

# THE BOG HAUNTER

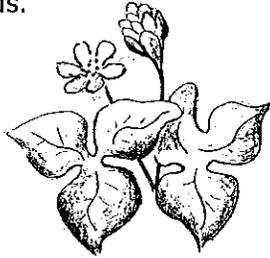
*the newsletter of the Friends of the Cedarburg Bog*

Volume 2, Number 2

Spring, 2007

## **EARLY RISERS**

The first chorus of wildflowers that proclaims the spring is predictable. Wetland pioneers, skunk cabbage and marsh marigold, yield to the trout lily, trillium, anemone, hepatica (insulated by its fuzzy stalks), violets, and bloodroot (whose coiled leaves shield both stem and bud from cold), of the uplands.



In the early spring, the true spring ephemerals break through gray weather-beaten leaves of past summers using energy reserves stored in bulbs, corms, tubers or rhizomes. Their life cycles are compacted – developing leaves, flowers and seeds, as well as the carbohydrates needed for next year's show, within a few weeks. Evidence of these early bloomers is hard to find by mid-summer.

What is the advantage of blooming before the shade forms? A leafed-out canopy shades the forest floor, and minimal sunlight produces uninviting conditions for many plants. Bare trees allow the sun a direct path to light and heat the forest floor. Early blooming solves the sunlight problem.

High soil nutrients and soil moisture (leafless trees use less water) nourish the new plants. Damp earth moderates extreme changes in temperature and protects these low-growing wildflowers.

To compete for the pollinators of early spring, ephemerals produce color, odor, and inviting "landing strips." The dead-meat color and odor of skunk cabbage attract beetles, small carrion flies, early bumblebees, and ants (they may also be pollinated by honeybees that shelter in the warmth of the insulated spathe on cool days).

Ants are attracted to the seeds of several ephemerals; these seeds germinate in the organic richness of an anthill.

Although maple sap begins to rise when daytime temperatures reach above freezing, and skunk cabbage can melt surrounding snow, most plants wait for temperatures in the fifties to warm the soil before they grow.

Latitude plays a part in the emergence of sugar maple leaves. Sugar maples of the far northern forests leaf out at colder temperatures than do their southern counterparts. This shortens the window during which the sun reaches the floor of the northern forests and may limit the range of ephemerals.

Whether caused by man, part of a natural climate cycle, or both, the timing and temperature of seasons has changed. Eons-old synchronies between migratory birds and their insect foods, between plants and pollinators are unraveling. Studies document cases in which "affiliated" species now "miss" each other due to time shifting by one of them.

A hike in mid-May will find ephemerals at their peak.

## **THE BOG'S FIRST SETTLERS**

Fifteen years ago, Don Bezella was curious about whether Native Americans had settled near the present-day Cedarburg Bog. His curiosity grew into an archaeological research project, and he looked where others had neglected to look. (Field Station Bulletin 1992 25(2) pp 1-9).

During 1991 and 1992, Don surveyed land around the border of the Bog using a method called "plow zone archaeology" – he walked the plowed fields, and he talked to landowners. He scoured maps and aerial photos for likely spots. Farmers told him where they discovered "arrow heads." In the fields he found the chert flakes that are the by-products of forming a variety of stone tools. When he found deposits of flakes, he tried to determine the borders of the site geographically and to fix its place in time.



Although archaeologists used to believe that Indians tolerated wetlands because they lay near choice upland locations; many now feel that Native Americans selected relatively level sites in uplands because of the nearness to neighboring wetlands – where wetland and upland plants and animals could be found in close proximity.

The wetland that we now call the Cedarburg Bog probably had larger expanses of open water 5,000 years ago than it does

today. It held a variety of plants, including wild rice, which fed humans and attracted game birds. Today's Bog provides shelter for large numbers of white-tailed deer, and it most likely did historically.

The mixed beech-oak-maple forests that existed at the time of the first land survey (1835) had probably been there for 4,000 to 5,000 years. These trees have long been important to Native Americans for food and materials. So, the Bog and its uplands provided oak forests, marsh wetlands and permanent water - three vital requirements for settlement.

Eventually, Don collected about 100 projectile points. Bows and arrows weren't used in this area until around 400 A.D., so points older than that were fashioned as spear or dart points, knives, or other cutting or piercing tools; he also found hammers and other devices. The distinctive styles developed by craftsmen in each time period allows their work to be dated.

Don's study located eleven sites adjacent to the Bog that were used by Native Americans between 6,000 B.C (the Early Archaic Period) and around 1,700 A.D (the Late Woodland Period). Several of the sites were used by inhabitants of more than one time period, indicating that they were very desirable spots. None of the sites Don located had been recorded previously by the Wisconsin State Historical Society.

One disadvantage of plow zone archaeology is that plows are very hard on pottery. If pottery shards were present near the Bog, they were not detected. Another drawback is that the survey is limited to plowed fields. Pastures, fallow fields, hay fields, wetlands, and woodlands are not assessed. Are more sites waiting to be discovered?

In December, the Cedarburg Bog lost a champion and the Friends, a board member. Don Bezella, a founding member of the Friends board grew up exploring the Bog, hunting and fishing in the Bog, and absorbing its often pungent essence. He made decoys and bird houses, studied the recent and the archaeological history of the area, collected Indian artifacts, learned flint-knapping, and canoed Mud Lake with his dog.

The October, 2006 *Bog Haunter* included an article he wrote about the history of hunting camps of the Bog. The Bog was his teacher, and Don was an avid student. Don in turn became a great teacher, mainly through the questions that he would ask about the Bog and Mud Lake.

A memorial fund was established in Don's name. Donations will be used to finish rebuilding the boardwalk on the UW-M property. That boardwalk allows hundreds of people to experience this exceptional place each year and gives researchers easier access. Contributions to the *Don Bezella Memorial Fund* may be made to the Friends of the Cedarburg Bog.

### *Gytta*

The soil at the surface of the Bog is peat; organic material formed from semi-decayed aquatic and wetland plants. Peat acts as a great sponge, shrinking or swelling both vertically and horizontally during wet years and dry ones.

The cool water temperature of the saturated materials inhibits bacteria that carry out decomposition, so organic materials are recycled at a snail's pace, and peat builds.

Beneath the peat in the Cedarburg Bog lies gytta (pronounced git'-ya); its name

comes from similar sediments studied in Scandinavian countries. Gjit-ya, was formed as debris settled to the bottom of the lake that used to occupy the Bog's basin. Eventually the accumulated gjit-ya made the basin shallow enough for aquatic, and then wetland, plants to take root.



Punching through peat into the sediments below is easy, but retrieving the sampling apparatus takes muscle. At a depth of about 20 feet, the sampler captures a column of gray material that looks and feels like tofu. It can be broken apart in layers, and the layers reveal skeletonized leaves, seeds of plants that are still present in today's wetland, and snail shells. It is material that hasn't seen the sun for thousands of years.

Gytta could be described as "pre-sedimentary rock". Laid down in layers over thousands of years, it needs only millennia of pressure to turn it into a layered rock.

### *Membership Renewal*

Starting this year, to make better use of your contributions, your annual membership is based on the calendar year, rather than "anniversary date". Members will receive a renewal reminder each fall after the September Annual Meeting. If you renewed or joined after June, 2006, your membership extends through 2007.

### *State Bird*

Who hasn't seen a postcard that names the mosquito as our state bird? It's the insect we love to hate, but behind the legend lies a fascinating animal.

Yes, there are a lot of them – about 3,500 species worldwide, around 50 in Wisconsin. They are the definition of the word “swarm.”

Yes, they are adaptable. Eggs develop in wetlands, but are also laid in birdbaths, puddles, flower pots, old tires, and the dog’s outside water dish. It usually takes a month or more to morph from egg to larva (wiggler) to pupa (tumbler) to adult, but the time can be telescoped into 10 days.

Yes, they do have that annoying habit of biting (not stinging, that’s the other end). Adult females mate only once, and although males and newly emerged females feed on plant juices, a female must ingest a blood meal before each cluster of eggs she lays.

She injects, with her saliva, small doses of anticoagulant and anesthetic to aid the process. Then, she ingests so much blood that a take-off seems impossible. A mosquito’s abdomen has expandable tissue between each segment and also between the harder upper and lower surfaces of each segment, so it stretches both vertically and horizontally.

And yes, for reasons that are not completely clear, mosquitoes are more attracted to some people than to others. It may be a response to clothing color (they prefer dark), perfumes, body odor, sweat, or to distinctive carbon dioxide exhalations.

Adult mosquitoes are an essential food for bats, birds, dragonflies and damselflies. The aquatic wigglers are equally important as food chain “middlemen” between the tiny invertebrates they feed on and the fish, amphibians, reptiles and birds that prey on them.

That annoying hum is actually a love song; he sings alto, and she sings tenor. When they hear each other, they vary their tone – by

changing the frequency of their wing beats – until both are humming at the same pitch.

A specialized bog species, the pitcher plant mosquito (*Wyeomyia smithii*), grows only in the water of the purple pitcher plant (*Sarracenia purpurea*). Eggs are laid in the new leaves, often before they contain water. The larvae later prey on other tiny aquatic animals present in the pitcher. They may overwinter in the pitcher, frozen in its water.



Shifts in seasonal patterns in the past 30 years have resulted in behavioral changes in many species. The pitcher plant mosquito shows a response at a genetic level to the increased length of today’s growing periods.

#### ***Important Bird Areas***

The Cedarburg Bog has joined 85 other sites in Wisconsin as an Important Bird Area (IBA). This newest IBA, which encompasses six square miles and includes three State Natural Areas, was dedicated at the recent bird symposium held in Port Washington. UW-M Field Station Manager, Dr. Gretchen Meyer, accepted the honor.

The IBA program is a voluntary, cooperative initiative that aims to identify and protect those sites that are most important to birds at any stage in their life cycle. These sites are considered to be exceptionally significant for bird conservation. Their protection is one important approach to the conservation of many bird species.

To become an IBA, an area must meet at least 1 of 5 stringent criteria, and the Cedarburg Bog

met three of them! The Bog is important to bird species identified as high conservation priorities in the state; it harbors an assemblage of species associated with habitat types that are representative, rare, or threatened in Wisconsin; and it has a long history of bird research.

However, becoming an official IBA is just the beginning. Once a site is officially recognized as an IBA, it enters the monitoring and stewardship phase, which involves assessing conservation needs and opportunities at the site; identifying and prioritizing specific conservation goals; and planning and implementing projects and initiatives to meet those goals. Stewardship activities may include habitat protection, active management, habitat restoration, removal of exotic species, physical improvements, education and outreach, etc.

Monitoring of birds and habitat is an essential and ongoing component of site stewardship. Monitoring can help to identify stewardship needs and offers a way to evaluate stewardship activities; it helps ensure that the site will remain important for birds.

For more information about Wisconsin’s IBA effort, please see <http://www.wisconsinbirds.org/IBA/overview.htm> or contact IBA Coordinator Yoyi Steele, Box 7921, Madison, WI 53707.

#### ***Friends Receive Besadny Grant***

The Friends of Cedarburg Bog received a Besadny Conservation Grant from the Natural Resources Foundation of Wisconsin. The Friends’ proposal was ranked as 2<sup>nd</sup> highest of the 41 received. The \$1,500 will be used to construct teaching platforms in the final phase of the boardwalk reconstruction in the Bog.

## *"2006 -- A Little Help From Our Friends"*

With this first annual issue of the newsletter, it's time to look back on the accomplishments of our first year. It's no great surprise that you, our Friends and volunteers, are both our greatest achievement and our greatest asset. Through the efforts of our membership committee and with your willing support, we were able to build a founding membership of 150, and we ended the year with over \$7000 dollars to seed our 2007 projects. But I'm getting ahead of myself. Let's talk about 2006, our first year.

During 2006, we sponsored 3 invasive plant work days, focusing on glossy buckthorn eradication. We participated in bog plant inventory efforts, and we began the restoration of the stone building at the Field Station. We participated in the launch of a UWM Milwaukee School of Urban Planning class, UP 692 "A Land Protection Strategy for The Cedarburg Bog". We introduced ourselves to the Town of Saukville, and we were warmly received. Through the dedication of our newsletter committee, we were able to publish these quarterly newsletters to keep you in touch with our efforts and needs. Behind the scenes, and with the help of Dave Kinnamon of Quarles & Brady, we were able to file for and receive our initial 501 (c)3 tax determination. Our first Annual Meeting was held on October 15<sup>th</sup>. I could fill this entire newsletter with the names and efforts of the individuals that contributed to making our founding year a tremendous success.

### *In 2007 - Looking Forward*

Our volunteer focus will expand. Grass root environmental groups thrive with volunteer participation. A significant challenge for any organization is keeping in touch with volunteers and coordinating their efforts. To help us accomplish this, we are seeking funding for a volunteer coordinator through the Natural Resource Foundation and Americorps. If we are successful in our funding, we should be able to hire a volunteer/outreach coordinator in September, continue our growth, and tackle some of the bigger challenges facing the Cedarburg Bog.

Our stewardship committee has already held some winter work days and the annual Winter Hike is scheduled for January 28, 2007 from 1:30 to 4:30. January 10<sup>th</sup> will be our first board meeting of 2007. We will be adding new board members, electing officers and chairs for the committees. There will be reports from the committees on the 2006 projects and on the objectives and proposed budgets for 2007. If you would like to learn more about our efforts and become more involved, please feel free to attend the meeting and meet the committees in which you'd like to participate.

Which brings us to our greatest need for 2007 - your participation. Our board and all our committees are 100% volunteer. As such, we represent many people doing their little bit to accomplish large and important objectives. The only way to continue to grow and to tackle the largest threats to the Bog is through "enlarging the circle". Almost any skill you could contribute would be a valuable resource in our efforts. With just a few hours of help each month from each of our Friends and volunteers, we could celebrate some amazing accomplishments. Reach out to your friends, neighbors and coworkers. Share the pride you deserve in your efforts to make a difference. Invite them to join with us and participate. Together, we have already made a difference. Through inviting others to join us, we can take our efforts to the next level.

Thank you for your support during 2006, our founding year. Because of each of you, the Friends of the Cedarburg Bog is a reality. I look forward to working with you in 2007 to preserve and protect the Cedarburg Bog and its surrounding areas. - *Dan*

**DATES TO REMEMBER:**

Join the Stewardship crew on the second Saturday of each month to control invasive plants and work on stewardship projects at the UW-M Field Station.

9:00 a.m. - 3:00 p.m.

Pre-register at 262-675-6844 or [fieldstn@uwm.edu](mailto:fieldstn@uwm.edu).

**Riveredge Speaks Out**

Ecology information series.

Third Tuesday of every month,

Mequon City Hall. 7:00 p.m.

(Programs are free; a \$4 donation is suggested.)

**Quarterly Board Meeting**

Friends of the Cedarburg Bog

April 11, 2007, 7:00 - 8:30 p.m.

UW-M Field Station

**Crane Counts**

April 14, 5:30 to 7:30 a.m.

Monitor sandhill crane populations.

Ozaukee County, contact Lee

Arhelger (414-453-5243).

Washington County, contact Bob

Raffel (262-966-2187) or email

[sandhill@nconnect.net](mailto:sandhill@nconnect.net)

*May is Native Plant Appreciation Month.*

*May is American Wetlands Month*

**Attract Songbirds to Birdboxes:**

April 14, 1:00 to 3:30 p.m.

Identify songbirds, hike the songbird trail, discuss nest box styles, maintenance, monitoring.

Mequon Nature Preserve. Pre-

register at 262-338-1794 or

[spunzel@owlt.org](mailto:spunzel@owlt.org) (event is free,

donations are appreciated)

**Birdathon - Bandathon**

May 12, all day/part day

Join Riveredge Bird Club in their annual count of migrating birds.

Contact: Noel 262-675-2443 or

[noel.cutright@we-energies.com](mailto:noel.cutright@we-energies.com).

At Riveredge Nature Center

**Spring Wildflower Sale**

May 12, 9:00 a.m. to 1:00 p.m.

Lac Lawrann Conservancy, West Bend.

For information: 262-335-5085

or [kpwbprf@ci.west-bend.wi.u](mailto:kpwbprf@ci.west-bend.wi.u)

June 7 starts the 3<sup>rd</sup> Annual Invasive Species Month (ISAM).

More information at:

<http://invasivespecies.wi.gov>



**PUBLIC WALKS**

*Sponsored by the Friends*

**Dances in Spring**

Woodcock and frog extravaganza.

Bring a flashlight.

April 5, 6:00 to 8:00 p.m.

**Natural History of the Bog**

Enjoy the sights and sounds of the Bog in spring.

May 20, 9:00 a.m. to noon

**Spring Bird Walk**

Savor the spring migration.

May 21, 7:00 - 10:00 a.m.

**Full Moon over the Field Station.**

Explore the bog on a moonlit evening.

May 31, 6:00 to 9:00 p.m.

**Summer Solstice Walk**

Walk the Bog on the longest day of the year.

June 21, 9:00 to 9:00 p.m.

*Attendance is limited to 15 to 25 people per walk.*

*Pre-register at 262-675-6844 or [fieldstn@uwm.edu](mailto:fieldstn@uwm.edu).*



# Support the Cedarburg Bog State Natural Area . . .



## . . . Join the Friends!

Cedarburg Bog is one of the last remnants of original Wisconsin, with abundant wildlife and some of the rarest plants, animals and landscapes in the Midwest -- over 2000 acres of a National Natural Landmark, a National Experimental Ecological Reserve and one of the first State Natural Areas.

The Friends of the Cedarburg Bog, Inc. is a 501(c)3 organization supporting preservation, stewardship, research and education at the Bog in partnership with the University of Wisconsin-Milwaukee and the Wisconsin Department of Natural Resources.

### *What Friends do . . .*

- Assess protection and management needs
- Survey & control invasive plant species
- Contribute to long term scientific monitoring
- Complete the renovation of the UW-M boardwalk
- Maintain the Highway 33 access and trails
- Build an osprey nest platform at Mud Lake
- Offer guided hikes and programs for all ages

*What Friends get?* Most importantly you'll help protect this very special place. Members also receive the Friends newsletter, with natural history highlights and issues affecting the Cedarburg Bog area, notification of public walks and workshops, members-only walks and events, and priority sign-up for events sponsored by the Friends.

*Join us in protecting this special place. Fill out the form below and become a Friend.*

## YES, I'd like to be a Friend of the Cedarburg Bog!

Name(s) \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_ E-mail address \_\_\_\_\_

Membership Fee: \$25, Basic Friends (Individual or Household)  
\$ \_\_\_\_\_, Very Good Friends

Preferred contact? (please circle): Mail Phone E-mail

### **Your Volunteer Interests?**

- Research / Monitoring
- Fundraising
- Trail Maintenance / Construction
- Invasive Species Control
- Educational Programs
- Special Events
- Website
- Newsletter

**What you want to do** \_\_\_\_\_

*Make checks payable to 'Friends of the Cedarburg Bog, Inc.' and return to Friends of Cedarburg Bog, Inc. c/o UW-M Field Station, 3095 Blue Goose Road, Saukville, WI 53080.*

*FOCB is a non-profit organization. All contributions are tax-deductible. FOCB will not share your personal information with any other organization.*