

THE BOG HAUNTER

the newsletter of the Friends of the Cedarburg Bog
Volume 5, Number 1 Winter, 2010

TO SLEEP, PERCHANCE TO DREAM

Winter just isn't as "lively" as summer. Most species of birds deal with the season by migrating. For many, temperature isn't the issue – birds, after all, "invented" down jackets. Though some birds stay and change their diet, the birds that migrate leave because their summer food source isn't available in winter. Birds that do stay, stay silently. Other than the call notes of Crows, Jays, and Chickadees, the "yank-yank" of Nuthatches, and the polyglot utterances of Starlings, the daytime landscape is a quiet place. Bird song is designed to advertise breeding, a summer pursuit.

The vast majority of animals are cold-blooded animals. Their body temperatures match the temperature of the surrounding air or water, and their winter options are few. Their only alternative to death is hibernation, with their cells protected by "antifreeze" from the damage caused by freezing and thawing.

When it comes to mammals, the term "hibernation" is applied too loosely. Winter sleep - the "period of adaptive winter inactivity" - is a continuum. At one end are the very few true hibernators, and at the other end are a group of mammals that may "hole up" briefly during really severe stretches of weather but that are otherwise active throughout winter. In the middle are a variety of light and heavy sleepers. Whatever the duration of the "nap", its purpose is to minimize the number of calories burned.

True hibernators put on an impressive layer of fat in late summer and fall, retire to a den they have prepared, and then lower their metabolism, heart rate, breathing, and body temperature for the duration. Hibernators sleep so deeply that they are hard to rouse.

The woodchucks that occupy the grasslands and forest edges of the Bog are true hibernators whose spring awakening is driven not by the call to forecast our weather but by the imperative to reproduce.

The Bog's Jumping mice (*Zapus sp.*) and some species of bat are also true hibernators. The hibernation debate continues about bears (absent from the Bog, but probably not by far), whose temperature drops relatively little and whose sleep is fitful, but who, for over half a year, may not eat, drink or eliminate.

"Deep sleepers" achieve torpor – a hibernation-like state – for part of the winter. They may be roused easily because their temperature doesn't drop very much or because they don't put on a thick layer of insulating fat and so must get up periodically to eat.



The chipmunk, a common rodent in the Bog's uplands and islands, is a classic heavy sleeper. Its famous cheek pouches allow it to gather food rapidly and so minimize its exposure to predators. Its life revolves around the collecting and storing of food, and in winter it may even sleep on a pile of food.

Much of the food a chipmunk collects is cached in its underground tunnel system. Tunnels have a main room, about a foot wide and almost as tall, that serves as nest chamber, store room and bedroom. There may be additional store rooms, and there is usually a separate room for a latrine.

Chipmunks collect grass and other soft vegetation which they fashion into a bed on top of their food

supply. Because they lack the true hibernator's layer of fat, chipmunks must raise their body temperatures and wake for a meal every few days. By the end of winter, their bed may be on the chamber's floor. If the winter is long and they run out of food, they emerge to hunt for food when there's still snow on the ground.

Light sleepers disappear for part of the winter but leave their tracks across the landscape during mild winter days and nights. Most skunks, possums and raccoons stay in dens during deep winter. The diet of all three of these omnivores includes a higher percent of small rodents in cold weather. After an evening of foraging, they may switch dens with each other. Skunks prefer dens near the ground, raccoons like cavities in trees; and opossums will use either.

Squirrels trade their airy, tree-top nests for leaf-lined winter nests in holes in trees. The nuts they store during the fall are fair game for any foraging animal. The vast majority of nuts are found, but squirrels don't bother to recover acorns that their noses tell them have rotted. Squirrels are well adapted for short sleeps in severe weather. Curled up with their bushy tail acting like a blanket, they can sit out a few days of harsh weather.



The Bog's deer, mice, voles, shrews and cottontails stay active, as do the muskrats that live below ice. And the carnivores? Most are active throughout the winter because they aren't adapted for sleep, and there is still food available for them. Watch for their tracks in the snow.

RESTORING TAMARACKS

A hike out the boardwalk trail into the Cedarburg Bog this fall offered a tantalizing glimpse of a possible brighter future for one of the bog's signature components. Looking up, bog visitors witnessed the annual colorama that the wispy coniferous tamaracks offer as they move from vibrant green to brilliant gold before shedding their foliage. But looking down, hikers also could see fluffy green sprouts emerging from some of the hummocks.

Although tamarack (*Larix laricina*) was once one of the most dominant trees in a wide range of wetlands in southeastern Wisconsin, it now occurs in less than 15% of the area it once dominated. It is an indicator of some of the highest quality and least disturbed wetlands.

Jim Reinartz, Director of the University of Wisconsin-Milwaukee Field Station at the bog, and one of his graduate students, Anne Reis, recently completed a project aimed at developing methods to regenerate tamarack in the area. The green sprout tamarack seedlings are in one of their three study sites, which abuts the north side of the boardwalk midway through the conifer-hardwood swamp, just before you reach the shrub-carr area west of the bog stream.



Without active management tamarack continues to decline in southeastern Wisconsin. For it to remain an important component of wetland plant communities in the Southeast Glacial Plains Ecological Landscape of Wisconsin, Reinartz writes in the abstract of the project study, it will be necessary to develop methods to restore and regenerate tamarack. The project, funded by a two-year State Wildlife Grant, tested five site preparation treatments that are practical for application to large- or small-scale forest restorations.

The study involved seeding 322 individual wetland hummocks in three plant communities in the bog:

1) a degraded tamarack-white cedar-hardwood stand along the boardwalk, 2) a mixed tamarack-shrub-carr, and 3) a shrub-carr-cattail community near St. Augustine Road damaged by a past flooding event.

Tamarack seedlings are known to need abundant light and a constant suitable water level in order to establish and grow. Shaded seedlings grow only about an inch their first year and have almost no chance of survival. So all five treatments at each site used a chain saw and brush cutter to completely remove the woody canopy.

For four of the study trials an additional step was taken: 1) removal of living and dead plant material by burning the hummock surface, or 2) raking the soil surface, or 3) treating the plots with Roundup to kill herbaceous plants, or 4) treatment with Roundup and with Garlon to kill both herbaceous and woody plants. The researchers also planted bare-root, 2-year-old tamarack seedlings in the same sites to compare performance in control plots.

The clearing work was done in the fall of 2007; burning and herbicide application followed in the spring and seeding in June of 2008.

There were highly significant differences in seedling establishment rates. The three most successful treatments removed most of the competing ground layer but left some mosses and low ground cover, which appeared to help retain moisture on the hummocks. Similar to the results of the direct seeding experiment planted bare-root, 2-year-old tamarack seedlings survived much better in plots where the woody canopy was removed than they did in control plots.

Reinartz says the seed plants are doing very well in some of the treatment areas. "You expect a lot of mortality between seed and seedling, but we are seeing ... (what) would be a very high (success) rate if it persists."

"What we are finding is that it takes a pretty severe disturbance – a clear-cut, a blowdown – for tamaracks to get re-established. And

that the establishment process is greatly aided by fire," Reinartz added.



The goal of the study was to develop the best seeding methods or ways to enhance regeneration. "We are also studying what conditions transplanted seedlings survive the best; we'll need a few more years to compare the two approaches," Reinartz said.

Don't look for big changes in the bog in the near term, he added. "But the interesting results will be 8, 10, 20 years from now when we see if we actually have regrown a patch of tamarack forest."

"The small scale of the project makes this more a scientific study than a restoration project," Reinartz said. However, the DNR "already has some interest. If we show that with some major disturbance like clear-cutting and burning we can regenerate tamarack, they might want to use these methods to restore some swamp forest."

One ideal target for such a large-scale project?

Parts of the Cedarburg Bog.

By Carl Schwartz

Incorporating excerpts from the research of Dr. James Reinartz and Anne Reis.

WISH LIST

- *A laser printer
- *Work gloves (large & medium)
- *Office chairs
- *Pots, pans and bowls in good condition and especially those suitable for cooking for and serving large groups
- *A good, working lawn tractor
- *A good, working 4-wheeler
- *A back-pack sprayer for herbicide.

The Friends of the Cedarburg Bog is a 501 (c) (3) organization; donations are tax-deductible.

LET IT KANIKTSHAQ

A lot has been made of the fact that the Eskimos have many different words devoted to the subtle nuances of snow (*Kaniktshaq* means "fresh snow"). The fact is, so does the rest of the world, and some great "snow words" have made their way into local Weather Reports recently.

Graupel, also called soft hail or tapioca snow, refers to the small, soft, lightweight white pellets that look like single beads of Styrofoam (true hail is an ice ball). Graupel (German for "barley") forms when a layer of ice crystals or rime coats the outside of a snowflake.

Ganfefedern (German for "goose feathers") are those huge, flat snowflakes that float down softly from the sky. Five-inch-wide snowflakes have been recorded, but the world record goes to the 15 inch flakes that fell in Montana in the winter of 1887.

HUNTIN' THE BOG

We are so blessed to have a natural resource like the Cedarburg Bog so close to a large Metropolitan area. One of the ways to enjoy this resource is to grab a camera, bow, or firearm in the fall and do some "huntin'."

As with any adventure, you need to do some planning. There are only two main DNR parking lots that are open to hunting. They are Watts Lake off STH 33 on the North end and Mud Lake off Cedar Sauk Road on the South end. DNR public hunting land that surrounds the bog can also be accessed with the private landowners' permission. The UW-Milwaukee Field Station and State Scientific areas are closed to hunting, so you need to find out the boundaries. Get your hands on an Ozaukee County plat book and talk to some landowners. "Plan your Hunt, then Hunt your Plan."



One of the best kept secrets is the fantastic duck hunting. Just about every species of diving and puddle duck that migrates through the Mississippi Flyway seeks overnight parking on Mud Lake during the fall. You are going to have to earn them though by push-poling your skiff through the cattails to get to Mud Lake.

Hunters are reminded that duck blinds and boats on DNR property must be removed at the end of the season. Hunter's names and/or DNR customer ID numbers must be displayed on the blinds. (See current DNR Waterfowl Regulations.)

The same holds true for deer hunters. Yes, there are "swamp bucks" that cruise the edges of the bog. Trailing wounded deer into the bog and dragging them out demands some dedication and patience. It's best to have some nearby deer hunting friends on your speed dial list (bribing sometimes works).

A couple of laws regarding hunting on DNR property should be noted: Tree stands must be taken out daily, you cannot damage any trees or pick any plants and if you are in a portable deer blind it must have some blaze orange displayed. (See current DNR Hunting Regulations.)



Special items of concern include: Learn to recognize poison sumac especially in the winter stage. Yes you can contact the poisonous oil, urushiol, in the winter time. I take extra precaution by trying not to touch my face with my hands while wearing gloves and washing or discarding my gloves after every outing.

I've been out there when it is minus 20 and have broken through the ice on the creek past my waist. At this point, I no longer call it a bog, I call this area "COLD". So beware of all feeder creeks and muck holes. Last, but not least, I always carry a flashlight, cell phone, compass, and GPS unit. When the sun goes down,

a snow or rain squall can come from nowhere, or a dense fog can roll in, making everything look the same once you are inside the bog. At least once a year I have to pull out one of these items to get me back home. I've never been lost, but I've become more confused than my ego cares to admit.

So what are you waiting for? With over 2,000 acres in and surrounding the Cedarburg Bog ecosystem, you can experience a Manitoba wilderness-type adventure almost in your backyard.

By Rick Wolff

Editor's note: Hunting is included in the Management Plan for the Cedarburg Bog State Natural Area. Rick Wolff is a retired DNR Game Warden.

Annual Winter Walk and Chili Supper

sponsored by the
Friends of the Cedarburg Bog

Sunday, January 31, 2010

1:30 PM: Hike the Bog
4:30 PM: Stay for the Chili

You don't have to get chilly to eat chili! Hikers and non-hikers are welcome to celebrate winter in the Bog.

The Friends will provide chili and beverages; if you can, bring a dish to share.

If your last name starts with:
A to M, bring a dessert.
N to Z, bring a side dish.

Please let us know you're coming!
Contact us at 262-675-6844 or
fieldstn@uwm.edu.



CALENDAR

The Wonders of Winter Life

January 9, 1 to 3:30 P.M.
Come and learn from Rick Wolff how Wisconsin animals survive the winter. This Family Program starts inside and moves outside. Pre-registration suggested. Members \$6, 12 and under \$4. Non-members \$8 and \$5. Riveredge Nature Center. For more information or to pre-register: contact www.riveredge.us or 1-800-287-8098.

Riveredge Speaks Out.

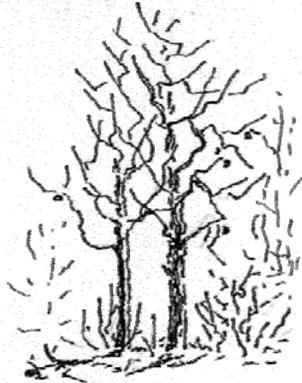
Second Wednesday of the month in West Bend; third Tuesday in Cedarburg. 7:00 to 8:15 P.M. Programs on Natural History, for the curious of any age. Open to the public. For locations and topics, contact 1-800-287-8098 or www.riveredge.us. A \$5 donation is suggested.

Riveredge Bird Club

First Tuesday of the month 7:00 to 8:30 P.M.
January 5, 7 p.m. Wind Turbine Interactions with Birds and Bats.
February 2 – Changes in Populations of Wisconsin Bird Species.
Riveredge Nature Center Barn.
No pre-registration or fee required.

Quarterly Board Meeting

January 21, 7:00 to 8:30 p.m.
Friends of the Cedarburg Bog,
At: UW-M Field Station
Members welcome.



Friends' Event

Winter Walk & Chili Potluck
January 31, 1:30 to 4:30 – walk
4:30 to 6:30 – eat
Explore the ice-bound Bog.
Please let us know you're coming – fieldstn@uwm.edu or 262-675-6844. For details, see Invitation elsewhere in this newsletter.
UWM Field Station

Milwaukee Audubon Society's 30th annual Natural Landscapes

Conference - "Year of the Niagara Escarpment"
February 13, 8:00 AM to 3:30 PM
Pre-registration before Feb. 8 - \$30
After Feb 8 or at the door - \$35
Complementary Continental Breakfast.
Concordia University's Barth Hall,
12800 N. Lake Shore Drive, Mequon
For information call: 414-352-2437

Owl Prowl

Feb. 19, 7:00 P.M.
Search for owls in the dark of the moon.
Please let us know you're coming (wind date, Feb 20) and bring a flashlight.
fieldstn@uwm.edu or 262-675-6844.
UWM Field Station

Tapping the Sugar Bush

February 27, 1 to 2:30 PM
Learn how to identify and tap a maple.
Members: free; non-members: adults \$3 and kids \$1.
At: Riveredge Nature Center. For more information or to pre-register: contact www.riveredge.us or 1-800-287-8098.

C/O UWM Field Station
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Saukville, WI 53080
www.bogfriends.org

