CONSERVATION CHRONICLE

Newsletter of the Land Conservation Department

To promote the awareness of Sauk County's natural resources and to provide technical assistance for their productive use, enhancement, and preservation.

Volume 15 | Number 1 | April 2004

Frogs - "Our Canaries in the Coal Mine"?

Ah spring! The temperature is climbing, and frogs are climbing out of their muddy winter homes. Many reptiles and amphibians spend the winter buried in mud. While many stay insulated from freezing, some frogs actually freeze, coming to life again when they thaw! Once back on the surface, it is time for the frogs to find a mate and start a family. The males call on warm spring nights, attracting females.

A key to enjoying Wisconsin's frogs and toads is knowing how to find them. Start by scouting nearby wetlands. Almost all of Wisconsin's amphibians need water for breeding. Some breed in temporary ponds that form in farm fields, some only inhabit lakes and perpetually wet areas, others use woodland pools. Go out after dark and listen. Hear the chirping, trilling, and clucking of the males calling for mates.

Frogs have very special skin. They do not just wear it, they drink and breathe through it. Frogs do not usually swallow water like we do. Instead they absorb most of the moisture they need through their skin. They get most of their oxygen through their lungs, but when they need more they can get more through their skin.

Their skin is porous, which makes them especially sensitive to changes in their environment. As their life cycle requires both aquatic and terrestrial habitats, frogs are among the first to suffer the consequences of environmental threats such as pollution, destruction of wetlands and other habitats, introduction of non-native species, and increased ultraviolet (UV) radiation. Over 200 amphibian species from around the world have experienced recent population declines. As an indicator of greater ecosystem health, this widespread trend raises many concerns about the health of our environment.

What is causing these problems in our frog populations? While researchers are still far from finding any definitive answers, some of the puzzle pieces are starting to fit together. Not all species of amphibians are in trouble. For example, there does not seem to be the same devastating effects on salamanders, and some frogs are actually *increasing* in numbers. This suggests that it is probably not just a single, planet-wide phenomenon. Instead, it is probably quite a few varied causes.

These factors probably include the destruction of natural habitat, pesticides, industrial pollution, acid rain, changes in temperature, introduction of new predators or competitors into breeding areas, diseases, and even just natural population fluctuations.

(Continued on page 2)

inside...

Oak Wilt Spreads Now ..... page 3
MFL Proposed Application Deadline ..... page 3
EQIP Your Forest..... page 3
White Mound Project Nears Completion .. page 4
"Bubble Baths" in the Baraboo River?..... page 5
Cash Incentives Available ..... page 6
Gypsy Moths Are Coming ..... page 7
Where Is This?..... page 7
Farmland Preservation Deadline…… page 7
2004 Earth Day Celebration ..... page 8

Did you know that…

- When a frog swallows a meal, his bulgy eyeballs will close and go down into his head. This is because the eyeballs apply pressure which actually pushes a frog's meal down his throat!
- Frogs have special ears that are connected to their lungs. When they hear noises, not only does the eardrum vibrate, but the lungs do too. Scientists think that this special pressure system is what keeps frogs from hurting their eardrums with their noisy calls. Some frog calls make so much noise they can be heard for miles!
- Frogs can launch themselves over 20 times their own length using their big strong legs. That would be like you jumping 100 feet!
- The longest frog jump on record measured 33 feet 5.5 inches.

(Continued from page 1)

Increases in UV radiation as a result of the earth's thinning ozone layer may also have lethal affects on amphibians. Experiments in the laboratory and in the field have shown that UV radiation interferes with the development of eggs in some species. Increased UV levels may have even worse effects in higher elevations, where levels are already high.

Since frogs breath and drink through their skin, pollution, pesticides, and acid rain have really devastating effects on them. This is particularly true in their developmental stages. In addition, chemicals can interfere with a frog's natural ability to fight off diseases and infection.

Frogs have recently become quite popular as they are a very good symbol of the health of our environment. They are in many ways the "canary in the coal mine," meaning when their populations drop, it signals an overall need for protection of our ecosystem.

Sources:
Allaboutfrogs.org
Nwf.org/frogwatchusa/
dnr.wi.gov/org/caer/ce/eek/critter/amphibian/

Frog Calls as Described on "Wisconsin Frogs"

Ray Anderson and Debra Jenson at UW-Stevens Point

Chorus frog - running your finger over a fine toothed comb
Green frog - plucking a banjo string
Spring peeper - high ascending peep, occasionally trilled; jingling of sleigh bells
Bullfrog - roar of a distant bull with a musical ring; a foghorn
American toad - high-pitched tremulous trill, long lasting, ending abruptly
Eastern gray tree frog - loud resonant trill
Leopard frog - deep, rattling, uneven snore; rubbing your thumb on a balloon
Pickerel frog - snore more regular and less carrying power than leopard frog
Wood frog - hoarse, low-pitched croaking, subtle quacking

"Wisconsin Frogs" tape available at Madison Audubon, 222 S. Hamilton, Madison WI 53703
(608) 255-BIRD

2004 EARTH DAY CELEBRATION

April 25, 2004 Rock Springs Community Center

- Educational booths and farmers market will be open from 10:00-5:00
- Free canoeing all day
- Bus tours of the Pink Lady Quarry. Buses will leave at 10:00, 11:15, 12:30, 1:45, and 2:30

10:45 Nature guided walk with Ken Lange
12:00-1:30 Lunch available from the Rock Springs Volunteer Fire Department. Music by the Whoopers.
2:30 Hikes to Van Hise Rock or the Kids Ranch
4:00 Music by the Whoopers

Seminars

10:15 Sauk County's Soils - Jean Pinkston, Agronomist for Country Partners Coop
11:00 Canoeing on the Baraboo - John Exo, Sauk County UW-Extension
1:30 Fishery Improvements in the Baraboo River - Matt Catalano, WDNR Fisheries
3:00 Sauk County Conservation Issues - Joe Van Berkel, Sauk County Land Conservation

Printed on Recycled Paper

Sauk County Land Conservation Department
505 Broadway - West Square Building
Baraboo, WI 53913

Nonprofit Org
U.S. Postage Paid
Baraboo, WI 53913
Permit No. 105

SAUK COUNTY LAND
CONSERVATION COMMITTEE
Lester Wiese - Chair
John Bernien - Vice Chair
Katherine Zowin - Secretary
Robert Cassity - Member
Gerald Lehman - Member
Robin Craker - FSA Representative

County Directory

LCD	(608) 355-3245
LCD Fax	(608) 355-3292
NRCS	(608) 355-4420
FSA	(608) 355-4420
UWEX	(608) 355-3250
DNR Forester	(608) 355-4475
APHIS (WDS)	(800) 433-0663

Oak Wilt Spreads Now

From mid April through August, oak wilt disease rears its ugly head killing valuable oak trees throughout our region. Protecting oaks from damage during this time period can help prevent oak wilt introduction and spread.

What is oak wilt? Oak wilt disease is caused by a fungus that mainly affects red, black, and pin oaks (trees with pointed leaves) in the southern two-thirds of Wisconsin. Once infected, the water-conducting vessels become plugged and the tree can die within a three-week period. Oaks with rounded leaf tips, such as white and bur, are less susceptible to the disease.

Oak wilt spreads both overland and underground. Overland infection occurs when trees are harvested, pruned, or wounded during April through August. Sap-feeding beetles carrying oak wilt spores land on and infect the tree by leaving the spores behind. The disease moves into the tree roots and can infect adjacent oaks by interconnecting or grafting onto healthy tree roots of the same species. The result can be an ever-widening pocket of dead oaks. Where oak is mixed with other species, the spread can slow or stop naturally.

Can oak wilt be prevented? The general prevention rule is that red, black, and pin oak should not be harvested, pruned, or injured from April through August. This rule is routinely written into timber sale contracts by professional foresters. If an oak is wounded or pruned during this time period, apply a tree wound dressing immediately.

Can the spread of oak wilt be slowed or stopped? Removing only the infected trees will not control the spread of oak wilt. One method of control is to cut a root graft barrier between diseased and healthy trees with heavy equipment such as a vibratory plow or trencher. Placement of the barrier is very important and should be designated by a professional trained in oak wilt management. Another control method that has shown some success involves the use of fungicides. The oak wilt pocket of infected trees is cut along with a perimeter of healthy trees. A fungicide such as Alamo® is then applied to the healthy stumps.

Can trees infected or killed from oak wilt be moved? Trees that have died from oak wilt can harbor fungal mats under tight bark and if moved can spread the disease into unaffected areas. Once the bark becomes loose and falls off the wood, the mats are no longer viable and no special treatment is necessary. Logs from infected trees may be sold to a sawmill or chipping facility. The purchaser should be advised that the infected trees with tightly attached bark need to be utilized over the coming winter.

Additional information on oak wilt can be obtained by contacting Sauk County Forestry at 355-4475 or 355-4476 or by accessing the WDNR Division of Forestry website at www.dnr.state.wi.us/org/land/forestry/

MFL PROPOSED APPLICATION DEADLINE

The Managed Forest Law (MFL) is a property tax reduction program for landowners with ten or more contiguous acres of forestland. It has recently been revised through legislative action and is awaiting the governor's signature. One proposed change is moving the annual application deadline from January 31 to July 1. Applications for 2005 entry (under the January 31 deadline) are closed. The next July 1 deadline will affect 2006 entries. Contact the DNR Forestry office (355-4475 or 355-4476) for updates regarding the MFL revision or visit the WDNR Forestry website at: www.dnr.state.wi.us/org/land/forestry/ and click on Forest Tax Law.

EQIP YOUR FOREST

Cost sharing dollars are available through the federal EQIP (Environmental Quality Incentives Program) for conservation practices associated with forest improvement. It can cover 50 percent of the expenses of a practice, up to certain limits. Applications and information are available from: Farm Services Agency at 355-4420, NRCS at 355-4420, Sauk County Forestry at 355-4475.

White Mound Project Nears Completion

With the spring rains will come the refilling of White Mound Lake. While the lake is refilling, the other parts of this extensive rehabilitation project will also be reaching completion. This multi-faceted effort to improve the lake has been a true partnership effort. The initial flood survey and the identification of the floodway were completed by the Land Conservation Department and Natural Resources Conservation Service (NRCS). Two houses and a business located in the dam break floodway were purchased and the occupants relocated through efforts led by the county Corporation Counsel's Office. The dredging of 130,000 cubic yards of soft sediments from the lake bed was contracted to Phenco, Inc. A new beach is being constructed by the Sauk County Highway Department. Fish habitat structures were built in the lake bottom by the Hillpoint Rod and Gun Club and the Highway Department crew. New zoning protection maps to prevent future development in the dam break floodway were prepared by the Planning and Zoning Department and adopted by the County Board. Repairs to the lawns and roads within the White Mound Park are being performed by the Park's staff and the Highway Department. Agreements with NRCS have been signed to extend the operation and maintenance agreement on the dam until 2104.

All of these efforts were in response to orders from the Department of Natural Resources (DNR) that the county, as owner of the three flood control structures in the area, address the danger they may cause if they were to fail. Originally built in the late 1960's to provide flood protection for roads and property in the valley below and into the Village of Plain, the dams were a cooperative effort of the Sauk County Land Conservation Department and the federal NRCS. The dams served their purpose well, greatly reducing the size and number of flood events.

However, at the time they were constructed, people were not thinking about the impact these large contained water bodies would have if the dam might break. Dam failures in some eastern states brought attention to this concern, and the state legislature initiated a dam safety inspection program administered by the DNR. The inspection and correction orders resulted from this program.

When the federal and state governments announced a pilot dam rehabilitation assistance program in 2001, Sauk County quickly decided to apply. The selection of this project for the funding has made the improvements affordable. The federal government, through the NRCS, will cover 65 percent of the cost, while the Wisconsin DNR is contributing an additional $200,000. Much of the county expense consists of in-kind services provided by the Land Conservation, Parks, and Highway departments.

The end result should be a better lake and improved flood protection. Removal of the sediment will deepen the lake, reduce weed growth, and improve the fishery. The restored sediment capacity is expected to add 30 years to the life of the lake. The removal of flood-susceptible buildings and implementation of dam break zoning should provide increased flood protection for life and property. Parks Manager Steve Koenig is excited about the improvements to White Mound Lake. "Over time the sediment buildup had eliminated swimming in the lake. We hope that by dredging out the spoil and rebuilding the beach in a new location we can bring back swimming. We are also excited about the potential improvements in the fishery. In the last few years we have seen a decline in the size of the panfish being caught in the lake. They seemed to be going up in number but way down in size. The reduction

(Continued on page 5)

Where Is This?

If you recognize where this is located, send us your answer along with your name, address, and phone number by May 28 to the following address: Sauk County LCD, 505 Broadway, Baraboo, WI 53913. One winner will be drawn from the correct answers and will receive a Farm & Fleet gift certificate.

Congratulations to Don Dietz for correctly identifying the mural on the side of the old Reedsburg Woolen Mill in downtown Reedsburg. He received a Farm & Fleet gift certificate. The mural highlights the confluence of agriculture, natural resources, and industry. It depicts the agricultural roots of the raw materials (wool), the reliance on natural resources (river), and the resulting industry that helped build a thriving little town quoted by one historian as being "full of ginger and hustle".

The Wormfarm Institute, a Reedsburg based not-for-profit organization, coordinated the community mural based on a key element of local history. The Reedsburg Woolen Mill, once Reedsburg's largest employer, was initially powered by the Baraboo River. It supplied blankets to the army in both world wars as well as a variety of fashion wools. A fire destroyed the mill in the 1960's, and all that remains is the Woolen Mill office building on which the mural is located.

This mural was made possible in part through a grant from Sauk County Arts, Humanities and Historic Preservation Commission, Lands' End , Reedsburg Room Tax Fund, and many individual contributions. The lead painter was Loey Colebeck, an artist at the Wormfarm's residency program along with local artists: Monica Leigel, Marcy Huffaker, Jessy Huxmann, Vickie Wildes, Lucy Schoenfeld and Julie Koenke. Visit the Wormfarm's website at www.wormfarminstitute.org for more information.

Mural on Reedsburg Woolen Mill Office Building

Farmland Preservation Agreement Deadline in June

The deadline is Wednesday, June 30, 2004, to submit an application for a Farmland Preservation Agreement to be eligible for the 2004 tax relief credit. This only pertains to landowners who do not currently have an agreement and live in Woodland, LaValle, Winfield, Dellona, Delton, Fairfield, Greenfield, Baraboo, Merrimac, Washington, Freedom, Bear Creek, or Spring Green townships. A Farmland Preservation Agreement is the only way to claim tax credits in townships that have not adopted Exclusive Agricultural Zoning. Landowners who live in townships zoned for exclusive agriculture may also want to sign an agreement in order to lock in benefits and requirements and protect against possible future changes in the program.

Landowners must own a minimum of 35 contiguous acres and produce agricultural products worth at least $6,000 per year or an average of $18,000 over three years on that property. Agreements can be signed for a minimum of 10 years up to 25 years. The land entered into an agreement must remain in agricultural land uses and maintain a soil conservation plan.

New applicants must also be in compliance with the new state runoff rules (NR 151) that became effective October 1, 2002. The law sets performance standards to protect water quality. Farms applying for new agreements will be required to address barnyard runoff, nutrient management planning, and livestock access to surface waters. If the county requires a practice to be implemented, cost sharing will be provided.

Cash Incentives Available

Eight landowners have applied for the Conservation Reserve Enhancement Program (CREP) in the last few weeks, and together they are protecting more than ten miles of streams and ditches. CREP is the grass buffer strip program for cropland and pastures that protects streams and ditches from runoff pollution. Ten landowners signed up in 2003. Duane and Bonnie Lins signed up last fall. "It makes sense from the farming side because that land was always so wet," said Duane, "and it makes sense from the financial side because they paid me enough that I could rent other ground." Duane and Bonnie chose a native grass mix for its wildlife value and because it filters runoff better.

The 15-year CREP agreement pays from $50 to $140 per acre for 15 years plus a first-year incentive payment from $200 to $300 per acre. The permanent CREP easement pays from $50 to $140 per acre for 15 years plus a first-year incentive payment from $700 to $1,400 per acre.

CREP uses forested buffers, grass filter strips, grassed waterways, and wetland restorations to protect the water supply from sediment, nitrogen, and phosphorus. Wildlife also benefit from the food and winter cover provided by prairie grasses, flowers, and/or trees typically planted in buffers. You can hike, ski, or hunt - just about anything that does not remove or damage the vegetation. Public access to CREP land is not required.

Do you have cropland or pasture near waterways? Call our office at 355-3245 to see if you are eligible!

Gypsy Moths Are Coming….What You Need to Know!

Gypsy moth caterpillars hatching from an egg mass on a tree

Gypsy moth infestations continue to spread throughout Wisconsin. Populations of the moth and its caterpillar can explode in early summer every 5 to 15 years and have defoliated large forest tracts in northeastern Wisconsin. Similar outbreaks can be expected in Sauk County starting in three to five years; however, there are many steps landowners, communities, and forest managers can take to delay outbreaks and minimize the damage.

For woodland owners, the best thing to do is work with a forester to make your trees are as healthy as possible NOW. Develop a management plan and thin appropriately. You do NOT need to clearcut your woods. Most defoliated trees will grow new leaves and survive. They just have a much better chance if they are well spaced. Remove and destroy egg masses, and put duct tape bands smeared with petroleum jelly around the trunks to keep the caterpillars from climbing up. Destroy egg masses by spraying them with Golden Pest Spray Oil or by scraping off egg masses and killing them. Treating egg masses with Golden Pest Spray Oil is preferred if you plan on participating in a suppression spray as it leaves the egg masses in place to be counted by the program's surveyors. Golden Pest Spray Oil should be mixed 50/50 with water and then spritzed onto the egg mass until it is soaked. If you scrape off egg masses, use a knife to scrape all of the eggs into a jar. Eggs can be killed by microwaving them on high for two minutes or by soaking in soapy water for two days before discarding them in the trash. Do not just scrape egg masses onto the ground or try to crush them with your shoe as they will survive to hatch next spring!

Tent caterpillar-NOT gypsy moth egg mass

For tips on silvicultural options to reduce damage from gypsy moths, get the forestry facts pamphlet #83, "Forest Management Strategies to Minimize the Impact of Gypsy Moth," from the UW-Extension (355-3250) or the Sauk County Forester (355-4475). For more information call 1-800-642-MOTH, Wisconsin Department of Agriculture, Trade and Consumer Protection www.datcp.state.wi.us/arm/environment/insects/gypsy-moth/

(Continued from page 4)

in weed growth should help reverse this trend. We could not afford these improvements without the grants." Koenig continues, "A rededication celebration is being planned for May 27. We are excited about the improved lake and are anxious to show it off. Also, we want to recognize the great help provided by the state, federal, and local project partners. Watch the local news media for more information about the day's events."

INVITATION

White Mound Lake Rededication
Thursday, May 27

For more information, contact the White Mound County Park at 546-5011 or the Sauk County Land Conservation at 355-3245.

"Bubble Baths" in the Baraboo River?

A nostalgia piece in a recent issue of the Baraboo News Republic provides a good benchmark of the changes in the Baraboo River. A clipping from the "50 Years Ago Today" column highlights the "bubble bath" of foam created as the water flowed over the Woolen Mill Dam and the wind "breaking off big pieces of the foam which went sailing like balloons." It also notes that the foaming was earlier than usual indicating it was an annual event. Many of us can remember events like these from times gone by. Foaming rivers, dye-colored waters, and rafts of sludge floating downstream were all evidence of polluted waters.

Foam on a river is an indication of a high phosphorus level in the water. High phosphorus levels are a concern because phosphorus acts like fertilizer for algae and weed growth in water bodies much like nitrogen does in the soil. More phosphorus equals more weed and algae growth and more bubbles. Phosphorus gets into the river from household detergents, manure runoff, and eroding soil particles.

Much has been done to reduce this pollution and eliminate these clouds of bubbles. Industry and municipalities have been required to upgrade their treatment plants and control their discharges. The Clean Water Act brought rules that limited the phosphate level in detergents. Pollution control practices installed on farms eliminated much of the soil erosion and manure runoff of the past. The statewide agricultural pollution standards now will require these same types of practices be in place on all farms in the future. Cooperators in the Crossman Creek-Little Baraboo River and the Narrows Creek-Baraboo River Priority Watershed Projects knew that reducing their farm runoff pollution was a good thing to do. These farmers voluntarily installed practices that reduced manure runoff to the Baraboo River by 60 percent and reduced soil erosion by 52 percent. The results of their efforts are clear. We now see cleaner water, less foam, and more fish.

Funds are available for the design and cost sharing of erosion and runoff control practices - some may end in 2004!

The Crossman Creek-Little Baraboo River Project has ended, and this is the last year to cost share these conservation practices through the Narrows Creek-Baraboo River Watershed Project. The improvements visible in the Baraboo River can also be possible in the other streams in Sauk County. State and federal funds are available for the design and cost sharing of erosion and runoff control practices on other rivers throughout the county. Call our office at 355-3245 to learn more about any of these programs and how you might participate.