

# A Rolling Stone Gathers No Moss

*R* olling Stone Lake has always been known for its good fishing and its good people. Head up-state on Highway 55 through Langlade County and you will finally arrive at Rolling Stone Lake—tucked on the edge of the Great North Woods. Rolling Stone reaches 14 feet in depth and covers 672 acres. The lake is naturally rich in nutrients and the accompanying abundance of aquatic plants...

BY: Sonny and Mimi Wreczycki and Marianne and Warren Otto of the Rolling Stone Lake Environmental Impact Committee

In 1975, 100 property owners decided to form an inland lake protection and rehabilitation district. The organization debuted with a distinctive idea. That idea was to raise needed funding through volunteer efforts and limit their use of taxing powers.

Their first task was a 1977-78 feasibility study to identify areas of concern in the lake. The finances for the district's portion of the study were procured through fundraising events—no taxes were needed. The conclusion was that heavy deposits of nutrient rich silts were stimulating excessive aquatic plant growth. The silt was too expensive for the district to dredge but plant removal was "do-able." In 1984, a mechanical weed-harvesting program was started. Over \$70,000 was amassed through a host of fund-raising events: donations, raffle tickets, poultry shoots, dances, corn roasts, rummage sales and Fish-A-Rama—to name a few. The aquatic plants were eventually brought under control and continued harvesting manages the plant growth.

While working on the plant control, operators of the harvester began to observe some unsettling signs. They noted green streaks in the water and repulsive smells. In some areas pollution seemed to be seeping into the lake. The District decided to see if faulty sanitary systems were polluting the lake.

Back in 1988 lake districts lacked the authority to undertake any investigation of private sanitary systems. A 1990 amendment to chapter 33 of our state statutes changed that. Lake districts can now apply to the town board to assume all or some of the powers of a town sanitary district. Rolling Stone followed the steps needed to obtain the power to inspect private sanitary systems on properties within 1,000 feet of the lake. The first step was to place the topic on the agenda for the District's annual meeting. At the 1991 annual meeting, the members passed a resolution requesting the Ainsworth Town Board to grant sanitary district powers limited to the inspection of private sanitary systems. The resolution was presented to the Town Board and on June 22, 1991, a public hearing was held. Over this same four-year period a vital educational campaign was launched with assistance from the University of Wisconsin Extension, the Langlade County Extension agent, and the zoning administrator. People began to understand the possible repercussions that failed septic systems could have on the water quality of Rolling Stone. In February 1992, the Town Board granted the Rolling Stone Lake District the power to inspect private sanitary systems.

The county zoning administrator helped lake volunteers as they searched the records of the Land Records and Regulations Department to obtain information about existing sanitary systems. At the 1992 annual meeting, funds from the Labor Day picnic and raffle were budgeted to start the inspection process. A survey form was sent to each property owner in the designated area to find out if information was correct and to provide any additional information about their sanitary systems. Bids were obtained and a licensed inspector was contracted. The project was divided into three phases. Phase I of the project targeted the older systems that bordered the lake. Thirty-two systems were inspected, and 28 failed. The failed systems are in the process of being replaced.

Phase II of the program will inspect the next oldest group of sanitary systems. The final group will be inspected during Phase III in 1994-95.

Volunteers enjoy working on the plant harvesting program, the sanitary inspection project, and fund-raising activities. Through fund raisers, Rolling Stone also was able to purchase 4 acres of land, and construct a building for storing harvesting equipment and use as a meeting place. If enough people care, positive things can happen!

Brats, beer, dances, raffles, prizes -their motivation is contagious. Rolling Stone Lake is an excellent example of what can be accomplished when a group of people have a vision and the determination to see it through. To this day the district has been able to meet that goal of raising the majority of their dollars from fund raisers and donations. Their 1990-91 budget saw the first use of a mill levy to pay for half the cost of a new harvester and truck. The rest was collected with fund raisers. In 1987 Rolling Stone Lake won the Wisconsin Lake Stewardship Award.



# **Investigating Sanitary Powers**

Lake districts and property owners have asked about inspection of private septic systems. We decided to investigate this delicate balance between private property rights and a district's interests in inspecting private systems to protect our waters. We reluctantly waded into the statute books and here is what we found...

#### BY: Michael D. Dresen

A town board may allow a lake district to exercise some or all of the sanitary district powers authorized by law [s. 33.22(3), 60.77 & 60.78, Stats.]. An annual or special meeting of a lake protection district must be held to request sanitary district powers from the town board. The lake district resolution requesting sanitary district powers and the town resolution granting them should specify the particular powers to be exercised.

Among the powers which can be assumed is the right to inspect existing private septic systems to determine compliance with the state plumbing code (ILHR 83). The state plumbing code is incorporated into local ordinances administered by the zoning administrator, sanitarian or health department in counties throughout the state.

After a town grants appropriate powers, a lake district may inspect or contract for the inspection of private septic systems. To assure credibility, districts should avoid contracting with plumbers or inspectors who may have designed or installed systems that are now in question. Districts should notify property owners of the date and time of inspection and request their consent. A description of what will be done during the inspection, the reasons for it and the consequences will help property owners feel more comfortable with the process.

If a property owner refuses consent, inspectors must obtain a special inspection

warrant from circuit court. The inspector must prepare a sworn statement showing:

- refusal of consent for inspection;
- premises to be inspected (municipality and address);
- ordinance sections applicable (local sanitary ordinance sections);
- reasons for inspection (evidence of system failure or condition of lake, etc.); and
- items to be inspected (samples, etc.). If the reasons for inspection are suffi-

cient, the circuit judge will issue a warrant to authorize it. The inspector must report the results of the inspection and return the warrant to the court (see s. 66.123, Stats. for examples of warrants, reports, etc.).

We asked Rebecca Frisch, Langlade County Zoning Administrator, about the referral of failing systems to the county for enforcement, and about her experience with the Rolling Stone Lake District. She complimented the District on their research of public and owners' records to determine which systems had no construction records and were most likely failed. That information helped to convince the town board to delegate sanitary powers and was the basis for determining which systems to inspect and renovate first. Another real plus, said Becky, was the District's effort to educate property owners about how their failing septic systems were damaging the lake, how to determine the health of their system, and what to expect as a result of the inspections.

Because of this groundwork by the district, few owners were surprised when enforcement orders were issued by the zoning office. The orders gave owners one year to replace failed systems. Becky reminded us that the Wisconsin Fund is available in most counties to help defer the cost of septic system replacement for principal residences. She was not aware of any counties or Lake Districts that provide additional funding to upgrade failed systems.

# HEAD FOR THE HIGH GROUND or Start Collecting Two of Everything

#### BY: Michael D. Dresen

This year's flooding in Wisconsin and throughout the Midwest makes us wonder if it might not be a good idea to start building a big boat and collecting two of each species. We decided to ask some of the experts just how wet it was and what can be done to prevent flooding or protect us from it.

Pam Knox is the state climatologist with University of Wisconsin Extension's Geological and Natural History Survey. She reports that precipitation to date this year is 138% above normal statewide with Madison and LaCrosse reporting in at 182% above normal. The heaviest rainfall has occurred in southern and central parts of the state. Pam cites Baraboo's 12 inches of rain in 3 hours as a possible 1,000 year storm event. The folks there who suffered its effects undoubtedly hope they won't be around for a similar torrent.

We spoke with Bob Watson from the DNR. Bob works with the floodplain management and dam safety programs in Madison. He explained that floods are to some degree predictable. A 100 year flood is a term that many folks find troublesome. If we are having one now, we won't see another for 99 years...right? "Not so," says Bob. "We use historical climatological and flooding records, river and stream topography information and computer models to estimate flood elevations for different storm events. **The 100 year flood has a 1% chance of occurrence every year.**" That translates into a 26% or about 1 in 4 chance that buildings located in the 100 year flood plain will be flooded during a 30 year mortgage period. For contrast Bob points out that insurance industry data show a 17% risk of fire in the same 30 year period. "The message seems to be that while we can't predict exactly when floods will occur, we have a pretty good idea what risks of flooding are over a period of time."

Bob explained that floodplain zoning applies to lands inundated by the 100 year flood. There are two parts to a floodplain. The **floodway** includes the stream channel and adjacent lands that carry moving water downstream during floods. Local floodplain zoning prohibits buildings and filling there. The area called the **flood fringe** lies landward of the floodway and stores standing water during major floods. This area can be developed if buildings and access to them are elevated to protect them from flooding.

What if I happen to own a home in a flood area which was built before floodplain zoning went into effect or near a lake or river which hasn't been studied to determine flood levels? Bob informed us that flood insurance is available only through the federally subsidized National Flood Insurance Program. Policies are available through insurance agents in about 450 communities in the state that participate in the program. Your home doesn't have to be located in the floodplain to qualify for flood insurance.

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Bob says that federal regulations prohibit major reconstruction of buildings damaged by recent flooding unless buildings are relocated outside floodways and are properly elevated and protected if they are located in flood fringe areas. "After all, why should taxpayer dollars be spent for reconstruction which will again be flood damaged?"

What are the lessons of the recent flooding? Well... floodplains flood. If you live there, you're probably going to get wet. If you plan to build near a lake, river or stream, visit the local land use planning or zoning office and ask for information about flooding and related regulations. If you already live near the water and plan to add on to your cottage or home, maybe it's a good time to consider moving to higher ground on your lot. If the addition is a major one, some local ordinances will require you to move out of the floodplain or elevate and floodproof your building.

A number of modern circumstances aggravate flooding. Forests and grasslands where snowmelt and rains once seeped into the soil have been replaced in some measure by roadways, parking lots, roofs and other impermeable surfaces which accelerate runoff to nearby rivers and streams. Wetlands and flood-plains, which once stored flood waters, have been ditched and drained, filled, or diked. Water levels in artificial reservoirs are held high for recreation, negating possible flood control benefits. Levees force flood waters onto other lands, raise flood levels upstream and cause faster, more damaging stream flows. The combination of more runoff and fewer flood storage areas generally means more frequent flooding that lasts longer.

Until mother nature and the jet stream bring us fair weather, let's keep cool heads and good records so that we can plan for the next time the 100 year flood visits us.

### WE ALL LIVE DOWNSTREAM...

Even land locked lakes were experiencing high water problems this summer. Piers were under water; some septic systems were flooded; well water was threatened; and waves or boat wakes eroded shorelines. Some waterfront residents suggested pumping to reduce the flooding. Michael Cain of DNR's Bureau of Legal Services says DNR permits may be required to maintain lake levels by pumping and suggests a cautious approach. He recounts some of the legal history associated with surface water flooding. "Once diffuse surface water was regarded as a common enemy. A property owner could pump, or construct ditches and do whatever was necessary to avoid damage from flooding. More recent laws require property owners to exercise reasonable care and avoid actions which damage other properties." Pumping down your lake, even if it's technically feasible, may damage property owners downstream. You could be held responsible for damages. Contact local town or county officials, DNR and downstream property owners, including any farm drainage district or similar authorities, to determine the effects of your activities before altering natural drainage.



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## THE WISCONSIN RURAL LEADERSHIP PROGRAM... A Unique Opportunity

As adults we have many life experiences but few opportunities to systematically examine the big issues confronting our communities.

The Wisconsin Rural Leadership Program is designed to provide such opportunities for Wisconsin residents. Every two years 30 adults are selected to participate in a series of eight Wisconsin seminars, a week-long national seminar in Washington, D.C., and a two-week international seminar.

Three-day seminars are offered on: State Government, Natural Resources, Urban Issues, Leadership and Social Change, Health Care, Economic Development, Rural Families and Communities, and Education.

For more information on program costs and arrangements, contact Mary Maier (608-263-5024). To discuss program content or relevance to lakeshore communities, contact Lowell Klessig (715-346-4266). Lowell has been appointed as the next Executive Director of the program.

### **SURVEY SAYS...**

Thanks goes out to all who sent back the <u>Lake Tides</u> renewal survey in the last issue (Vol. 18, No. 2 - Summer 1993). We are still waiting for your responses!

**REMEMBER:** Return of the postage-paid survey <u>with your mailing label</u> will ensure that you will remain on our subscription list to receive future issues of <u>Lake Tides</u>.

### LAKE FAIRS

Throughout the Badger State thousands of lake lovers converged on regional Lake Fairs during the summer of 1993. Area lake organizations, towns, cities, agencies, the university extension and businesses pitched in to help folks discover more about their lakes. The Lake Fairs furnished fun, food, facts and a chance to chat with your area experts about lakes. Plan on attending a Lake Fair near you next summer.

### ZEBRA MUSSELS FOUND ON AQUATIC PLANTS

The best way to prevent zebra mussels from spreading to inland lakes may be to clean aquatic plants from trailers and boats, according to Ladd Johnson, a visiting scientist at the National Oceanic & Atmospheric Administration's Great Lakes Environmental Research Laboratory. As part of Johnson's Sea Grant-funded study, he examined boats removed from Lake St. Clair and found that up to a quarter were trailing aquatic plants with zebra mussels attached.

"The number of zebra mussels we found on plants was astounding," Johnson said. "One strand of coontail was so heavy it couldn't float."

Reports like Johnson's have prompted UW-Madison zoology professor Jim Kitchell to suggest that the Wisconsin lakes most likely to become infested with zebra mussels are the same ones that experienced an early invasion by Eurasian water milfoil. Both zebra mussels and water milfoil require similar water quality conditions and are spread by similar human vectors.

Kitchell believes reviewing the historical pattern of the Eurasian water milfoil invasion might help predict the spread of zebra mussels to our lakes.

From <u>Zebra Mussel Update</u>, by Cliff Kraft, Sea Grant, Green Bay

#### THE GREENING OF AMERICA

In the United States, **lawns occupy more land than any single crop**, including wheat, corn or tobacco.

Americans spent **\$750 million on 400 million pounds of grass seed** in 1992-93.

Homeowners use 10 times more chemical pesticides per acre than farmers do.

As much as **60 percent of water in Western cities is used for lawns;** as much as 30 percent in Eastern cities.

There are 25 million acres of turf grass in the United States—that would cover over 2/3's of Wisconsin's 34.6 million acres.

Of the 34 major pesticides commonly used on lawns, 32 have not been tested for their long-term effects on humans and the environment.

(from Newsweek, June 21, 1993/source: The Lawn Institute)

### An Indispensable Directory: The 1994-95 Lake List

The <u>Lake List</u> is an indispensable directory for people concerned with Wisconsin's lakes. It contains the addresses and phone numbers of lake organizations, agency and university lake professionals, firms providing lake management equipment and services, and sources of assistance for each county. If you are aware of a lake organization that is not currently listed, please contact <u>Lake Tides</u> with the details. For organizations that have changes in the contact person, please send them in. We want everyone included in the 1994-95 edition.

Vendors who wish to be listed should send us their complete mailing address, telephone number (including FAX), contact person, and list of the products and services provided. The new edition will also contain a list of providers of native plants and related landscaping and gardening products. If you are aware of a nursery that provides these services, let us know.

Help us to make your directory the best it can be! If you have suggestions on improving <u>The Lake List</u> call Dorothy Snyder or Robert Korth at 715-346-2116. The new edition will be available early in 1994.

## **Self-Help Program Continues to Grow**

The DNR's Self-Help monitoring program began in 1986 with 125 volunteers collecting Secchi data on 113 lakes. Today the program has grown to over 500 volunteers with a variety of monitoring responsibilities. The core of the program is still Secchi disk monitoring. Twenty new Trophic Status Index (TSI) volunteers record clarity and temperature information and collect phosphorus and chlorophyll samples on 18 lakes. Thirty-five volunteers carry on Expanded (EXP) monitoring, collecting TSI data as well as dissolved oxygen profile information.

Zebra mussel volunteers were added to the Self-Help program in 1992. The DNR, in conjunction with the UW Sea Grant Program, selected volunteers on thirty mussel-vulnerable Self-Help lakes (primarily near the Great Lakes and the Mississippi River) to watch for these nuisance invaders. Contact Jo Temte or Celeste Moen, DNR Self-Help Monitoring Program (608-266-8117) for information on becoming a self-help monitor for your lake.

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On July 1st, the Lake Management Program received funding to begin statewide Self-Help-Plant Monitoring. Beginning in the summer of 1994, self-help volunteers will have the opportunity to monitor their lakes' aquatic plant populations. Interested volunteers will be trained to map aquatic plant beds, identify general plant types, collect specimens, and watch for Eurasian water milfoil. There is a growing awareness of the importance of healthy populations of native aquatic plants and Wisconsin's lake managers are focusing their attention on their protection.

#### ##########

Our summer issue survey results showed an impressive interest in information on aquatic plants. To meet that request, Lake Tides is inaugurating a new regular feature written by aquatic plant experts.

## **AQUATIC PLANTS: A Crucial Role**

**T** rees in the forest and grasses on the prairies play critical roles in their ecosystems. Even though they are often less obvious, aquatic plants that grow near the shore and in the water play the same important role in the water world.

Native aquatic plant populations are the underpinning of a healthy lake. A better understanding of aquatic plants and the role they play in a lake ecosystem is vital to anticipate the future of our inland lakes. Protecting native aquatic plant communities can have diverse benefits.

- Native plants can limit the spread of exotic plants like Eurasian water milfoil.
- Plants leaves, stems and roots provide homes, building materials and food for wildlife such as fishes, birds, reptiles, and amphibians.
- Plants that emerge above the water surface or grow near shore are often perfect homes for loons, ducks and shorebirds.
- Plants help stabilize the lake and river bottoms and prevent shoreline erosion by dampening waves and currents.
- The best fishing spots are typically near aquatic plant beds.

• Plants provide protective cover for fish, spawning areas, nurseries, and a perfect restaurant for hungry game fish. • Aquatic plants produce oxygen, vital to all the creatures that live in the water.

- Decomposing plants return nutrients to the lake bottom where they become food for many small organisms.
- Flowering aquatic plants like the water lily, pickerel weed, blue flag, and cardinal flower add natural beauty to waterfront property.

Look for more articles on aquatic plants in upcoming issues of <u>Lake Tides</u>.



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Dear Lake Tides: My husband and I live on a beautiful lake in Oneida County. Our neighbor feeds the ducks. We have counted over 100 of them devouring the buckets of corn he brings to the water's edge. The ducks leave quite a mess; their droppings are on the shore and all over the bottom of our bay. At the North Woods Lake Fair you folks acquainted me with a relationship between waterfowl and swimmers' itch. Some of the people on the lake have gotten swimmers itch and I'm concerned for the health of my grandchildren who swim in our bay. Please write an article on swimmers' itch to educate the public on the dilemma of duck feeding...

# **Swimmers Itch**

Swimmers' itch is caused by flat worms that penetrate the skin. The microscopic-sized parasites die shortly after penetrating the skin, but can cause allergic reactions in about one third of the people who contact it. A reddened spot appears within a few hours after the parasite enters the skin. The spot may grow in size—especially if scratched and the skin surface swells, sometimes appearing as red welts. The irritated spot reaches its maximum size after about 24 hours; the itching may continue for several days and should disappear after a week.

#### How/When Do You Get Swimmers' Itch?

The parasites are found in shallow water near the shoreline. They look for mammals or birds to attach to. The parasites penetrate the outer layer of skin within several minutes after making contact. The first outbreaks of swimmers' itch usually occur in late May or early June. Lakes in the northern half of Wisconsin usually have a swimmers' itch season of about two weeks; lakes in the southern half of the state may have a season lasting one month. There's no way to predict how long an outbreak may last, in some lakes it may last an entire summer.

#### Where Does the Parasite Come From?

The parasite has a complex life cycle that uses aquatic birds or rodents and snails as hosts at different times during its maturation. Common grackles, red-winged blackbirds, ducks, geese, swans, muskrat and moles have been found to carry the parasite.

The birds and rodents carry the adult schistosome parasite in their blood vessels. The eggs move into the intestine and are expelled when the host defecates. The eggs hatch when they're expelled into water and grow into free-swimming larva that take up residence in snails. Using the snails as hosts, these larva develop into another type of larva called cercaria. It's these cercaria that cause swimmers' itch when they look for a new host to complete the parasite's life cycle.

#### **Reducing the Risk:**

• Discourage birds from feeding near a swimming area.

• If possible, limit riprap because the rocks provide habitat for snails.

• Towel down immediately upon leaving the water.

• Swim in water away from the shore and avoid areas where snails have accumulated.

• If the lake is having problems with swimmers' itch, avoid swimming after an onshore wind.

• If symptoms intensify or persist, call a physician.



## **Autumn Highways**

Another summer season nears its end promising time for the land to mend from all that traffic headed north... tail lights, tents and trailers sallying forth.

Pleasure seeking among the lakes and pines in frantic search for peace of mind.

The pulsing highways carry memories and smiles now traveling south for many miles.

At this season winged migrants also convene at Vieux Desert, Court Oreilles and Prairie du Chien to follow ancient memories and their own highways... the Mississippi, Wisconsin, Fox and other byways.

They too are headed south, vacationing at some great river's mouth.

For each goose and gosling, drake and hen, autumn days have come again.



#### CALENDAR

October 16 - Southeast District Lake Fair, UW West Bend: Contact Pamela Buchholz, [414/335-4480]

October 23-24 - 4th Annual Minnesota Lakes Conference, Brainerd: Contact Pat Wulff [612/479-2972]

November 29-December 4 -North American Lake Management Society, 13th Annual International Symposium, Seattle, WA: Contact Bob Schroeder [303/781-8287] or WAL President Lisa Conley [414/567-5947]

March 25-26, 1994 - Wisconsin Lakes Convention, Oshkosh Hilton (details to follow)

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