beverages, and homemade desserts
7:30 PM - Bluegrass concert by the Big Cedar Bluegrass Band.
Tickets for food and concert (\$12) are separate.
Lac Lawrann Conservancy, 300 Schmidt Rd, West Bend.

Fall Migration Bird Walk

a Friends-sponsored Event
September 16, 6:30 to 8:30 AM
Search for fall migrants of the Bog.
Please pre-register at 262-675-6844, or fieldstn@uwm.edu or Bogfriends.org (click on the Events key). Walks are free and are open to the public; a \$3 donation is appreciated.

Friends of the Cedarburg Bog Fall Potluck (and Annual Meeting)

September 23, 3 - 7PM
3:00 - meet at the Hwy 33 parking lot or the Field Station for hikes at the north and the University trails.
See information earlier in this newsletter.
Please RSVP at 262-675-6844, or fieldstn@uwm.edu or Bogfriends.org (click on the Events key).
Members welcome
UWM Field Station

Return the Sturgeon

October 6, 10 AM - 2 PM
Help reintroduce Lake Sturgeon into the Milwaukee River at this 7th annual celebration. Sign up to sponsor and release your own sturgeon.
See the Riveredge website www.riveredge.us for more information, or call 800-287-8098.
Thiensville Village Park

The Friends of the Cedarburg Bog

Support stewardship and appreciation of the Cedarburg Bog through land management, preservation, research and education

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ADDRESS CORRECTION REQUESTED

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