

The BogHaunter

the newsletter of the Friends of the Cedarburg Bog
Volume 9, Number 3 SUMMER 2014

BUCKTHORN IN THE BOG

The Friends of Cedarburg Bog have been working hard to control buckthorn in the Bog.

There are three invasive plants that currently pose the greatest threat to the native plant communities of the Bog. Purple loosestrife is a relatively new invader in the marshes surrounding Mud Lake. From 2000 to 2010 the UWM Field Station, with the help of Don Bezella, selectively herbicided the individuals and patches of purple loosestrife that we could find. It eventually became obvious that locating scattered plants among the 8-foot-high cattails in the marsh around the lake was neither feasible nor sustainable over the long term. In 2012 and 2013 we released biological control beetles in patches of Mud Lake purple loosestrife. We will raise and release more beetles in 2014, and will have an opportunity to evaluate whether our previous releases have started to have an effect.



Glossy Buckthorn

Narrow-leaved cattail, and hybrids between that species and our native broad-leaved cattail, have taken over most of the marsh areas around all of the lakes in the Bog and along the stream crossed by the Field Station boardwalk. There is no known control method for these invasive cattails that would be feasible in the Bog. The Bog will have to live with narrow-leaved cattail.

The most widespread and abundant invasive plant in the Cedarburg Bog is glossy buckthorn, occurring at relatively high density in every part of the Bog except those cattail marshes,

which appear to be too wet for it to grow. While there is no hope of eradicating glossy buckthorn from the Bog with known control methods, there is the possibility, with a lot of work, to keep glossy buckthorn at a manageable level in selected parts of the wetland.

The "lot of work" part of this equation is that every stem must be cut close to the ground and treated with herbicide, or an herbicide that will penetrate the bark must be applied to the base of every stem. We have been doing this work mainly when the Bog is frozen and it is easier to get around, and when there is less risk that the herbicide will affect non-targeted native plants. Working in remote parts of the Bog, even in the winter, just getting to and around in the work site can be a daunting task. Thank God or Mother Nature for energetic, fit, mostly young, intrepid people who are deeply committed to the care of our prized natural areas.

In 1991 the Wisconsin DNR and the UWM Field Station began removing buckthorn from selected areas of the Bog that were defined as "exclusion areas". The idea was to keep representative examples of some of the native plant communities of the Bog relatively unaffected by buckthorn. The strategy is to remove all buckthorn that are big enough to produce fruits, and then to go back to those areas every few years to remove the plants that have grown to fruiting size. If seed production can be prevented for a long enough period, the density of buckthorn in the exclusion areas will decline to a level where long-term control is sustainable.

Volunteers have contributed substantially to our buckthorn control work, but in general, to accomplish the lion's share of the work that we have done, those energetic people working long hours need to eat, and groceries aren't free. As funding was available the DNR and Field Station continued working after that initial

1991 effort through 2008, with major efforts in 1991, 1992, 1996, 2001, and 2006 to 2008. Here enter the Friends of Cedarburg Bog.

Since 2010 FOCB has raised over \$73,000 to apply to this project through grants from We Energies Foundation, the Natural Resources Foundation, and the Knowles-Nelson Stewardship Program. The Wisconsin DNR has continued to provide some funding and crews when they are available, and the entire buckthorn control project in the Bog has been managed by a collaboration of FOCB with the DNR and Field Station.



Buckthorn's Cut Stems

We have developed a plan for control work in the Bog and identified three main priority areas for buckthorn control. We knew from vegetation surveys done by the Field Station in 1991 and 2006 that the northern part of the Bog had the lowest buckthorn density and also has very nice examples of the mixed conifer-hardwood swamp characteristic of the Bog. We defined one 250-acre priority control area at the north end of the Bog. All but 18 of those acres have had fruiting-sized buckthorn removed at least once.

The 63 acres of open string bog west of Long Lake was identified as another control priority because that typically-far-northern vegetation type is unique in Wisconsin and is home to a number of very rare plants, including our only Federally Threatened species, the prairie white fringed orchid.

A third, much smaller (5-acre) priority area was the place where this

whole exclusion project started and is located off the east end of the Field Station boardwalk loop. This area is considerably more accessible than the other two and is an excellent example of the more dense string bog habitat in the Bog.

Two other more minor areas where our control is focused is the area immediately bordering the Field Station boardwalk and the public access path to Mud Lake from Cedar Sauk Road.

Thanks to funding FOCB has generated, work funded by the DNR State Natural Areas Program, and FOCB volunteers, our efforts to provide relatively buckthorn-free areas in the Bog have been very active over the past three winters. In the winter of 2011-12, we again removed buckthorn from the 5-acre plot at the end of the boardwalk and cleared an adjacent area along the trail. In 2012-13 funds raised by FOCB were used to employ a DNR crew to cut and treat buckthorn from 22 acres in the open string bog and another 94 acres at the north end of the Bog. Another 10 acres was cleared by a FOCB-hired contractor.

This past winter (2013-14) a DNR Natural Areas crew removed buckthorn from 31 acres in the open string bog, and FOCB raised and spent over \$21,000 to hire independent contractors to cut and treat 67 acres at the north end of the Bog. In addition to that funded work, FOCB volunteers killed buckthorn along the western portion of the Field Station boardwalk and along the access trail to Mud Lake. See a map of the control areas at the end of this newsletter.

FOCB is committed to ongoing stewardship of the Cedarburg Bog as one of its highest priority missions and control of invasive plants is the most important part of that mission. There are few other ways that we can better show our love of the Bog. Volunteer opportunities abound; contact fieldstn@uwm.edu or 262-675-6844.

Jim Reinartz, UWM Field Station director

THOSE DAM BUILDERS

About 20 years ago, beavers discovered the outlet stream at the southwest corner of the Bog and started doing what beavers do best – building a dam and creating wetlands. The trouble was that there was already a wetland there, a pretty unique one. Should nature be allowed to take its course - leave the

beavers alone and allow the water level in the Bog to rise - or should the beavers be re-located?



Activity from Beavers on Trees

Beavers are considered “keystone species” because their actions affect the ecosystem and the resident plants and animals significantly. In some American Indian cultures, beavers were called the “sacred center” of the land because of the habitats they create.

Ultimately, a management decision was made. Because the Cedarburg Bog is such a high quality wetland that includes the southernmost string bog (or *patterned fen*) in North America, the beavers would have to take their act someplace else. Easier said than done.

In the words of Field Station Director Jim Reinartz, “*An entire season spent attempting to trap the beaver proved two things: 1) the Field Station staff were no expert trappers, and 2) the beaver were smarter than we were. We never did catch a beaver.*” So, the beaver trapping project turned into a dam disruption project and, Jim said, “*We had to content ourselves with regular trips to the Bog outlet to remove the ongoing dam construction project. Luckily, after three or four years of removing partially-built dams every two weeks, the beaver – still in the Bog – decided they really didn't need that dam and called off their dam building project.*” The outlet stream is still checked regularly for new beaver activity.

***Friends of the Cedarburg Bog
Supporting stewardship and
appreciation of the Cedarburg Bog
through land management,
preservation, research and education.***

WELCOME SHARON FANDEL

The Friends of the Cedarburg Bog is unusual as a Friends organization because we work with two partners, the University of Wisconsin-

Milwaukee, which operates the Field Station and maintains a boardwalk into the middle of the Bog, and The Wisconsin Department of Natural Resources. The DNR owns the majority of the Bog and administers the recreation plan of the State Natural Area.

Sharon Fandel is the new DNR representative on the Bog team. She works as an ecologist for the Bureau of Natural Heritage Conservation of the Wisconsin Department of Natural Resources, where her territory spans the southeastern counties of the state. In addition to providing expertise to other DNR programs involved in decisions and actions impacting natural communities and native species, she is also the assigned property manager for several State Natural Areas in southeastern Wisconsin. In that capacity, she spent some bitter days last winter cutting buckthorn in the Bog. Welcome aboard, Sharon.

BIRDING THE BOG

The Friends of the Cedarburg Bog and the UW-Milwaukee Field Station's annual spring birding field trip drew a nice crowd of around 20 people, including both a Webelos and a Daisy Scout, and identified 51 different species that are residents of Ozaukee County. The June 1 trip was led by Friends board member John O'Donnell, assisted by former board president Carl Schwartz, state coordinator for Bird City Wisconsin.



Sandhill Crane

The Field Station owns almost 80 acres of one of the finest mature beech-maple forests remaining in southeastern WI. Like the Bog, the beech-maple forest has been designated a State Natural Area and is classified as a National Natural Landmark by the Department of Interior. The hike spent most of its allotted two hours from 6:30 am to 8:30 am on Sunday, June 1 in the upland woods. Fortunately, most of the crowd was willing to go into overtime when John offered to extend the trip so that folks could enjoy the fauna and flora of the Bog itself with a hike out the boardwalk.

Highlights included long, good looks at a Scarlet Tanager, Blue-winged Warbler Great Crested Flycatcher and brief looks at several Ovenbirds (all of them shouting TEACHER! TEACHER! TEACHER!). Five species of woodpeckers, six flycatchers, four warblers, and five sparrows were observed. And then there was the young fawn, frozen in its tracks only scant feet from us as we stood outside the Field Station. The full list can be seen on *eBird* (a valuable resource) at

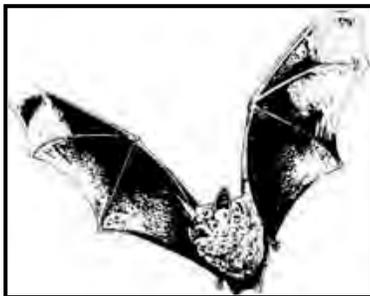
<http://ebird.org/ebird/wi/view/checklist?subID=S18664192>.

Carl Schwartz, former FOCB Board

DREAM TIME DOWN UNDER

A Monologue by Roger Kuhns

Journey through gold mining towns to backwater Aboriginal villages. Discover the resilience of the human spirit and the imperatives of relationships in an ancient geologic cradle in this true story that crosses dimensions, time, and lives. Roger delivers his monologue at **Riveredge, July 15, 7 PM**. A \$5 donation suggested.



ENDANGERED BATS?

On a warm summer evening in the Bog, you can usually see – or just barely hear – bats flying about attempting to eat as many mosquitoes as possible. Wisconsin is home to seven species of bats, all of which are insectivorous. Favorite

foods include mosquitoes, but there are many species of insects that they readily feed on, including moths, beetles, cicadas, and leafhoppers.

Of our seven bat species, four of them are hibernatory bats. Like bears, they spend their winter months hibernating in Wisconsin. However, unlike bears, they don't have a thick layer of fat to live on when they hibernate. Bats weigh a few ounces, and gain less than an ounce of fat to help them survive the winter. They are very picky about choosing a hibernation location and prefer caves and underground mine systems. They need a winter home that is cool and somewhat moist. This allows them to slow their metabolism greatly in order to survive on their tiny fat reserve. In fact, if a bat is awakened during hibernation, the activity of waking up may use up the last of its fat reserve, making it unable to survive the rest of the winter.

Unfortunately for Wisconsin's hibernatory bats, a killer fungus has been found in the southwestern corner of the state. White-nose syndrome is a fungus that lives in cool damp caves, and it infects the skin of hibernating bats. The fungus damages the skin, and that damage interferes with hibernation. Bats infected with the fungus cannot regulate their metabolism to hibernate properly, and most will die. White-nose syndrome is 95-100% fatal to hibernating bats. It was first found in a cave in upstate New York in 2006 and has spread to 25 states including Wisconsin, Alabama, Maine, and Ontario, Canada. The US Fish and Wildlife Service is concerned that this fungus may cause regional extinction of bats throughout the US. It has already killed more than 5.5

million bats in the Northeast US. To learn about white-nose syndrome, go to whitenosesyndrome.org.

There is a great deal of research going on today to understand how this fungus spreads, if there is a way to kill the fungus (without destroying the entire flora and fauna within a cave), and methods to slow the spread of the fungus. Caving groups have been very helpful by ensuring their members are aware of this terrible disease and disinfect their equipment before and after going into a cave that contains bats. Certain caves have even been closed to human access to provide safe habitat to bats.

Why does this matter? A 2011 study by the Department of the Interior determined that if bats in the US become extinct, there will be additional costs to agriculture of approximately 3.7 billion dollars a year. Bats eat hundreds of tons of insects each year; if the bats didn't eat the insects, farmers would apply a great deal more pesticides. In some parts of the country and the world, bats are important pollinators of fruit and nut trees.

So when you spend an evening in the Bog, and see groups of bats swirling through the night air, enjoy the sight and appreciate their spectacular contribution to the environment.

Sue Schumacher, FOCB Board



Gray Treefrog

CALENDAR

Look for more events at the treasuresofoz.org/calendar.

Discovering Dragonflies

July 19, 10 AM to 3 PM
Learn to identify and document the dragonflies and damselflies of Riveredge. Join us for part of the day or bring a bag lunch and stay all day. Binoculars, especially close-focus styles, are helpful. Wear good field shoes.
Location: **Riveredge**, 4458 Hawthorne Dr, Saukville

Fly In Celebration

August 23, 3:30 PM to 10 PM

Join the Ozaukee Washington Land Trust for their annual celebration of our brotherhood of the land. Self-guided walks, social hour, silent auction, raffles, and music. **5:30** - Supper featuring local foods, catered by Shully's. Register at owl.org/fly-in or 262-338-1794. Location: **Forest Beach Migratory Preserve**, 4970 Country Club Rd, Port Washington

8th Annual Eat Local Resource Fair: Navigating the Local Food Network

September 6, 11 AM to 3 PM
Discover options for bakery, cheese, meat, beverages, and

more. Have a lunch featuring local ingredients, attend cooking demos, gather recipe ideas, and tips for eating locally all year. Location: **Urban Ecology Center, Riverside Park**, 1500 E. Park Pl, Milwaukee
Fee: Free, donations appreciated

This Old Barn - Big Cedar Bluegrass Band Concert

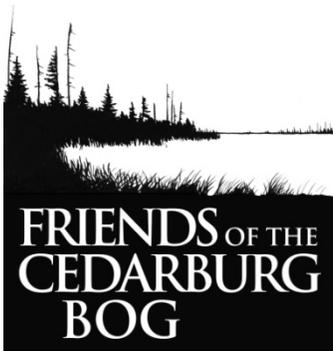
Sept 12, 5:30 PM to 9:30 PM
Call 262-335-5080 or visit laclawrann.org/index.php/this-old-barn for more info.
Location: **Lac Lawrann Conservancy**, 300 Schmidt Rd, West Bend, laclawrann.org



Sturgeon

Sturgeon Fest – The 9th Year

September 27, 11 AM to 3 PM
Celebrate the release of a new generation of lake sturgeon. Release a sturgeon. Activities for kids, food for sale, and other attractions. For more info or to sponsor a fish, call 800-287-8098 or visit riveredge.us.
Location: **Lakeshore State Park**, 500 N Harbor Dr, Milwaukee



UWM Field Station
3095 Blue Goose Road
Saukville, WI 53080

ADDRESS CORRECTION REQUESTED

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FRIENDS EVENTS

Join us for these Friends-sponsored events. **Unless otherwise stated**, walks meet at the UWM Field Station on Blue Goose Road. Space is limited - please register. For directions or to register, visit bogfriends.org (click on Events). Walks are free and open to the public; a \$5 donation appreciated. Questions? 262-675-6844 or fieldstn@uwm.edu.

PLEASE - NO PETS ALLOWED

Bog Bugs for Beginners

July 20, Noon to 2 PM
Curious about the insects around you? Find out about the lives of some Bog insects. **Meet at the north end of the Bog in the parking lot on Hwy 33 just west of Lakeland Road.** No restrooms.



Beech Nut

International Bog Day

July 27, 9 AM to Noon
Celebrate International Bog Day with a hike in the Cedarburg Bog. Find out why it isn't a bog.

Tour Sturgeon Facility at Riveredge

August 16, 1 PM to 2:30 PM
Join us as we take a tour of the streamside rearing facility at Riveredge Nature Center and meet these prehistoric fish that will be

released into Lake Michigan in fall and return to the river in 20 years. **Meet at the main interpretive building at Riveredge, 4458 Hawthorne Dr, Saukville, riveredge.us**

**Please join us for the
Annual Fall Potluck
(and mini-annual-meeting)
at the UWM Field Station**

October 5, 2014

3:00 - hikes

5:30 - eats

6:30 - campfire

6:30 - 6:45 meeting

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

If your last name starts with A to M, please bring a side dish.

If your last name starts with N to Z, please bring a dessert.

No dogs, please.

Please RSVP at bogfriends.org (click Events). Questions? fieldstn@uwm.edu or 262-675-6844.

Bats over the Bog

September 6, 7:30 PM to 8:30 PM
Led by Bill Mueller, Director, Western Great Lakes Bird and Bat Observatory. Learn about our local bats and their habits, and take part in our ongoing bat monitoring project.

Ethnobotany

September 16, 9AM to Noon
Wetland areas provide the most diverse habitats for plants used by Great Lakes tribes. Join ethnobotanist Lee Olsen and find out what can be learned from the Indian names. He will demonstrate utility uses (dyes, cordage, fiber, and construction), reveal medicinal plants, and identify food plants.

A Walk in the Beech woods

October 19, 12:30 PM to 3 PM
Maple-beech woods are spectacular in fall. Come learn what makes the community tick.

Fall Owl Prowl

October 24, 7 PM to 8:30 PM
Join the "Owl Meisters" for a night walk at Riveredge in search of these elusive masters of the night. Bundle up and bring binoculars. **Meet at Riveredge, 4458 Hawthorne Dr, Saukville, riveredge.us**

How do Trees Grow?

November 16, 12:30 PM to 3:30 PM
Part indoor talk and part outdoor walk, come and discover how trees grow.

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

UWM FIELD STATION WORKSHOPS – LAST CALL

Space is still available in these workshops. Sessions run 9 AM to 6 PM on Fridays and 8 AM to 3 PM on Saturdays. For more details or to register, visit http://www4.uwm.edu/fieldstation/workshops/workshops_sumfall09.cfm. Any questions? Email fieldstn@uwm.edu or call 262-675-6844.

August 2 & 3

Dragonflies & Damselflies: Identification and Ecology

September 27 & 28

Mushrooms and Other Fleshy Fungi: Identification and Ecology



Fungus

Buckthorn control

- Priority areas
- FOCB 13-14 (67ac)
- DNR 13-14 (30.6ac)
- Volunteer 13-14
- DNR 12-13 (116ac)
- FOCB 12-13 (10.4ac)
- 2011-12

