

# The BogHaunter

the newsletter of the Friends of the Cedarburg Bog  
Volume 9, Number 2 SPRING 2014

## MEET THE ARUMS

One of the Bog's earliest-blooming plants, the skunk cabbage, is a member of the Arum family, Araceae. There are more than 3700 Arum species worldwide (mostly tropical), and the four members of the family that grow within the Bog – skunk cabbage, Jack-in-the-pulpit, wild calla, and arrow arum – are some of our oddest-looking wildflowers.

Arums are famous for their decadent odor, for containing calcium oxalate crystals that make eating them painful and even dangerous, and for the ability of many species to produce heat. They are not poisonous to touch, but both the odor and the crystals discourage grazers. Native Americans used the rhizomes, seeds or leaves of all four Bog species as food or medicine – only after disarming the calcium oxalate by long cooking or drying.

Many arums grow from thick, underground stems called rhizomes or rootstalks that have roots sprouting from them. They can live for a long time, and their root systems may get so extensive that they're almost impossible to dig up. Wild calla, skunk cabbage, and arrow arum like to grow with their feet in or near the water, while Jack-in-the-pulpit grows in the slightly dryer ground of rich, damp woods, shady wetland edges, and hummocks. Like the habitat that surrounds them, the tissues of their leaves and flowers are very watery, and they decay quickly.

Although the structures that surround their flowers may be showy, you must look closely to see the flowers themselves. Tiny male and female flowers are borne on a fleshy structure called a *spadix*, and the spadix is hooded by a modified leaf called a *spathe* - "Jack" is the spadix, and his "pulpit" is the spathe. Most Arums have female flowers at the base of the spadix and male flowers above them. They are not self-pollinating; a plant's female

flowers bloom first and then become unreceptive when its male flowers start releasing pollen.



Skunk Cabbage

Heat is generated when the plant uses oxygen and an aspirin-like substance to break down stored starches. That heat broadcasts the plant's pungent odor, and it also attracts insects that climb inside the spathe to warm up and thus become unintentional pollinators.

Skunk cabbage (*Symplocarpus foetidus*) blooms right at ground level, so the heat it produces can melt the spring snow around it. The temperature inside its rust-colored spathe may be more than thirty degrees higher than that of the ambient air, and that protects the plant on frosty nights. The shape of the spathe produces a vortex of air within, pulling cool air in near the warm spadix at the base and circulating it upwards. It blooms when few insects are out, and its flowers are pollinated by heat-seeking bees and stoneflies and by fungus gnats, carrion-loving flies, beetles, and other insects accustomed to following the scent of decomposition. Opportunistic spiders spin webs across a spathe opening.

Skunk cabbage may grow for decades, and the rhizome of an older plant can be a foot thick. Its roots are "contractile" – after the plant blooms, the roots contract slightly and snug the plant down into the soil. Conspicuous, cabbage-like leaves appear and unfurl only after the flowers have been fertilized. By August, these leaves are decaying.

Jack-in-the-pulpit (*Arisaema triphyllum*) is said to smell like fungi, and its chief pollinator is a small fly called a fungus gnat. The color of the spathe is variable, from pale green to burgundy-striped. In fall, the only sign of the plant is a tight cluster of bright red and orange fruits lying on the ground – food for Wild Turkey and Wood Thrushes.

Jack-in-the-pulpit plants can change genders during their lifetimes, and the gender for the next year is determined by late summer based on starches stored in the rhizome. In general, a young plant, or an older plant that is stressed or diseased, will have a single leaf stalk topped by three leaves and will bear male flowers. Older plants with a good food supply will grow two leaf stalks and bear female flowers. Why? It takes more energy to produce seeds.



Jack-in-the-Pulpit

Its name in the Algonquin language means "bulbous plant used for food," but some tribes called it "memory plant," a testament to the after-effects of eating it raw. Early settlers extracted starch from the plant for laundry purposes, as they had from a European arum called cuckoopint, and undoubtedly with the same results. The starch was very caustic to the hands of the laundress, and slightly less so to the garment's wearer.

Water arum or wild calla (*Calla palustris*) resembles but is not in the

same genus as the calla in the florist's shop, though that calla is also an arum. *Calla palustris* means "beauty of the swamp." Most wild callas have a single, white spathe, but some produce two or even three. It's a circumboreal species, found in northern zones of America, Europe and Asia.

Its flowers and heart-shaped leaves are borne on foot-long stalks that grow out of standing water from rhizomes submerged in the muck. Flower flies (family Syrphidae) are frequent visitors to the flowers, but its odor also attracts pond snails, surprising pollinators of wild calla.

Historically, people in Scandinavian countries harvested the rhizomes of wild calla, dried them, and ground them into flour that was used to make a bread called "famine bread."



Wild Calla

Arrow arum (*Peltandra virginica*) has a limited distribution in Wisconsin and is a relative newcomer to the Bog, where a specimen was collected in 1991. At present it is found only near Long Lake. A plant of eastern North America, it is creeping west, aided by migrating birds that eat and spread its seeds and by people who introduce it intentionally. It's considered invasive in part of its range.

Unlike the other arums, arrow arum's large rhizome produces a thicket of stalks and leaves that can be than three feet tall or taller. These thickets shelter a variety of wildlife, from dragonflies to fish to snakes to deer. It's able to survive in wetland soils where oxygen is scarce.

The flower resembles a slim, pale cattail encased in a sheath and is pollinated by several species of small flies. Its fruits are too heavy for their pulpy stalk, which bends toward the water, submerging the berries, planting some and allowing others to float away. Arrow arum berries are eaten by muskrats and several kinds of ducks, and possibly by snapping and painted turtles. Humans have

used the spadix and the cocoa-flavored seeds.



Arrow Arum

### GOT GAB?

The majority of Friends events are led by just a few guides. We are looking for a few people who can help us to introduce the public to the Bog. Potential leaders *do not* have to be knowledgeable about all things animal, mineral, and vegetable in the Bog; we'll train you. They *do* have to be interested in learning and be comfortable talking to a small group.

Sound like fun? Drop a snail mail to Kate Redmond, c/o the Friends mailing address on the newsletter.

### THE BOG'S MARSUPIAL

Opossums (*Didelphus virginianus*) are listed as common mammals on the UWM Field Station mammal list; that's not surprising, because the Bog represents the habitat "crossroads" it prefers. Remarkably adaptable, generalist omnivores, nomadic, and mainly nocturnal, possums are at home everywhere. They are increasingly successful urban and suburban dwellers, but their preferred habitats are woodlands and farmlands with water nearby, and although they are good swimmers, they are one of many species that takes advantage of the boardwalks in the Bog.

No story about opossums would be complete without an account of their remarkable spread throughout North America. They originated in Central America, and by 1492, their range included the southeastern US. They moved north and west as the settlers cleared the great forests and made roads; they probably reached Wisconsin before statehood, and their populations increased dramatically in the 1900's. Today, opossums live in much of the country east of the Rockies, and they are also found along the Pacific coast, where they were introduced.

They shouldn't be here. These are southern animals whose coats are not well insulated and whose hairless

ears and tails freeze and crack. They are not equipped physiologically to hibernate, though they do sleep in winter dens for several days at a time without the true hibernator's drop in body temperature. Then they must forage for food.

Fortunately for them, food is everywhere. As "opportunistic omnivores," they'll eat just about anything they find - fruit, insects, frogs, slugs, garbage, and road kill. They have the efficient immune systems of carrion eaters, are relatively unaffected by the bites of rattlesnakes, and rarely transmit rabies.



Possum

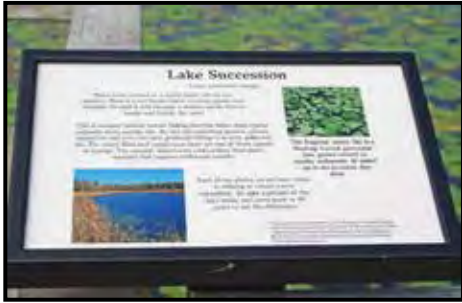
Alarmed possums may show all 50 teeth, hiss, growl or run away, but they are famous for "playing possum," an involuntary response to great stress. The "dead" animal curls up with eyes half-closed, stiffens, bares its teeth, salivates, and releases a bad-smelling musk. This "catatonic" state may last for minutes or hours, until twitching ears signal that the opossum is reviving enough to monitor its surroundings.

As marsupials, the honeybee-sized opossum young still look embryonic at birth and must find their way to the female's pouch, where they stay for the next two months until they are mouse-sized. The usual litter is about seven, and they ride on their mother's back after they leave the pouch. Cars, dogs, coyotes, Great-horned Owls, hawks and winter weather take their toll, and possums seldom live more than two years.

Opossums do not hang by their prehensile tails, except briefly, as youngsters, but they do use the tail for balance while running, as a fifth hand while climbing, and for carrying leaves and grass back to their dens.

What's in a name? The Algonquin name for the animal was "*aposoum*," meaning "white animal." That word

was corrupted by Captain John Smith, who called them "opossums." In 1608, Smith wrote that, "*An Opassum hath a head like a Swine, a taile like a rat and is of the bignes of a Cat. Under her belly she hath a bagge wherein she lodgeth, carrieth, and sucketh her young.*"



Trail Sign

### BOG EDUCATION

When the Friends of the Cedarburg Bog organization incorporated in 2005, education was recognized as an important part of our mission. The Education Committee, chaired by Mary Holleback, takes on a variety of outreach and education-related activities and also supports the projects of the Events and Stewardship Committees.

Some of the more visible projects of the committee have been developing trail signs for the north end of the Bog, seasonal information for the

kiosk in the Highway 33 parking lot, and checklists for birds, butterflies, and dragonflies that are available on-line and that will be in brochure boxes at the start of the north trail. A PowerPoint about the Bog has also been completed.

### TREASURES OF OZ

Grab your "passport" and spend June 14 exploring unique Ozaukee County natural areas. This year's Treasures include the Cedarburg Environmental Study Area, the new mountain bike park at Pleasant Valley Nature Park, the Ravine and Beach Natural Area at Lion's Den Gorge Nature Preserve, the hiking the trails at Mee-Kwon Park, the US Fish and Wildlife Service Belgium Waterfowl Production Area, and the Trinity Creek Wetland Area.

As always, all trails lead to Forest Beach Migratory Preserve where you can enjoy the 5-Star Bird Hotel, along with food, music, displays, live animals, raffles, and a silent auction. 9 AM to 3 PM - Guides will be available at all sites. Noon to 6 PM - Celebration at Forest Beach.

Sample each of them or just a few. Get your passport stamped – stamps can be traded for free raffle tickets. Check [Treasuresofoz.org](http://Treasuresofoz.org) for maps and site details; passports will be available by the end of May.

The 5th Annual Treasures of Oz celebration. A great opportunity for the family to see the unsung Natural areas of Ozaukee County!



Leatherleaf

### WELCOME KATIE

The Friends organization recently hired an Administrative Assistant for about twenty hours a month to handle tasks such as data entry, membership drive, newsletter formatting, and meeting minutes.

Katie Sparks currently works as a fundraising professional at Froedtert & the Medical College of Wisconsin, and has worked in this role at UWM (her alma mater). She is married to nature photographer Paul Sparks, who frequents the Bog. They have two sons and live in Glendale. Katie recognizes the critical role the Bog plays in our local community and the larger environment and is thrilled to join the FOCB as the first employee.

## FRIENDS' EVENTS

Join us for these Friends-sponsored events. *Unless otherwise stated*, walks meet at the UWM Field Station on Blue Goose Rd. Wading boots not needed; sandals not recommended. Space is limited. Registration requested. For directions or to register, visit [Bogfriends.org](http://Bogfriends.org) (click on Events tab). Walks are free and open to the public. \$5 donation appreciated. Questions? 262-675-6844 or [fieldstn@uwm.edu](mailto:fieldstn@uwm.edu).

PLEASE - NO PETS ALLOWED

#### Woodcocks and Frogs

April 24, 7:30 PM to 9:30 PM

The early spring frog chorus at the Field Station can be a religious experience. Witness the night sounds of frogs, woodcocks, cranes, other wetland noise-makers. Bring a flashlight.

#### Frogs (and maybe Woodcocks)

May 8, 7:30 PM to 9:30 PM

The calls of mid-season species of frogs join early spring species as other wetland noise-makers add their voices. Bring a flashlight.

#### At the North End of the Bog

May 11, 9 AM to Noon

Explore plant life at the north end of the Bog and learn why Watts Lake is different from the other lakes in the Bog. *Trip will meet at the Hwy 33 parking lot; no bathrooms.*

#### The Bog Wakes Up

May 25, 9 AM to Noon

Late spring? Early spring? Hike the boardwalk and experience the sights and sounds as the Bog wakes up.



Painted Turtle

#### Spring Bird Walk

June 1, 6:30 AM to 8:30 AM

Search for migrants and breeding birds of the Bog. Bring binoculars, dress for the weather.

#### The Bog in Bloom

June 29, 9 AM to Noon

Enjoy sights and sounds of summer in the Bog.

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

*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

**Volume 9, Number 2 SPRING 2014**

**CALENDAR**

More events: [treasuresofoz.org/calendar](http://treasuresofoz.org/calendar)

**Science for Everyone**

Public programs on Natural History

7 PM to 8:15 PM

3rd Tuesday of the month at RNC

4th Tuesday of the month at LLC

For information, topics, or driving directions, call RNC at 800-287-8098 or see [Riveredgenaturecenter.org](http://Riveredgenaturecenter.org).

Fee: Free (\$5 Donation Appreciated)



Leopard Frog

**Noel J. Cutright Bird Club**

1st Tuesday of the month

6 PM hike (Daylight Savings months)

7 PM program

May 6 "Sky Hunters Birds of Prey": a visit by birds from the Schlitz Audubon Nature Center's Raptor Center.

June 3 Centennial Commemoration of the Passenger Pigeon's Extinction.

Location: [RNC](http://RNC), Fee: Free

**Friends of the Cedarburg Bog Board Meeting**

April 17, 7 PM

Location: **UWM Field Station**

Members welcome.

**Earth Day: Earth is a Solar-Powered Juke Box**

April 22, 7 PM

Acoustic ecologist Gordon Hempton to speak on the importance of listening. His sound portraits are featured in PBS's documentary, *Vanishing Dawn Chorus*. For info, (262) 242-8055 or [Mequonnaturepreserve.org](http://Mequonnaturepreserve.org).

Location: MNP, Fee: Free

**Earth Day: Work & Learn Day**

April 26

- 9 AM to Noon - work with staff member

- Noon - spaghetti lunch

- Afternoon - more activities, including an update on Bat Monitoring Program

Opportunities for groups, families and individuals of all ages to get involved. Groups are requested to pre-register. Call 262-375-2715 to register. Location: [RNC](http://RNC), Fee: Free

**Become a Water Quality Monitor**

May 3, 9 AM to 3 PM

Learn to assess water quality of a stream or river. Volunteers learn to ID aquatic invertebrates and do 5 tests. Monitors conduct monthly tests in summer and submit their data on a statewide website. Call Mary Holleback 262-416-1224 to register. Location: [RNC](http://RNC), Fee: Free (\$5 donation appreciated)

**4<sup>th</sup> Annual Green Birding Challenge**

May 10, 6 AM to 1 PM

Join the Urban Ecology Center (UEC) for a fun day of green birding and support research at the UEC by collecting pledges for your efforts. All experience levels are welcome. For details or to register, call 414-964-8505 or visit [urbanecologycenter.org/greenbirdingchallenge](http://urbanecologycenter.org/greenbirdingchallenge)

Location: **Riverside Park UEC**, 1500 E. Park Pl. Milwaukee, Fee: Free

**Noel J. Cutright Bird Club Birdathon Bandathon**

May 10, 6 AM to 4 PM

Join us for all or part of the day as we try to see and band as many species as possible.

RNC - Riveredge Nature Center, 4458 Hawthorne Dr, Saukville, WI 53080, [Riveredgenaturecenter.org](http://Riveredgenaturecenter.org)  
 LLC - Lac Lawrann Conservancy, 300 Schmidt Rd, West Bend, WI 53090, [LacLawrann.org](http://LacLawrann.org)  
 MNP - Mequon Nature Preserve, 8200 W County Line Rd, Mequon, WI 53097, [Mequonnaturepreserve.org](http://Mequonnaturepreserve.org)

Bird on your own or join an informal group along the trails. Watch bird banding near the Visitor Ctr. No registration required.

Location: [RNC](http://RNC), Fee: Donation requested (This is the Bird Club's only fundraising event.)

**Annual Wildflower Sale**

May 10, 9 AM to 1 PM

Wildflowers, perennials, herbs, trees, shrubs, trellises, wood carvings, other garden stuff.

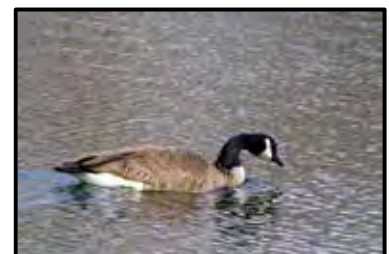
Location: [LLC](http://LLC)

**International Migratory Bird Day**

May 17, 7:30 AM to 9:00 AM

This hike is for avid birders of all ages in search of the elusive spring migratory bird species. Bring binoculars. Max: 12 people. Register at the LLC website under Public Programs or call 262-335-5080.

Location: [LLC](http://LLC), Fee: Free



Canada Goose

**Treasures of Oz**

June 14, explore Ozaukee County natural areas. See details on page 3.

**Butterfly Count**

June 28, 8:30 AM - butterfly review

9:30 AM to 3 PM - butterfly count

Contribute to more than 25 years of butterfly research at Riveredge. Join us for full or partial day. Dress to walk. Bring bag lunch if staying all day. Adults & kids (ages 12 & up w/ parent) are welcome. Location: [RNC](http://RNC), Fee: \$5 donation appreciated

