

# The BogHaunter

the newsletter of the Friends of the Cedarburg Bog  
Volume 17, Number 1 WINTER 2022

## Four-Toed Salamander Found in the Cedarburg Bog Area!

The Cedarburg Bog is a mysterious and ecologically rich environment. It's constantly hiding secrets that are awaiting to be seen. By uncovering these secrets, we can shed light on the natural history of Wisconsin. On October 29th 2021, during the UWM Conservation and Environmental Science Field Methods class, students hiked through hilly terrain for the outside portion of class. Dr. Gretchen Meyer led the students through the Beechwood Forest, teaching them about



Four-Toed salamander, photo by Morgan Schmanski

the importance of diversity among tree species. While walking through the falling leaves and hilly terrain, a rock lying next to an upturned tree along the path caught a student's attention. Morgan Schmanski, Undergraduate, happened to notice a small lizard-like creature next to a small bright rock. She asked Joseph Cannizzaro, Graduate Student and Herpetologist, for assistance in species identification. Joseph immediately identified the little creature as the four-toed salamander. This species had no previous recorded appearances

in Ozaukee County. As this species is of Special Concern in Wisconsin, this find will be recorded and published in a scientific journal for its significance. The four-toed salamander (*Hemidactylium scutatum*) is an elusive creature. It is the smallest of Wisconsin's salamander species, only reaching a length of about 10 centimeters. This animal is recognized by four toes on its hind feet, a black and white belly, and the vertical lines on the abdominal region. The genus name *Hemidactylium* means an individual with fused digits, referring to the four toes present on the hind feet. The species name *scutatum* translates to an animal who is armed with a shield, in reference to the costal lines along the abdomen. As four-toed salamanders are lungless, these lines resemble gill-like structures for external breathing. Their habitat ranges from Canada down to Florida. However, four-toed salamanders are very picky about the conditions that they breed and live in.

Generally, these salamanders are found in large forests and around spring fed wetland areas containing Sphagnum moss. The salamanders breed in the fall, hibernate through winter, and lay the eggs in the springtime. The mother four-toed salamander is a great parent, as the female will guard her eggs in the Sphagnum moss until they hatch after a 45-day incubation. She lays her eggs on moss directly overhanging the water, so when they hatch, the babies immediately drop into the water habitat to grow and develop. A crucial part of the salamander's life occurs in the water after the eggs hatch. The larval stages develop through a similar process to frogs, with the egg to tadpole stage. Instead of losing their tail, which distinguishes salamanders from frogs or toads, they keep it. Eventually the salamanders will make their way from the water to the land, similar to other amphibians.

Unfortunately, the four-toed salamander, like other amphibious creatures, are

affected negatively by habitat loss. This is a loss of habitable area caused by the development of once forested natural areas and wetlands. The best thing that can be done for the sustainability of the four-toed salamander is to preserve forests and wetlands, more specifically mossy habitats. We can do this by observing the unknown world, and ecologically rich environments within Wisconsin and partaking in the preservation of these areas. The ecological masterpieces that are the Wisconsin landscape retain many more secrets that have yet to be told or uncovered!

Joey Cannizzaro and Morgan Schmanski

## Bog Volunteers Make Big Impact

The Friends of the Cedarburg Bog Stewardship Committee is thrilled to be hosting regular volunteer workdays again! After a hiatus of in-person events due to recent times of uncertainty, the Friends have hit the ground running doing what we do best: hands on, boots on the ground stewardship. Over the last two months, the Friends have hosted three well attended workdays to continue control of invasive species that threaten the Bog and Field Station natural areas.

During the first two workdays (all have been around 3 hours on Saturday mornings), energetic volunteers cleared multiple woody invasive species, including buckthorn and honeysuckle,



December 4th Work Day Volunteers

near the Mud Lake entrance to improve the health of the woodland between the parking area and boardwalk. It was refreshing to see so much progress, and it was fun getting acquainted with new and returning volunteers. There will be follow-up work required next year, as most invasive species control efforts take years. However, thanks to the dedicated volunteers that came out to help, the worst of this infestation is behind us.

Another workday was held in the Field Station Beechwoods State Natural Area to address a recent explosion of a lesser-known woody invasive vine, Oriental bittersweet (*Celastrus orbiculatus*). While the few established populations appeared daunting at first, volunteers pulled enough by hand to make many big, heaping piles of the sprawling stems. Seeing what our volunteers could do in only three hours makes the continued effort needed to control the population seem more manageable. The workday was a great opportunity to get experience handling a lesser-known invasive plant, and a chance for the Friends to share knowledge of its habits and control. We also took GPS coordinates to map the extent of the population to lay the groundwork for next season's continued management.

These recent volunteer workdays have been invigorating, fun, and hopeful for us and our volunteers. We find ourselves at an important time to keep the momentum of these efforts moving forward as stewardship is key to protecting the natural areas we love. It takes a community to do this work and we hope to see you somewhere down the line as we keep learning and enjoying time outdoors together while caring for the Bog and surrounding natural areas.

If you are interested in participating in future volunteer workdays, or learning more about the FOCB, please contact: bogfriends@gmail.org

*Roberta Kaleta & Christine Bohn  
FOCB Stewardship Committee*

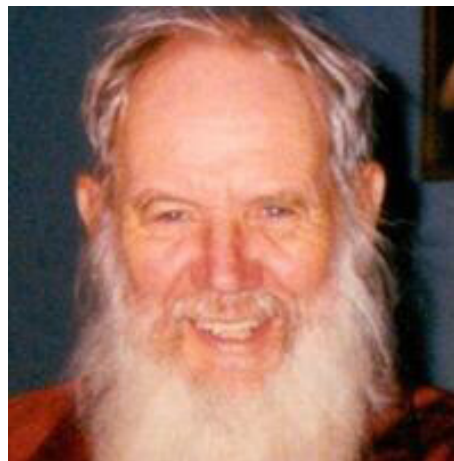
*Friends of the Cedarburg Bog:  
Supporting stewardship and  
appreciation of the Cedarburg  
Bog through land management,  
preservation, research and education.*

### ***In Memory of Karl Andersen, 103***

Longtime friend of the Bog Karl Andersen died in September at the age of 103. He was born in 1918 in Butternut, Wisconsin. In 1925 his family moved to Lake Mills where he lived the rest of his life. Karl and his wife, Carolyn Heidemann, had long been interested in the Cedarburg Bog when the Friends group was founded in 2005. They took a keen interest in the organization and followed the work the Friends were doing. Karl decided to encourage the Friends with enough financial support to put the organization on a sound financial footing. He and Carolyn have been very generous to FOCB over the past several years. Karl last visited the Field Station and took a hike in the Bog when he was 99.

Karl was also involved in Lake Mills city government, especially the park board, for many years. He was known for his large garden, his more than 60-year old beard, as well as his well-written letters to the editors of various newspapers. He was a life member of the Wisconsin Academy of Sciences Arts and Letters and a long-time member of the American Gourd Society.

*Jim Reinartz  
President FOCB Board of Directors*



*Karl Andersen*

### ***In Memory of Brennan Delap***

Brennan Delap died way too young in July 2021. Brennan was a consummate outdoorsman; he was enthusiastic and knowledgeable about everything natural. He was a student arborist and had started a professional tree service with a partner.

Brennan loved the Cedarburg Bog. He served on the FOCB Board of Directors and was chair of our Stewardship Committee. Brennan also worked in the winter to control buckthorn in remote parts of

the Bog and on many other Friends stewardship projects.

When we look around the Bog, we see signs that Brennan erected, trails he graveled, facilities he repaired, buckthorn he cut, and plants he collected. Brennan is very much missed for his knowledge, his enthusiasm, and his work to take care of the wetland he loved.

*Jim Reinartz  
President FOCB Board of Directors*



*Brennan Delap*

### ***Mud Lake, Purple Loosestrife, some Hungry Beetles, and a Project for a Volunteer***

Don Bezella and I first found a few plants of invasive purple loosestrife growing on some islands in Mud Lake in 1992. Those plants were growing on islands that duck hunters used to construct their blinds in the northern part of the lake. For many years after 1992, I and students employed by the UWM Field Station made annual canoe forays into the lake selectively spot-spraying herbicide to kill every plant we could find. The work was both challenging and wonderful. Being on Mud Lake, or anywhere in the Bog for that matter, usually gave me that "I can't believe I am getting paid for this" feeling.

By the late 1990's it was obvious that we would never eradicate purple loosestrife from the lake with our program of spot spraying. We nevertheless continued our spraying to maintain some level of control, and in 2000 we began annual surveys of loosestrife abundance in the marshes along the lake shore. In 2003 I had the opportunity to take a low helicopter flight over the Mud Lake marshes when purple loosestrife was in bloom. I could see many of those horrible purple displays scattered deep in the marshes. Our spot spraying efforts clearly could not reach those plants



## Seasons of the Bog: Fall

Photos by Andy Holman



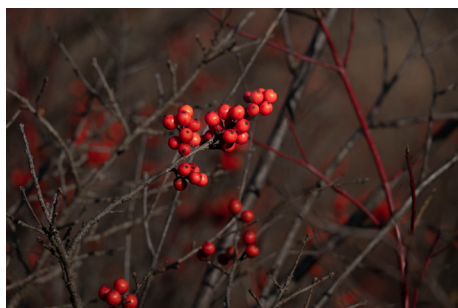
The stream in the bog



Purple leaf of bittersweet nightshade, *Solanum dulcamara*



Tamarack turning color



Fruiting winterberry



Birch Bark

far from the shore. It was time for some other control plan.

The Wisconsin DNR had been using two species of *Galerucella* beetles imported from Europe as a biological control for purple loosestrife since 1994. These two “Cella” beetle species had been shown to depend only on purple loosestrife and not feed on or harm any native plants. By feeding on its leaves and shoots they were nearly eliminating purple loosestrife flowering and seed production elsewhere in the state by the late 1990s. However, a substantial population of loosestrife is required to support and sustain a population of Cella beetles.

In 2004 we decided to stop spot-spraying purple loosestrife to allow the pest to build its vigor to the point where a release of Cella beetles might successfully take hold in Mud Lake. In 2006 with help and instruction from the WDNR Purple Loosestrife Biocontrol Program we raised eight “pots” of Cellas at the Field Station and released thousands of beetles into the loosestrife on the lake; in 2007 we raised and released another six “pots” of beetles.

By 2010 the *Galerucella* beetle population in Mud Lake had increased in abundance to the point where flowering of loosestrife was prevented. Purple loosestrife plants survived in the marshes but were so weakened by the beetles feeding on their leaves and shoots that no flowers were produced. Our biological control of purple loosestrife on the lake was wonderfully effective from 2010 to 2018; the Cellas were doing their job. In fact, from various releases, the beetles had spread and were thriving throughout our area, and it was hard to find a flowering plant of purple loosestrife. Even along the Milwaukee River, where loosestrife had been abundant, it took a keen eye to spot the weakened and beetle ridden plants even late in the season.

Then came the crash. Something happened to the beetles between the end of the 2018 and the start of the 2019 growing seasons. By August of 2019 it seemed that purple loosestrife was booming everywhere in our area, in roadside ditches, wetlands, the Milwaukee River, and Mud Lake. As of this past 2021 growing season, I was able to find a few plants in the Mud Lake marshes with Cella beetle damage, but flowering purple loosestrife was abundant, especially on those islands in the northern part of the lake where we first found loosestrife 30

years ago. The Cellas had not yet regrown to an adequate abundance on their own.

The FOCB Stewardship Committee has resolved that the apparent crash of our Cella population is not a reason to give up on biological control. As our only effective and practical method to maintain control of purple loosestrife on Mud Lake, we are committed to raising another set of beetles to release in 2022 to augment those that have survived and to rebuild the control that saved the Mud Lake marshes for a decade.

That is where the “Project for a Volunteer” part of the title comes in. The methods for raising beetles are very well known and easy to manage; instructions are laid out in detail on the DNR website (<https://dnr.wisconsin.gov/topic/Invasives/loosestrife.html>). All of the facilities, supplies, and equipment needed are available at the Field Station. The FOCB Stewardship Committee needs a dedicated volunteer or two to set up the beetle nursery and to tend it over the early part of the growing season.

Early in the season a few beetles are placed on a purple loosestrife plant in a pot, contained within netting, and growing in a pool of water. The beetles multiply and by the time loosestrife is flowering the potted plant is taken to the lake, the net is removed, and thousands of beetles are released onto the Mud Lake plants. The canoe expedition to release our biological control beetles is guaranteed to be a little bit challenging, exciting, and extremely gratifying. If you would like to learn more about this project and help FOCB accomplish this vital stewardship of the Mud Lake marshes, please contact us ([admin@bogfriends.org](mailto:admin@bogfriends.org)).

Jim Reinartz  
President FOCB Board of Directors

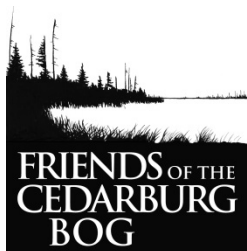
## Annual Winter Hike

February 6, 2022 1:30 - 4:30pm

Hike into the Bog with Jim Reinartz.

Register at [bogfriends.org](https://bogfriends.org) (click on Programs & Events) and check our social media for more details as the date approaches.

**Registration Required!** Email [fieldstn@uwm.edu](mailto:fieldstn@uwm.edu) or call 262-675-6844



C/O UWM Field Station  
3095 Blue Goose Road  
Saukville, WI 53080

ADDRESS CORRECTION REQUESTED

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### **CEDARBURG BOG 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 [www.bogfriends.org](http://www.bogfriends.org) (click on Programs & Events).

Walks are free and open to the public; a \$5 donation is appreciated.

Questions? Contact (262) 675-6844 or [fieldstn@uwm.edu](mailto:fieldstn@uwm.edu). Please, No Pets.

#### **Quarterly Board Meeting**

Thursday, January 6, 6:00 p.m.

All members are welcome to join the FOCB board meeting. The January meeting is being held in person and Zoom. If interested in the agenda and to receive access to the meeting, please contact [admin@bogfriends.org](mailto:admin@bogfriends.org).

#### **Identifying Woody Plants in the Winter**

Saturday, January 22, 10:00 am - Noon

Learn to recognize the characteristics of trees and shrubs necessary to identify them in the winter with naturalist Danielle Bell. Participants will spend time carefully observing the plants using hand lenses and learning to use identification keys for winter woody plants. Meet in the Research Lab (red building) for a short presentation. Masks required when indoors. Be prepared to go outdoors to look at different specimens, so dress for the weather and wear good boots!

#### **Winter Hike**

Sunday, February 6, 1:30 – 4:30 PM

Winter presents the opportunity to explore the interior of the Cedarburg Bog. Jim Reinartz (Field Station Director Emeritus) will lead the annual hike into the heart of the Bog. This is a 4-mile hike, and weather or snow and ice conditions can make this hike challenging. In the past we have hiked in bitter cold, on a warm day with wet slush over the ice, in deep snow, with no snow at all on very slick ice, and when we were lucky, with a little snow over solid ice. If ice conditions in the Bog are not safe, we will hike in the uplands instead. The Field Station website (<http://uwm.edu/field-station/>) will be updated several days prior to the hike with snow and ice conditions. See more on page 3.



Four-Toed salamander, photo by Morgan Schmanski

#### **Winter Wildlife**

Friday, February 11, 10-11:30 AM

Join DNR Wildlife Educator, Liz Herzmann, as we explore the sights, sounds and signs of the Bog. We'll venture out searching for tracks, scat and other signs of the active winter animals in the Bog. Bring along your binoculars as we scour the area for resident winter birds as well.

### **Ozaukee- Washington Birding Coalition**

The newly formed **Ozaukee-Washington Birding Coalition (OWBC)** has scheduled three events. The coalition consists of the Friends of the Cedarburg Bog, the Lac Lawrann Conservancy, Mequon Nature Preserve, and Riveredge Nature Center. Each organization will offer events and handle registration for the event.

#### **Banding and Tracking Snowy Owls and Red-shouldered Hawks in Wisconsin**

Wednesday, January 5, 7:00 PM

at Lac Lawrann Conservancy, or by Zoom

Gene Jacobs, researcher and raptor specialist, has been capturing and banding owls and hawks of all kinds for more than 50 years. Join us in person or by Zoom. Gene will share some of his most remarkable findings about these two birds of prey. Registration required. Registration for the Zoom event is also required. Please email Lac Lawrann at [info@laclawrann.org](mailto:info@laclawrann.org) to register for this event either virtually or in person.

#### **What's Up with Wood Ducks?**

Wednesday, February 2, 7:00 PM

This is a Zoom only event.

Jake Shurba, a graduate student affiliated with the Clemson University Kennedy Waterfowl and Wetlands Conservation Center, will fill us in on the fascinating ecology and conservation issues surrounding this beautiful bird. You must register to attend. Please email Mequon Nature Preserve at [ngall@mequonnaturepreserve.org](mailto:ngall@mequonnaturepreserve.org) to register for this Zoom event.

#### **Tune In: Birding by Ear**

Wednesday, March 2nd, 7:00 PM

This is a Zoom only event.

Spring is still a way off but let's get ready by joining DNR wildlife educator, Liz Herzmann, to practice identifying birds by their songs. Please email Riveredge Nature Center at [info@riveredge.us](mailto:info@riveredge.us) to register for this Zoom event.

### **Ways to Stay Connected with FOCB**

 Like us on Facebook  
<https://www.facebook.com/TheFriendsOfTheCedarburgBog/>

 Follow us on Instagram  
[https://www.instagram.com/friends\\_cedarburgbog/](https://www.instagram.com/friends_cedarburgbog/)

 Join our Email List  
<https://bogfriends.org/mailling-list/>

**LLC**– Lac Lawrann Conservancy  
300 Schmidt Road, West Bend  
[laclawrann.org](http://laclawrann.org)

**MNP** – Mequon Nature Preserve  
Pieper Power Education Center  
8200 W County Line Rd, Mequon  
[mequonnaturepreserve.org](http://mequonnaturepreserve.org)

**RNC** – Riveredge Nature Center  
4458 County Hwy Y, Saukville  
[riveredenaturecenter.org](http://riveredenaturecenter.org)