

The BogHaunter

the newsletter of the Friends of the Cedarburg Bog
Volume 12, Number 3 SUMMER 2017

CELEBRATE "INTERNATIONAL BOG DAY"

All bog enthusiasts, neighbors, families and friends are invited to the first annual "**International Bog Day 2017**" celebration on Sunday, July 23. The event will be held at the UW-Milwaukee Field Station beginning at noon (there's a bird walk at 6:30 AM for early risers).

"The tradition of International Bog Day goes back to Scotland, a place noted for its bogs," said John O'Donnell, Friends of the Cedarburg Bog Board member and chairman of the event. "They started to officially celebrate it in 1997 on the fourth Sunday each July, and the event has grown to the point where it is now celebrated in every country in the northern hemisphere."

The day was established to raise awareness about the need to protect these special ecosystems and demonstrate their benefits to the overall health of the planet. Starting at noon, the Friends' event will include live music, bog walks, a bog tour via drone, a live presentation of hawks and owls, refreshments, and information about the Cedarburg Bog and its array of wildlife and plants.



Pitcher plant flower

"As many people know, the Cedarburg Bog is one of the largest and most outstanding wetlands remaining in southeastern Wisconsin," said Jim Reinartz, Director of the Field Station. He added that the bog is registered as a

National Natural Landmark by the U.S. Department of the Interior and includes tamaracks, marshes, swamp hardwoods, and both deep and shallow bog lakes.



Round-leaved sundews await their prey

The bird walk will start at the UWM Field Station. Registration is not required. For more information, please contact the Friends of the Cedarburg Bog at 262-675-6844 or see www.bogfriends.org. "I encourage everyone to come and bring your friends and families to celebrate this gem that exists right in our own backyard," John said.

A few volunteers are still needed to help the day run smoothly. Contact John at johnodonnell132@gmail.com.

Schedule of Events - International Bog Day

6:30 – 8 AM Bird walk (meet at the UWM Field Station)

Noon - 4 PM: Ongoing face painting, music, prize drawings, refreshments

1 PM: Introduction -- "Why the bog matters" A drone tour of the Bog

2 PM: Live owls and hawks presentation

3 PM: Bog Walks & Talks (mammals, birds, rare plants and unique critters)

4:30 PM: Prize drawings and wrap up

BOARD TALK

Late summer is one of my absolute favorite times of the year in the Bog and... Oh, who am I kidding. I love every season in the Bog for different reasons. This time of year when I step out of my car I know I'm going to hear Eastern Towhees and Field Sparrows. Most of this year's new birds have fledged and are learning how to live – how to eat, how to fly, how to sing (three things I love to do too). If I step away from my car the tree frogs are winding down their activity but the green frogs are in full voice.

And how exciting that we have "discovered" International Bog Day. Can you think of a better place in Wisconsin to celebrate bogs?

I also am amazed at the talented, dedicated and passionate group of individuals that make up the Friends (Board Members, volunteers, community partners, neighbors). In a recent reflection about what the Friends group is up to, off the top of his head UWM Field Station Director Jim Reinartz rattled off: 1) Excellent educational programming; 2) Stewardship through grants and Bog Guardians; 3) Developing and strengthening the neighborhood community; 4) Sponsored Research; 5) Support of the DNR facilities; 6) Support of preservation; 7) Support of the Field Station programs and facilities; he said he could go on and I believe him.

As you read through another issue of the Bog Haunter I encourage you to think of friends, family members and other acquaintances who haven't yet experienced the magic of the Bog and bring them along to an event.

Enjoy your summer! Oh, and please come to our annual meeting on October 8 for a hike through the bog followed by a potluck dinner.

Tim Vargo, Friends President

BE ON THE LOOKOUT FOR!

No, they haven't been spotted in the Bog or the Field Station, but jumping worms (a.k.a. "crazy worms," "snake worms," and "Alabama jumpers") are knocking on the door. They are established in Wisconsin, and the full extent of their range is not known.

Originally from Southeast Asia, the jumping worm (*Amyntas agrestis*) was first found the southern Appalachians in 1993. It was spotted in the UW-Madison Arboretum in 2013, another in a long line of non-native species to make themselves at home in the state. Since then, multiple infestations have been reported in more than 15 Wisconsin counties (including the band from Milwaukee to Dane county).

They probably arrived in the root balls of trees or in shipments of garden plants. A quick internet search turns up sites where you can buy jumping worms for composting or bait (it is illegal to sell, introduce, transport, possess or propagate them in Wisconsin).

All of Wisconsin's earthworms are foreigners, and while they may help aerate lawns and gardens, they devastate the forest floor. Earthworms disturb the incredibly important, rich nursery that is produced by the decaying mulch below the trees, making it less friendly to seedlings, wildflowers, and a huge number of animals, large and small. Jumping worms turn this fertile layer into material that resembles coffee grounds and that doesn't hold moisture.

Jumping worms emerge early in spring and aggressively out-compete (even eliminate) other worm species. They leave cocoons full of eggs in the soil - eggs that are able to survive our increasingly mild winters.

Earthworm eradication is very difficult, but we can contain them or minimize the spread. Report any suspected jumping worms to the DNR.

Learn more about them at <http://dnr.wi.gov/wnrmag/2015/06/worms.htm>, and <https://sewisc.org/invasives/invasive-animals/389-crazy-worm>.

Yes - their names come from their habits of thrashing around on the

ground, and yes, they do jump into the air.

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

October 8
3 PM hike
5:30 PM eats
6:30 campfire (and meeting)

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

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

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

Please, No Pets.

Please RSVP at bogfriends.org
(Click on Events)

Questions?
Call 262-675-6844, or email
fieldstn@uwm.edu

HORSETAILS IN THE BOG

In the primordial bogs of a few hundred million years ago, the relatives of today's horsetails grew to the size of tall (90 foot) trees. Their fossilized remains are the basis of our coal industry, and as John Eastman wrote in The Book of Field and Roadside, "*the gases of their former plant tissues gain final release in our coal-fueled power plants.*" Today's horsetails are called "*living fossils,*" and the only remaining members of the family are about 15 species in the genus *Equisetum*. The tallest is a 30' tropical species.

DNA analysis shows that horsetails are akin to ferns, being most closely related to the Bog's Cinnamon, Interrupted, and Royal ferns, all of which bear spores on separate structures rather than on the back of their leaflets. There are two species of *Equisetums* on the Field Station plant list - Field horsetail and Swamp horsetail.



The spore-producing cones (strobili) of Field horsetail

Horsetails are non-flowering, vascular plants that produce spores rather than seeds. Their coarse, hollow, ridged, and jointed stems contain silicates, which explains common names like "pipes," "gunbright," and "scouring rush," and their branching pattern earned them the name "horsetail." Sections of the stem are joined by a toothed sheath, and the teeth are modified leaves. Photosynthesis occurs in the green stems, but not in the leaves. Their main method of spreading is by cloning from an underground stem called a rhizome, but the spores they make also result in new plants.

Horsetails, which also contain calcium, have been used as food for humans and livestock and as medicines, but caution is urged. They contain a substance that lowers Vitamin B1 levels and they absorb heavy metals from the soil and pass them on. Horsetails contain alkaloids that may be harmful, and livestock have been poisoned when horsetail is baled with hay. A few species of insects and some wildlife will eat it.

Field horsetail (*Equisetum arvense*) grows in damp, dry, sunny, and semi-shady habitats, often in poor soil. In early spring, a tan stem, topped by a cone-like structure called a *strobilis*, pushes up through the soil, produces spores, and then withers. It is followed by low, brushy-looking green sterile stalks that also grow from the rhizomes.

Swamp, River, or Water horsetail (*E. fluviatile*) inhabits wetlands across the northern half of North America. Its two-to-three foot tall stalk rises from the water and may be bare or

have whorled branches. The fertile stalks have a cone at their tip.

To meet some of the other Bog ferns, join us for *Introduction to the Ferns* on September 17 at 10 AM.



Swamp or Water horsetail

SNAKES ALIVE!!

Eastern milk snakes (*Lampropeltis triangulum triangulum*), are the most beautiful of the half-dozen species of snakes that are found in the Cedarburg Bog and Field Station. They are "habitat generalists," equally at home in wetland edges, grasslands, woods, and around human habitations from Minnesota and Iowa to the Atlantic. They are common, but because they are nocturnal, they are seldom seen.

In some parts of their range and at some ages (their colors tend to be brighter when they are young), milk snakes resemble rattlesnakes, copperheads, and coral snakes (the second two don't occur in Wisconsin). This mimicry serves the snake well as a way to discourage predators, but it results in their being killed mistakenly by humans. Though they pretend to be, milk snakes are not poisonous; like many snakes, they vibrate the end of their tail like a rattlesnake when they are alarmed.

Milk snakes have a diagnostic light-colored "Y" or "V"-shaped mark on the back of their neck and a pattern of light and dark-colored bands that camouflage them on the leaves of the woodland floor. They measure 6" to 11" at hatching and an adult may grow to two to three feet long or more.

In early summer, females lay as many as 24 eggs in natural "incubators" - under boards or leaf litter or in the soil, and the eggs

hatch about two months later. A snake that survives its first year (the majority do not) may live as long as 12 years in the wild. Though solitary in summer, they spend the winter in communal dens in a state of *brumation*, which is like hibernation, but allows the snake to wake up when it's thirsty.

Young milk snakes eat invertebrates like earthworms, slugs and insects, and they graduate to mice, frogs, smaller snakes, and even fish as they get bigger. Their name comes from the old wives tale that they milk cows (a physical impossibility), but they do occupy barns, both for their cool shadiness and their rodent populations. They are constrictors that kill their prey by wrapping themselves around it.



Eastern milk snake

SECOND CHANCES

Every year, a few marsh marigolds bloom in the Bog in late fall. Some dandelions appear at the end of summer, too, as the declining number of daylight hours matches the photoperiod that stimulated them to bloom in the first place. Skunk cabbage buds poke up in the marsh, and a few spring peepers call in the woods. What's going on?

In the case of the peepers, photoperiod accounts for part of the answer, but warm fall weather is a factor, too. Skunk cabbage buds will stay tightly furled until it's time for them to bloom in spring, often melting their way through the snow to do so.

And the rest of them? Botanist Jim Reinartz, Director of the UWM Field Station, has some answers. "If plants that bloom in the spring are responding to the length of the day and the temperature, why don't they all bloom when that day length and temperature occurs again in the fall? There are probably two answers to this question, one simple, and one

that is currently fascinating plant physiologists and a hot topic of research. The simple answer is that many plants have used up all of their flower buds in the spring, buds that were formed the previous fall. In the fall flower buds are being formed for the following spring, and there just aren't any that are really ready to go.

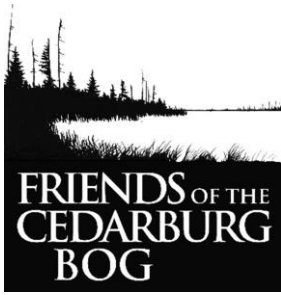
The second part of the story is more complicated. We all know that plants have genes that have the codes for building everything that makes the plant. We also all have the sense that every cell in the plant has a complete set of the genes that can make any part of the plant. But roots, stems, leaves, and flowers are all very different even though every cell has a complete set of instructions to make any of that. That is because careful control by hormones in the plant turn some genes on and other genes off; only certain genes are "expressed" in any part of the plant. (Isn't life amazing?)

The slow, accumulated, cold treatment that plants get over the winter causes a change in the expression of genes that readies the plant for flowering. Researchers are just now making discoveries about how the balance of different hormones in the plant can act as a timekeeper that judges the duration of the winter cold period. Once that plant clock, or calendar, has recorded a long enough period of cold the genes with the flowering instructions are turned on."



Speaker Julia Robeson searches for mammals that shelter under snake boards at our recent Mammals of the Area event.

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



UWM Field Station
3095 Blue Goose Road
Saukville, WI 53080

ADDRESS CORRECTION REQUESTED

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FRIENDS EVENTS

Unless otherwise noted, walks meet at the UWM Field Station on Blue Goose Rd. Space is limited, so please register. To register, visit bogfriends.org (click on Events). Walks are free and open to the public; a \$5 donation is appreciated. Questions? Contact (262) 675-6844 or fieldstn@uwm.edu. *Please, No Pets.*

Ethnobotany

July 8, 9 AM to noon.
Walk the trails with Lee Olson and find out how plants were used by early Native Americans.

Quarterly Board Meeting

August 3, 6 to 8 PM
UWM Field Station
Members welcome.

Celebrate the Bog

July 23, 1 to 4:30 PM
International Bog Day
See information elsewhere in this newsletter.

Dragonflies and Butterflies for Beginners

August 6, 10 AM to noon
Find out about the life styles of these flashy, airborne insects. This event will meet at the **North end of the Bog**, in

the parking lot off Hwy 33. No bathroom facilities.

Foraging

August 20, 9 AM to noon
We're surrounded by edible plants. Learn how to identify and harvest some of them.

Introduction to the Ferns

September 17, 10 AM to 12:30 PM
What are ferns and how do they

grow? This event will meet at the **North end of the Bog**, in the parking lot off Hwy 33. No bathroom facilities.

Ethnobotany

September 23, 9 AM to noon
Find out what plants were needed by local Indians as they prepared for winter.

Fall Potluck and mini-Annual Meeting

October 8, 3 to 7 PM
See information elsewhere in this newsletter

CALENDAR

See the *Treasures of Oz* website treasuresofoz.org and the websites of our partner organizations for more events and for more details about these and other events.

MAPS Banding

July 8, 15, 22 and August 5, 7 to 10 AM **RNC**
Visitors are welcome to see how resident song birds are mist-netted, extracted and banded by licensed bird banders (weather permitting). Find out what this long-term project is telling us.
Registration requested – for more information or to register, call Mary Holleback at 262-416-1224.

Canine Scent Day

July 15, 1 to 3 PM **MNP**
Conservation dogs are trained to help researchers by identifying certain plants and animals in the field. Celebrate the MNP's dog Tilia's first year of work and research. There will be a short demonstration and then we will celebrate Tilia's first birthday with cake and games.
This event is free and open to the public.

Discovering Dragonflies

July 22, 10 AM to 3 PM **RNC**
Join us as we identify and census Riveredge's dragonflies and damselflies. Come for all or part of

the count. Bring binoculars if you have them and a bag lunch if desired, wear good walking shoes. Registration requested – for more information or to register, call Mary Holleback at 262-416-1224.

Knee Deep in Prairie

August 25, 8 AM to 4 PM **RNC**
Celebrate prairies with walks and workshops and enjoy a catered lunch with keynote speaker, forager Sam Thayer. Sessions range from learning how to plant a prairie in your backyard to learning about the wildlife that call prairies home. Registration required.

Wild Edibles Workshop

August 26, 8 AM to 5 PM **RNC**
Join forager and author Sam Thayer for a day of foraging, identifying, and feasting from the landscape at Riveredge.
Registration required. To register and for fees, see the RNC website.

Monarch Tagging Program

September 9, 10 AM to noon **MNP**
Come help tag Monarchs before their epic journey to Mexico. In cooperation with the conservation research program Monarch Watch.

Nets and tags will be provided. This event is free and open to the public. To register, contact jnickels@mequonnaturepreserve.org.

Sturgeon Fest

September 30, 11 AM to 3 PM **RNC**
Join us to celebrate the release of the latest crop of young Lake Sturgeon. Raised at Riveredge and imprinted on Milwaukee River water, they will return to the river to spawn in 15 to 20 years. For more information or to register to release a fish, go to the RNC website or call 800-287-8098.
At Lakeshore State Park, Milwaukee.

RNC – Riveredge Nature Center
4458 County Hwy Y, Saukville
riveredgenaturecenter.org
(262) 375-2715 (800) 287-8098

MNP – Mequon Nature Preserve
8200 W County Line Rd, Mequon
mequonnaturepreserve.org
(262) 242-8055