

WOOD FROGS CONCERT

There's something primal about standing at the edge of a pool when the wood frogs are breeding. It's an all-out, no-holds-barred (back to that in a minute) event.

Along with the far-more common spring peepers (whose spring chorus can be a religious experience), wood frogs (*Lithobates sylvaticus*) are among the Bog's earliest singers, often starting their courtship when ice still edges the ponds. Their calls have been compared to quacking, barking, or chuckling.

Frogs vocalize by forcing air out of their lungs, through their throat, and into a loose pouch of skin under their chin called a vocal sac (leopard and wood frogs have two vocal sacs). Air passing over vocal chords causes them to vibrate, producing sound. In the process, the vocal sac puffs up like a big bubblegum bubble. The air in the vocal sac can be "inhaled" again, deflating the vocal sacs and producing more sound on its way back into the lungs.



Male Wood frog calling

What's all the racket about? Wood frogs are terrestrial, spending the summer on the forest floor and hibernating in winter under soil, leaf litter or logs. They literally freeze - no heartbeat or respiration or brain waves or metabolism. Brought back to life by warming weather, they travel to a pond to breed. Frogs that live and overwinter *in* the water tend

to have softer calls because their audience is already there; wood frogs, peepers, and other terrestrial frogs call loudly, summoning females from woodland to water.



Wood frog pair

It's called "explosive breeding" – everybody into the pool! Spring peepers are marathoners, calling for six weeks and more; but wood frogs sprint – they start, peak, and grow silent in a stretch of about a week before leaving the water and resuming their solitary lives on land. It's a huge expenditure of energy at a time of year when frog food is scarce, so wood frog breeding is fueled by fat stored during the previous fall.

No holds barred? In some frog species, females choose among the available males. In the chaos of a pond in late April, there's little time to choose. Female wood frogs are larger than males, and males instinctively grab the biggest frogs they can find (more size = more eggs). She looks for older (presumably more fertile/fit) males. A frog's close-up vision is poor; if he grabs a thin female, he will release her, but if he mistakenly clasps another male, a "back off" vocalization from the "arab-ee" quickly informs him of his mistake (apparently, some holds are barred).

Amphibian eggs don't have a tough shell, so they must be laid in water, and wood frogs prefer the fish-free water of ephemeral/seasonal ponds. They breed early and quickly to give their tadpoles a chance to mature before the pond dries up.

A wood frog's cluster of 1,000 to 3,000 eggs is surrounded by a gelatinous substance and may be attached to vegetation or float free. After a short while, green algae grow in the gelatin and provide camouflage. Several females may lay eggs in a big mass – since hatching time depends on water temperature, the large, dark raft of eggs acts as an effective solar collector, raising the temperature in its center by several degrees and giving those eggs an advantage.

Wood frogs eat and are eaten by a large number of organisms. Tadpoles feed on algae and decaying organic matter (and sometimes, on amphibian eggs), and adults feed on small invertebrates like insects, spiders, slugs, caterpillars, and worms.

Tadpoles are eaten by predaceous diving beetles, water bugs, and salamander larvae, and snakes, herons, raccoons, skunks, and mink prey on adults. Tadpoles develop poison glands as they age, and skin secretions of adults discourage a single predator - shrews.



Wood frog

Wood frogs occupy a wedge of North America from Alaska to Nova Scotia to the southern Appalachians. Their range extends into the Arctic Circle, farther north than any other frog. They come in a variety of browns, bronzes, and tans; they have a white line on their upper "lip." and most sport a black mask through their eyes

Join us for a spring frog walk. To practice identifying frog calls, check http://www.umesc.usgs.gov/terrestrial/amphibians/armi/frog calls.html and

http://dnr.wi.gov/org/caer/ce/eek/cri tter/amphibian/frogident.htm



White trillium

PASS IT ON

People join an organization like the Friends for a variety of reasons – They've met the Bog in person and are passionate about its preservation. They've never seen it, but the Cedarburg Bog has captured their imagination. They believe in the work that the Friends are doing and want to help fund it. They want to support stewardship of a natural area in their neighborhood.

Whatever your reason, there's no better advertisement than a satisfied customer. Whatever your reason, help us spread the word! Why not recommend the Friends to a friend or give a one-year membership as a gift? And, if you haven't already done so, plan on attending a Friends' event and meeting the Bog in person.

AMELANCHIER

A scientific name identifies an organism as a single, unique species on the planet. Common names reflect how it is experienced where the rubber hits the road and may refer to a species' appearance, smell, feel, uses, etc. *Amelanchier arborea* has a bunch of names – *Amelanchier* (it's often called by its genus name), shadbush, serviceberry (sarvisberry in New England), and Juneberry, to

name a few. Like the domestic apple, it's in the Rose family.

There are at least 20 Amelanchier species in North America, and identification can be tricky because they hybridize. The Bog's species, Amalanchier arborea, lives east of the Great Plains and is also called common or downy serviceberry because its young leaves are wooly.

Amelanchier is a tree of the understory and is an early - and showy - bloomer that flowers before its leaves appear. It's a sun-lover, growing in open, deciduous woods, both dry and damp, and at the edges of wetlands. Although they can exceed 40' in height, they sometimes look shrub-like with multiple trunks, and a 25' Amelanchier is a tall Amelanchier. The bark on the trunk is gray, and the branches are brownish, the crown is narrow, and their oval leaves are finely toothed. Reddish-purple fruits ripen in early summer.



Amelanchier

The fruits are an important food for birds and other wildlife, which spread their seeds. People eat them, too, in spite of their seediness (80,000 seeds per pound of fruit, says one source). The fruit is sweet and tasty. Historically, Juneberries were eaten by Native Americans fresh and dried, and were pounded with dried meat to make pemmican, the ultimate trail mix bar. Lewis and Clark wrote about a berry, probably June-berry, which was used in breads or was pounded into a loaf that weighed ten to fifteen pounds. Pieces of the loaf could be broken off and used as needed or cooked in stews. Maple sapor maple syrup or water was used to reconstitute dried fruit.

Parts of the plant were used medicinally. The fruit was so important to Native Americans that "take some June berry with you" was an Ojibwe farewell. The wood was used to make tool handles, baskets, furniture, rope, and arrows.

Shadbush – because in the East, the tree blooms as the shad fish are swimming upstream to spawn.

Juneberry for the ripening fruits. And service berry, because in bye-gone days, the tree was in bloom when the snow finally melted enough for the circuit-riding preachers to reach isolated communities and perform any religious services that were needed.

MASTER PLAN UPDATE

In order to move the Master Plan forward and resolve issues surrounding a proposed boardwalk, boat storage, and signage, the DNR convened a stakeholder group of users and potential users of Mud Lake. The FOCB, duck hunters, Field Station staff, birders, and silent sports were represented. They met three times from December to February, the discussions were thoughtful and diplomatic, and the participants came to a consensus on the questions posed by the DNR. This was a nice opportunity to "meet our neighbors."

The group's recommendations were submitted to the WDNR, brought to Division and Department leadership in late January, and received full approval and permission to incorporate the details into the draft master plan and re-submit it for the 21-day public review. It's possible that the Northern Kettle Moraine Region Master Plan will be in front of the Natural Resources Board at their May meeting in Madison.

If the stars align, the Master Plan will be approved and the boardwalk can be built soon thereafter. The FOCB has committed to funding and building the approved boardwalk. If you care to donate funds or effort in support of this exciting project, contact Bruce at bogfriends@gmail.com.

If you participated in the public comment process in the past, thank you – your voices make a difference. We'll let you know when comments will be accepted again.



Leopard frog

FIELD STATION WORKSHOPS

Topics of the Natural History Workshops offered through the UWM Field Station have been posted. Most are two day, Friday-Saturday programs. This year's topics and dates are:

- Invasive Plant Management Techniques (May 21)
- Field Herpetology: Identification of Wisconsin Amphibians and Reptiles (June 3 & 4; June 5 optional)
- Sedges: Identification and Ecology (June 10 & 11)
- Vegetation of Wisconsin (June 13 to 18)
- Wetland Delineation (July 8 & 9)
- Forest Communities of Southeastern Wisconsin (July 29 & 30)
- Wetland Hydrology (August 5 & 6)
- Unraveling the Mysteries of Bird Migration (September 16 & 17)
- Creative Writing about the Natural World (October 14 & 15)

Workshops are offered at the college level, and some may be taken for college credit. For course descriptions, fees, and registration, check the UWM Field Station website www.edu/fieldstation/workshops/.

The Friends of the Cedarburg
Bog supports stewardship,
understanding, and
appreciation of the Bog
through land management,
preservation, research, and
education.

WILD ORCHIDS OF OZAUKEE AND WASHINGTON COUNTIES

Showy and yellow lady's slippers, ladies' tresses, and fringed orchids are just a few of the many orchids native to Washington and Ozaukee Counties. On May 17, The Friends will partner with Riveredge Nature Center and the "Science for Everyone" series to present a two-part program on native orchids.

From 3:00 to 5:00, orchid specialist Melissa Curran, joined by Kate Redmond and Jim Reinartz, will talk about the status, distribution and lifestyles of the wild orchids of the area. Pre-registration for the afternoon program is required. There is a \$5 fee for non-Riveredge members.



Showy lady's slipper

During an evening program for the "Science for Everyone" series, Melissa Curran will share with us the exciting, cutting edge research on orchid restoration that is in progress at the Ridges Sanctuary in Door County. "Science for Everyone" starts at 7:00 PM; both programs will be held at Riveredge Nature Center.

TREASURES OF OZ

Download a passport and visit seven Treasures of Lake Michigan at the annual *Treasures of Oz* celebration on June 18th. This year's stops are at Donges Bay Gorge, Virmond Park, Lion's Den Gorge Nature Preserve, South Beach in Port Washington, Upper Lake Park in Port Washington, Cedar Grove US Fish & Wildlife

Waterfowl Production Area, and Forest Beach Migratory Preserve. Volunteers will be present between 9 AM and 3 PM to explain the sites.

Finish your tour at Forest Beach Migratory Preserve (both a "Treasure" and the celebration headquarters) where displays, a silent auction, raffles, food, and music will be available beginning at noon. Special features include wildlife expert Randy Hetzel and his collection of native reptiles and amphibians, and a presentation by Jean Lord, of the Pine View Wildlife Rehabilitation Center.

Information and passports will be available at www.treasuresofoz.org.

PHENOLOGY WORKSHOP

Phenology is the study of the timing of events in the life cycles of plants and animals, such as leafing out and flowering of plants or egg laying in birds. Blooming dates, the first warblers, frog calls, etc. all tend to occur in about the same order from year to year, it's the start dates that vary.

The UWM Field Station will host a Phenology Workshop on Friday, May 20, from 1 to 4:00 PM. Participants will walk in the woods, find out about the long term phenology studies at the Field Station, and learn about the USA National Phenology network website and about citizen contributions to this study.

For more information or to attend the workshop, contact the UWM Field Station at fieldstn@uwm.edu or 262-675-6844.



Needles emerge on a tamarack spur

ADDRESS CORRECTION REQUESTED

UWM Field Station 3095 Blue Goose Road Saukville, WI 53080



EDUCATION AND EVENTS

The Education and Events Committee is charged with the mission of conducting events and overseeing educational outreach for purposes of engaging community-wide support to maintain and enhance the ecological integrity of the Cedarburg Bog. Interpretative signage, reports, annual meetings, nature walks, birding programs, ecologically oriented workshops, and citizen science projects fall under the purview of the E & E Committee. Our goal is to host events that will engage the community in a personal, up close involvement in the environmental workings of this amazing complex -- the Cedarburg Bog!

Most of our events take place "in the field" at the Bog, some programs are partnered with other environmental organizations. Our programs are specific (owl prowls, edible plant forages, and dragonfly walks) or more general (wetland ecology, or phenology.) The E & E Committee is continually finding ways to make the Cedarburg Bog complex come alive in the hearts and minds of event participants and members of the overall community.

Upcoming events in the spring of 2016 are listed in the Friends' Events box on the calendar page and on our website (bogfriends.org). Please pass the information on to others.

If you choose to become a member of the Friends of the Cedarburg Bog,

you will become part of the "in group" where inside information on Bog events and really interesting happenings comes directly to your inbox -- assuming that you share your email address with us! You won't miss a thing if you become a member; also, we are exploring the possibility of having some events for "members only." Check out our website (bogfriends.org) to become a member!

John O'Donnell, Board Member



Bog Rosemary

2015 NEST BOX RESULTS

Since 2012 FOCB has installed 14 Wood Duck nest boxes and four small owl boxes around the Cedarburg Bog.

Eleven of the 14 duck boxes (79%) were used for nesting in 2015; one of them by a Hooded Merganser hen. Successful fledging occurred from nine of the 11 used boxes. One of the unsuccessful nests was taken over by a squirrel. The other abandoned box contained a clutch of 12 intact Wood Duck eggs, indicating that the hen may have been killed, or abandoned the nest for some other reason.

Two of the four small owl boxes were used for roosting in 2015 based on the presence of owl pellets, bird feathers, and other bird parts such as beaks. The owl occupants were most likely Eastern Screech Owls or possibly a Northern Saw-whet Owl. There is no evidence of owls using any of the four boxes for nesting since they were installed in 2012.

Nest box use has been steadily increasing since the first installations in 2012. Only one of the four boxes installed in 2012 was used that year. By 2014, 4 of the ten boxes installed were being used. Last year's usage of 11 of 14 nest boxes (79%) suggests that the Wood Ducks and at least one Hooded Merganser hen are increasingly being drawn to nesting in the boxes. Perhaps they are more secure than tree cavity nests that are more vulnerable to raccoons and other predators. Studies have documented that experienced hens and their offspring are likely in subsequent years to reuse boxes where successful nesting has already occurred.

Many thanks to Tom Bartz, Bruce Ross, Nathaniel Reinartz, Matt Learned, Dennis Goldsmith, and Jim Duncan for providing many hours of volunteer assistance with the construction, installation, maintenance, and/or monitoring of nest boxes from 2015 into early 2016.

John O'Donnell, Board Member

CALENDAR

For more events and activities, please visit treasuresofoz.org.

Noel J. Cutright Bird Club

Meetings are free and open to the public. Held at **RNC** on the 1st Tuesday of each month except December. Meetings start at 7 PM, during Daylight Saving Time bird hikes leave from the main parking lot at 6 PM.

Science for Everyone

Programs on Natural History held at **RNC** on the 3rd Tuesday of the month and held at **LLC** on the 4th Tuesday of the month. 7 PM to 8:15 PM. For program topics and driving directions, check the RNC or LLC websites. Event is free, \$5 donations appreciated.

Earth Day

April 22, 5:30 to 7 PM MNP

John Gurda will speak about the History of Milwaukee and the impact water has on it. Space is limited and reservations required.

Bluebird Walk

April 23, 10 to 11 AM LLC

Learn about bluebirds and about setting up and monitoring bluebird houses in your back yard. Register for Class # 10509-01 on the LLC website.

Earth Day Work and Learn

April 23, 9 AM to 1:30 PM RNC

Opportunities for groups, families and folks of all ages to get involved in activities that promote the health of our community and planet. A spaghetti lunch will be served at noon. Check the website for more information. Please call Director of Volunteer Resources, Pat Fox-Schindler, if you plan to help. Free

MNP Bird Count

May 7, 7:30 to 9:30 AM MNP

Joins us for a fund-raising birdathon to benefit bird conservation projects in the state. For info about collecting pledges, contact Emily at 262-242-8055 x 107 or emilyb@mequonnaturepreserve.org. Free

Annual Wildflower Sale

May 7, 9 AM to 1 PM LLC

Wildflowers of the woods, fields and wetlands, perennials, garden art, and so much more.

Mother's Day Wildflower Walk

May 8, 1 to 2:30 PM RNC

Find out about wildflowers as you stroll our trails with a special Mom. Register in advance on the RNC website. Fee: Moms Free, Other non-members and Trail Pass members \$5; All Access members Free

International Migratory Bird Day

May 14, 6 AM through mid-afternoon FBMP

The Ozaukee-Washington Land Trust is celebrating IMBD at 3 sites, starting with a 6:00 AM bird walk at Lion's Den Gorge Nature Preserve. The event will feature guest speakers, tours, and the third annual bird-house contest at Forest Beach Migratory Preserve. For details and to register your birdhouse, see http://owlt.org/international-migratory-bird-day.

Frog Fest

May 14, 1 to 4 PM RNC

Join Riveredge Naturalists and search for frogs, tadpoles, salamanders and other creatures that live in our wetlands, and learn how to identify frogs by their calls. Bring the whole family; come for all or part of the program. Don't forget your boots. Pre-registration required for groups, recommended for others. Fee: Adults \$7, Children \$5

Wild Orchids of Ozaukee and Washington Counties

May 17, 3 to 5 PM and 7 to 8:15 PM RNC

See information elsewhere in the newsletter or at RNC website.

Birdathon-Bandathon

May 21, 6 AM to 4 PM RNC

Join the Noel J. Cutright Bird Club for this 28th annual birding and banding event at Riveredge Nature Center. Bird on your own; or to join a team birding the property email Carl Schwartz at cschwartz3@wi.rr.com. Please contact Carl to make a pledge. Follow the signs to the banding station and watch banders handle and record the birds. Come for all or part of the day. Free (donations to the club are encouraged).

Treasures of Oz - Treasures of Lake Michigan

June 18, 9 AM to 6 PM

Free and open to the public. See information at <u>treasuresofoz.org</u> and elsewhere in this newsletter.

Bat Ecology

June 8, 6:30 PM MNP

Learn about bat ecology from Bill Mueller, then hike the trails (weather permitting) and survey bats using monitoring equipment. Contact Jason at 262-242-8055, ext. 103, or jnickels@mequonnaturepreserve.org. Free

Invasive Plant ID class

June 22, 10 AM to Noon LLC

Learn to identify, remove, and dispose of invasive plants. Adults only, free, bring your work gloves. Pease register at the LLC website for class # 2053001

Butterfly Bonanza

June 25, 9:30 AM to 3 PM RNC

Learn to identify (butterfly review 8:30 AM) and document butterflies, and contribute to more than 25 years of butterfly counts. Join us for all or part of the day, wear walking shoes, and pack a bag lunch if you're staying for the day. Adults, children ages 12 & up with an adult are welcome. Free



Snowberry Clearwing Moth

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.

Friends of the Cedarburg Bog Quarterly Meeting

April 14, 7 to 9 PM Members welcome UWM Field Station

Woodcocks and Frogs

April 21, 7:30 to 9:30 PM

Spring is in the air – and the water. Join us as we stalk these spring noisemakers. Bring a flashlight.

At the North end of the Bog

May 1, 9 AM to Noon.

Explore the plant life at the north end of the Bog.

Trip will meet at the Hwy 33 parking lot. No bathrooms.

Frogs (and maybe Woodcocks)

May 5, 7:30 to 9:30 PM

Discover the "mid-season" frogs (and maybe one, last sky-dancing Woodcock).

Ethnobotany

May 14, 9 AM to Noon

Hike with ethnobotanist Lee Olsen and learn Native American uses for plants.

Orchids of Ozaukee and Washington Counties

May 17, 3 to 5 PM, 7 to 8:15 PM

See information elsewhere in the newsletter.

Bird Walk for Spring Migrants

May 21, 7 to 9 AM

Bring your binoculars and enjoy a morning at the peak of migration.

I WANT TO GIVE MORE! \$50.00

Spring Bird Walk

May 30, 6:30 to 8:30 AM

See and hear both Bog residents and late migrants.

A Walk in the Bog

June 26, 9 AM to Noon

Experience the Bog at the very start of summer.



Eastern comma butterfly

DID YOU KNOW...

...that some of the Bog's early-flying butterflies – Question marks, Commas and Mourning Cloaks - got a head start because they went through winter as adults? Their bodies saturated with a natural antifreeze, they stay in sheltered spots called *hibernacula*, sometimes emerging briefly in the warm days of late winter before tucking themselves back in.

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

LLC – Lac Lawrann Conservancy 300 Schmidt Rd, West Bend laclawrann.org (262) 335-5080

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

FBMP – Forest Beach Migratory Preserve 4970 Country Club Road, Belgium <u>owlt.org</u> (262) 338-1794

YES, I want to be a Friend!	I am interested in helping FOCB with	
Name(s)	Scientific studies	Office support
Address	Grant applications	Graphic design
City/State/Zip	Invasive species control Trail maintenance, construction	col Educational programs Computer support –
Phone Email Address		website or database
We will now contact you via email and send you our quarterly newsletter, The Bog Haunter, electronically.	Special events Other way I'd like to help:	
f you do <u>NOT</u> wish to receive The Bog Haunter via email and prefer to receive a paper copy via regu	lar mail, please check here:	_
ANNUAL DUES: \$25 \$ (ANY DONATIONS	OVER \$25.00 INCLUDE	ANNUAL MEMBERSHIP)

\$100.00



BY CHECK to "FRIENDS OF CEDARBURG BOG, INC." to Friends of Cedarburg Bog, c/o UWM Field Station, 3095 Blue Goose Road, Saukville, WI 53080 OR ONLINE AT WWW.BOGFRIENDS.ORG/JOIN-THE-FRIENDS.