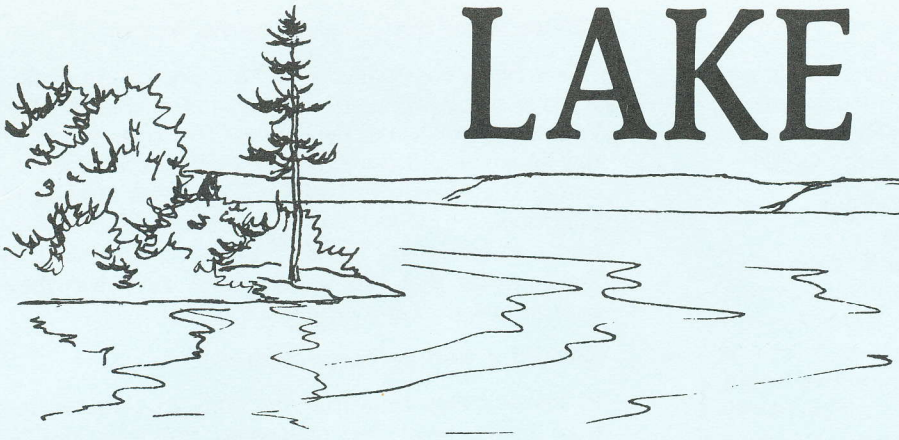


LAKE TIDES

Spring 1988
Vol. 13, No. 2

Lake Onalaska: Fifty Years of Change

by Marc Schultz

Lake Onalaska is known for its beautiful sunsets and its exceptional bluegill fishing. Located just upstream from La Crosse and directly adjacent to the city of Onalaska, Lake Onalaska lies within the Upper Mississippi River Wildlife and Fish Refuge. The refuge, managed by the US Fish and Wildlife Service, is part of the Upper Mississippi River nine-foot navigation project managed by the US Army Corps of Engineers. In fact, Lake Onalaska is actually a portion of a Mississippi River impoundment formed by Lock and Dam 7 in 1937.

Lake Onalaska covers 5,400 acres with a mean depth of five feet. The lake is a mixture of Mississippi and Black River waters. Because Lake Onalaska is shallow, it does not stratify. Islands separate it from the main channel of the Mississippi, and the Black River flows into the lake on the upper end through braided, marshy channels.

Lake Onalaska is very productive, with an average of 300 to 500 pounds of fish produced per acre per year. Extensive beds of submerged and emergent vegetation, including wild celery, coontail, potamogetons, water milfoil, American lotus, and wild rice provide more than ample cover. The most popular sport fish in the lake are largemouth bass, bluegill, and northern pike. Commercial fishing helps control rough fish populations, as well as providing economic benefits to fishermen. The most-commonly fished commercial species are catfish, carp, and buffalo.

In addition to fish populations, each year thousands of waterfowl use Lake Onalaska as a feeding and resting area during migration. This is particularly true for the canvasback duck. They feed on the wild celery tubers. The backwater areas produce hundreds of local waterfowl, muskrat, mink, and beaver.

Because Pool 7 is an impoundment, it suffers from sedimentation and nutrient trapping. The situation is complicated by the need to dredge the main channel for major navigation and commercial shipping. Changes in technology have also led to the use of large recreational craft on the channel and deeper backwaters of the river system.

In 1975, Lake Onalaska Protection and Rehabilitation District was formed in response to resident concerns that the lake was rapidly losing open water and becoming choked with vegetation. The district was formed to stimulate the collection of information, develop lake management alternatives, and promote projects that will lead to an improved lake environment. Major studies completed by the district are the Lake Onalaska Rehabilitation Feasibility Study and Lake Onalaska Macrophyte and Macroinvertebrate/ Population Study. They have also become involved in a number of projects, including: construction of a sediment trap, providing access to the lake, bank riprap by individual landowners, and establishment of a voluntary "no hunting" area to benefit canvasback ducks during fall migration.

The institutional arrangements to address management problems are complex, consisting of federal agencies, the several states adjacent to the upper Mississippi River system, interstate commissions, local municipalities, and groups such as the Lake Onalaska Protection and Rehabilitation District.

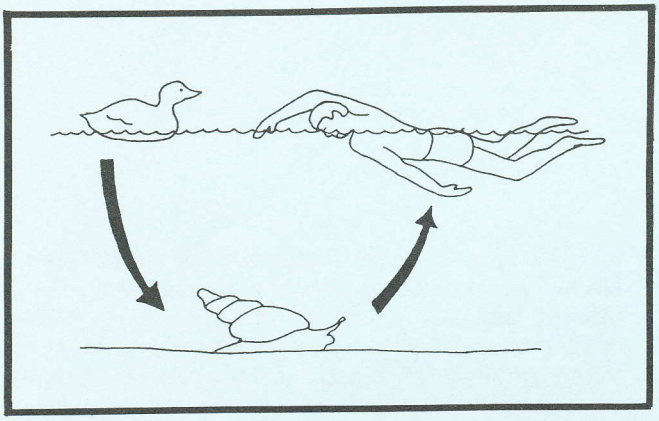
Different management philosophies and missions of the institutions have led to some stormy public policy debates and public concern over management strategies. In spite of the complexity, a comprehensive management plan for the upper Mississippi River system has been completed, and Federal legislation will establish the Environmental Management Plan for the Upper Mississippi River. Lake Onalaska has been given a high priority to receive funding under the program. Proposed projects will deepen areas for improved winter fish habitat, create islands for waterfowl nesting, riprap for bank stabilization, and manage water flow into and out of the lake system.

Presently, funds for district operations come from the sale of a lake map compiled by the district. The Lake Onalaska District will never be able to fully fund and carry out management programs for the lake. Many agencies must be involved and the management of such a valuable resource is expensive. However, the

Lake Onalaska continued

Lake Onalaska District is a good example of local government working closely with resource management agencies to implement national policy. The benefits are to lake residents as well as to the entire Upper Mississippi River.

Marc Schultz is UW-Extension Community Development agent for La Crosse County.



Common Questions asked about Swimmers' Itch

What is swimmers' itch?

Swimmers' itch is a skin irritation that is caused when flat worms, a larvel stage of the schistosome parasite, penetrate the skin. The microscopic animals die shortly after entering the dermis, but can cause allergic reactions in some people.

What are the symptoms?

A reddened spot appears within a few hours after the parasite bores into the host. The area may grow in size with some swelling—especially if scratched—and sometimes may appear as red welts. The irritation reaches its maximum size after about 24 hours. Itching may continue for several days, but symptoms should disappear after a week.

How do you get swimmers' itch?

The parasites are found in shallow water near the shoreline. They attach to mammals or birds and penetrate the outer layer of skin within several minutes of making contact.

When can you get swimmers' itch?

The first outbreaks 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. However, 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 schistosome parasite has a complex life cycle. Birds and rodents carry the parasite in their blood where the adults lay their eggs. The eggs move to the intestine and are expelled when the host defecates. They hatch in water and grow into free-swimming larvae (maracidiae). These larvae take up residence in snails and develop into cercariae larvae. It's the cercariae that cause swimmers' itch when they locate a new host to complete their life cycle.

Should a doctor be consulted?

In severe cases of swimmers' itch, the infected person may have a fever, feel nauseated, and have difficulty sleeping. Consult a physician if you're not sure what caused the rash, if the symptoms intensify or persist longer than a week, or if the symptoms cause undue discomfort. A physician can prescribe medication to reduce itching and topical creams to reduce swelling.

What preventive actions can lake property owners take?

- Don't encourage birds to stay near a swimming area by feeding them.
- Don't riprap the lakeshore if possible—the rocks provide habitat for snails.

Can swimmers lessen their chances of getting swimmers' itch?

- Towel down immediately upon leaving the water.
- Swim in water away from the shore.
- Avoid swimming immediately after an onshore wind if the lake is having problems with swimmers' itch.
- Avoid areas where snails have accumulated.

Jargon Busters

Benthos: The plant and animal life that live on the bottom of the sea, lake, or river.

Biochemical oxygen demand (BOD): A measure of the amount of oxygen consumed in biological processes that break down organic matter in water. Breakdown of organic waste uses up dissolved oxygen; thus, the greater the organic waste pollution, the greater the BOD.

Coliform organism: Any of a number of organisms common to the intestinal tract of man and animals and whose presence in wastewater is an indicator of pollution.

Chlorinated hydrocarbons: A class of persistent, broad spectrum insecticides such as DDT, aldrin, dieldrin, heptachlor, or chlordane. These insecticides are long lasting; they represent a hazard through accumulation in the food chain and the environment.

Conflict's Not a Dirty Word

by C.D. Besadny (as reprinted from "Voice")

For most of us, conflict is something we try to avoid in our personal lives. It doesn't matter where we find it—at home, while shopping, in school, or at work. Conflict makes us uncomfortable and ill at ease. It should be no surprise, then, that we want to avoid conflict, to prevent it, to resolve it if it occurs. And yet an honest assessment of our work at the Department requires an admission that conflict over natural resources is inevitable. It is as inevitable as geese migrating north in spring or as spring spawning for the walleye.

As DNR Secretary, I appreciate there are different views within our ranks and conflicting views with people we serve. There are those who want to preserve and those who would use; disagreements between administrative lumpers and bureaucratic splitters.

Webster's dictionary points out that conflict involves competitive or opposing actions of incompatibles; a secondary definition talks about a mental struggle. In either case, the image of opposing forces is drawn, a struggle from which there is a winner and a loser. I prefer another version of conflict: one that doesn't reject the notion of struggle, but does reject the assumption that there must be a winner and loser.

Constructive conflict, like constructive debate, has served conservation well over the years. It has allowed opposing views to emerge and dialog to take place. New ideas emerge, compromises are forged. There are no winners and losers, but rather an acceptance of a reasonable course of action.

I can think of a number of recent examples that have served the resource well: the consensus we reached on a landmark groundwater protection law; the decison that allowed us to continue the annual bear season in the North; an acid rain law that committed us to nationally-significant action; changes in the deer season framework that resulted in a uniform, nine-day season.

In each of these instances, parties of interest—stakeholders, the consensus builders would call them—had competitive or opposing positions.

Still, our system of government and our approach to resource management resulted in a positive approach to problem solving, a consensus building that may not have given everyone what he or she wanted, but allowed forward movement without significant roadblocks.

But resolving conflicts and building consensus takes skill and patience. Recently, the Natural Resources Board and agency top managers spent half a day with one of the most exceptional trainers I have ever experienced. Bill Wiedman of Synergy explained to us the nature of values-driven citizen involvement as a part of natural resources management. The Synergy approach was sensitive to people's deeply-held feelings about natural resources and recognized the inevitability of conflict for organizations such as ours.

What impressed me, however, was not only that 32 of our Department citizen involvement consultants were being exposed to techniques useful in effecting meaningful public participation, but that they were confronted with the inevitability of conflict and coached on how to achieve constructive resolution.

So the next time you hear of another tangle over natural resources use, or you see a conflict-bearing DNR headline, don't be surprised. Be reassured. Take solace in the fact that not only do the people of Wisconsin feel strongly about "their" natural resources, but that the Wisconsin DNR is channeling that concern and guiding that conflict in constructive and positive ways. That's as sure as the geese moving north in the spring.

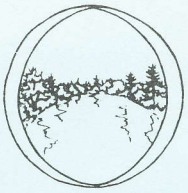
C.D. (Buzz) Besadny is Secretary of the Wisconsin Department of Natural Resources.

P.O. Box

Your organization needs a P.O. Box! We strongly encourage all lake associations and lake districts to obtain a post office box. Maintaining contact with lake groups has been frustrating for both state agencies and groups like the Wisconsin Association of Lake Districts and the Wisconsin Federation of Lakes.

Lake Tides will continue to be sent to the homes of individuals. However, a P.O. Box is needed as a *single* mail location for each organization. Without a permanent contact point, mailing lists are always out-of-date as lake leaders leave office for a variety of reasons.

Eco Note: Loon News



by Paul Strong

For many people, a northern Wisconsin lake is not complete unless it supports a nesting pair of loons. Their eerie calls and stately presence give a sense of wilderness to otherwise crowded and noisy lives.

Common loons are long-lived birds with an average life expectancy of 10-15 years and a maximum longevity of 25 years. They return to the same lakes each year and typically nest near the site of the previous year's nest, if not right in it. Chicks are raised in the same nursery area year after year. Islands and marshy coves are preferred nesting areas and nurseries are usually in shallow, protected coves, away from human activity.

Loons lay only two eggs and raise only one brood, although they may renest if the first nest is destroyed. The two downy chicks grow rapidly on a diet of minnows, crayfish, and aquatic insects, and are ready to fly after 11 weeks. Often one or both chicks are lost to predators, bad weather, food shortages, and human disturbance. On average, a pair of loons in Wisconsin raises only one young every other year.

Wisconsin's common loon population seems to have increased substantially since 1976-77, when the first intensive survey was done. However, shoreline development and some forms of lake recreation still threaten these magnificent birds.

Much is known about how to protect the loons on a lake to ensure their continued return. Many problems confronting loons can be solved by making lake residents aware and appreciative of the loons and their needs. A number of information and education materials and ideas are available from Wisconsin Project Loon Watch, a program of the Sigurd Olson Environmental Institute of Northland College in Ashland. For those interested in loon conservation, request materials on loon protection from Dr. Paul Strong, Northland College, Ashland WI 54806; 715/682-4531.

Paul Strong, coordinator of Project Loon Watch, recently led two workshops on loon conservation at the Wisconsin Lakes Convention.

Equipment Box

The Little Elkhart Lake Rehabilitation and Sanitary District No.2 has the following items for sale:

1982 Mariner Weed Harvester (used only two seasons)
1982 Harvester Trailer
1982 Harvester Weed Elevator
1960 Ford Truck, 14' Flat Bed w/Hoist, V8, 5 spd., tran/2 spd. axle, turn key operation.
$15,000 complete.

Interested parties can contact: Dennis Escher, Little Elkhart Lake Rehab and Sanitary District No.2, Rt. 4 Birch Pt. Rd., Plymouth WI 53073; 414/893-5686.

Editor's Note: On a trial basis, *Lake Tides* will provide space for governmental units and non-profit associations to list equipment wanted, for sale, for rent, or for cooperative use.

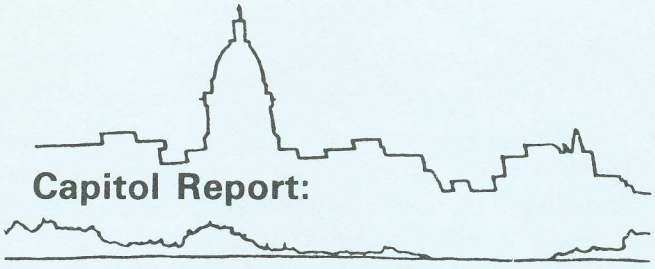
Self-Help Lake Monitoring Program Completes Second Year

by Carolyn Rumery

In 1987, volunteers on nearly 200 lakes around the state took Secchi disc readings to measure their lake's water clarity. A Secchi disc is a metal plate painted black and white in alternating quandrants that is lowered into the water column, usually at the lake's deepest point. Water clarity is one indication of water quality. The overall objective of the program is to collect data over a long-enough period of time (5-10 years) to begin to judge whether the lake's water clarity, and hence, water quality, is getting better, getting worse, or staying about the same. Volunteers on 25 lakes also read a staff gauge to measure water level fluctuations in a cooperative program with the US Geological Survey. The data collected are stored on a computer in the DNR office in Madison. Every volunteer has received a report about the data he or she collected. A report summarizing the data on a statewide basis has also been prepared.

Some volunteers collected data in both 1986 and 1987, while others began the program in 1987. If you would be interested in signing up as a new volunteer for the 1988 sampling season, please contact Carolyn Rumery at DNR, WR/2, PO Box 7921, Madison, WI 53707-7921 (608/266-8117) or call the DNR district nearest your lake and ask to speak to their lake management coordinator. You should have access to a boat and have one hour every two weeks to collect the data. The DNR will provide the equipment you need and will teach you how to use it.

Carolyn Rumery is with the Lake Management Program, Wisconsin Dept. of Natural Resources.



by Susan McComb

Rewrites of three chapters of the Wisconsin Statutes dominate the issues affecting lakes and lake management this legislative session. The following is a brief outline of the proposed changes.

WATERWAYS REGULATIONS

AB 788 (Holperin), the revised Chapter 30, simplifies the permit process by making uniform requirements for notice and hearing procedures, clarifying some confusing language, and authorizing a "general permit" which would be a "nearly automatic" approval for activities having little or no impact on the environment. The specific activities covered under this general permit (to be defined by administrative rule) are likely to be projects such as riprapping, fords, and sand blankets. Fines for violation of these statutes would be increased ($1000 to $10,000 for major violations). The Natural Resources Committee heard this bill in late January, and at this writing, no vote has been taken to bring it to the Assembly.

Other legislation to change parts of Chapter 30 includes AB 172 (Holperin) and AB 498 (Coleman). AB 172 defines and regulates piers and boatshelters. AB 498 would allow moorings to be placed 200 feet rather than the current 150 feet from the high water mark, either by DNR permit or by municipal ordinance. AB 172 has passed the Assembly and is waiting for action by the Senate Committee on Transporation, Tourism, and Conservation (Kincaid). AB 498 is awaiting hearing by the Natural Resources Committee (Black).

DAMS

AB 787 (Holperin), regulation of dams, is a proposal to replace Chapter 31, which was written in 1915. This rewrite uses modern language and regroups various provisions of the chapter to clarify how activities are to be regulated. Stiffer fines are imposed to deter violations. Proof of financial ability to construct, operate, and maintain a dam is required. AB 787 was heard by the Natural Resources Committee last January. It is likely to be amended.

Several other bills also involve dams. SB 227 (Harsdorf) was passed by the Committee on Transportaiton, Tourism, and Conservation, and will proceed to the Senate for a vote. SB 238 (Rude) would exempt dams inspected by or under the supervision of a county from the DNR inspection requirement. This bill was also passed favorably by the Committee on Transportation, Tourism, and Conservation. SB 227 and AB 279 (Bolle) call for the elimination of dam inspection fees, providing funding to the DNR through general purpose revenues. AB 652 (Brancel) and SB 377 (Andrea) create a public assistance program for repair and maintenance of dams. The Joint Survey Committee on Debt Management reported favorably to allow $3 million debt to fund this project. These bills are both still in committee.

WATERWAYS ASSISTANCE

Senator Chvala will introduce legislation to redraft Chapter 33, the "Public Inland Lakes Protection and Rehabilitation" program. The waterways assistance program outlines ways in which the revenues from the motorboat fuel tax could be used on Wisconsin waterways for protection, improvement, and recreational development. Both the Wisconsin Waterways Commission and the Department of Natural Resources share the powers and duties under this proposed legislation. The legislation substitutes the Wisconsin Waterways Commission (staffed through the Department of Natural Resources) for the inactive Inland Lake Council. The Commission would continue their function of allocating motorboat fuel tax revenue.

Susan McComb is Legislative Liaison for the Wisconsin Federation of Lakes.

Conservation Reserve Program

New rules for the US Department of Agriculture's Conservation Reserve Program (CRP) could be a lake-saver. The new rules let farmers idle highly-erodible cropland adjacent to streams or lakes and plant it to native grass or other protective cover. These grass-covered "filter strips" act as buffers between cropland and the lake, filtering out sediment, fertilizer, and pesticides from runoff before it gets to the water. The strips can be 66-99 feet wide.

Soil erosion from cropland is the major source of sediment in Wisconsin lakes and streams. The additional baggage that is attached to the soil particles — fertilizer, pesticides, etc.—pollute the water and upset the natural balance of the lake. The Conservation Reserve Program will take a big step toward reducing soil erosion and improving water quality in areas where landowners participate in the program. Wisconsin has enrolled over 353,000 acres in the program.

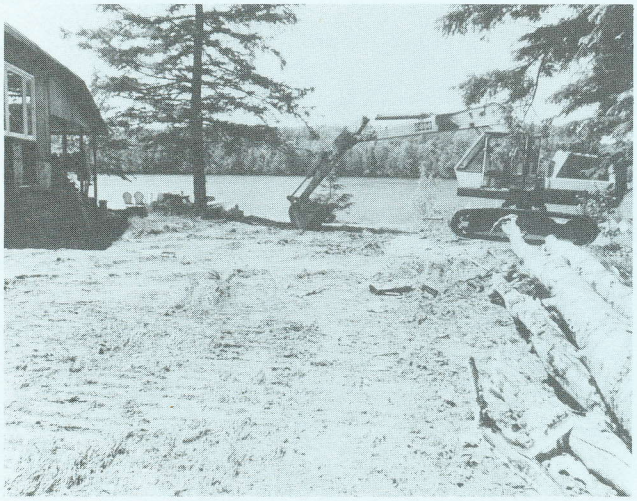
Farmers can rest their poorest land, create wildlife habitat, and preserve the aesthetic value of their farm, while receiving a guaranteed annual payment for ten years for removing sensitive acreage from production.

Landowners can submit a bid to enter their land in the Conservation Reserve Program during signup periods at their county Agricultural Stabilization and Conservation Service Office. Farmers should be encouraged to contact the Soil Conservation Service to see if their land is eligible. Both offices are located in the courthouse or county office building.

Shoreland Zoning: Chippewa County Study

by Eric Macbeth

Lakeshore property owners must obtain permits from their county zoning departments *before* regulated activities or construction are started. Many riparians do not follow this requirement, however. Either they do not secure the appropriate permits prior to construction or their projects do not comply with the permit obtained.



According to recent DNR research, these violations have an effect on the entire lake and shore community. Water quality and habitat as well as scenic beauty may be compromised. In June, 1987, the Wisconsin DNR hired Karen Voss to conduct a limited-term study of the effectiveness of shoreland zoning in Chippewa County. With help from the county zoning department, Karen investigated residential development on Round, Long, and Cornell Lakes. These lakes were selected as representative of Chippewa County lakes that have been fairly-extensively developed in recent years.

Sample developments were evaluated for two things: compliance with Chippewa County zoning ordinances and the degree that activities and construction on properties met the intention of Wis. Statute 144.26 (see box). Location of structures, as well as grading, filling, and excavation activities were evaluated. Structural use and shoreland vegetation cover were also judged. Age was determined, since over half of the structures were already on the sites when the county ordinance was adopted. These "old" residences were excluded from the study.

Nearly 75% of the remaining sample residences were in violation. More than 70% of the violations occurred without a permit. Some of these activities would have been acceptable with a permit. Others did not meet the aesthetic or environmental quality intentions of the shoreland zoning ordinance. Voss determined that at least 60% of the projects violating the statute's intentions would have needed changes *before* construction. Eighty percent of the projects now need major changes or removal.

Karen suggests that many lakeshore owners are unaware that a permit is necessary for activities or projects on their property. She emphasizes that shoreland zoning laws are intended to protect water quality and aesthetics for years to come. Furthermore, costs could be saved on corrections if changes were implemented before construction.

However, merely obtaining a permit does not insure zoning compliance. Forty percent of the projects *with* permits were not carried out in agreement. Karen believes that a lack of monitoring by zoning staff contributes to the permit violations. Chippewa County permits state that certificates of compliance must be requested after project completion. But in 1986 and 1987, no certificates were issued. This led the study author to conclude: "In reality, very few inspectons of permit sites occur during or after construction. As a practical matter, this is a result of staff limitations. However, Chippewa County has recently undertaken an aggressive monitoring and prosecution program to help correct this situation in some areas."

In summary, the study suggests the following approaches in Chippewa County and elsewhere:

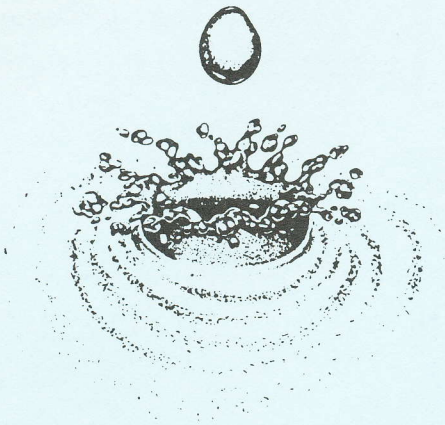
- Public education is necessary to advise landowners of regulations
- Construction site inspections are needed to insure permit compliance
- Recent violations should be brought into compliance.

Editor's note: As part of Karen Voss' public education effort, a half- hour video was prepared for the 1988 Wisconsin Lakes Convention in Stevens Point. She also participated in a workshop on shoreland zoning in Wisconsin.

Wisconsin's Water Resources Act (1965) requires counties to regulate land use within 1000 feet of lake shorelines. The intentions of Wis. Statute 144.26 are:
- maintain safe and healthful conditions;
- prevent and control water pollution;
- protect spawning grounds, fish, and aquatic life;
- control building sites, placement of structures, and land uses; and
- reserve shore cover and natural beauty.

Minimum standards require a building setback of 75 feet from the ordinary high water mark, 100 feet of frontage per lot, and a septic system drain field setback 50 feet from the shore. There are also provisions on clearing of vegetation and grading and filling of shoreland.

Eric Macbeth is a graduate student in the College of Natural Resources, University of Wisconsin-Stevens Point.



Spice Up Your Annual Meeting

Two slide-tape sets are available for your use at annual meetings or other events. These professionally-produced visual aids add an educational and motivational dimension to any local meeting regarding lakes. Both slide-tape sets are available from your County Extension Office or DNR Office.

"WISCONSIN LAKE WATERS" was released in 1986 and is designed to motivate lakeshore property owners to organize and begin the process of caring for their lake.

"ONE PEBBLE—A THOUSAND RIPPLES," released in November 1987, is designed to (1) explain the most common techniques available for lake management, and (2) build the confidence of local leaders by showing how other communities have undertaken lake protection and rehabilitation.

Summer Youth Programs

This summer, children and youth will combine recreation with lessons on the wonders of nature and environmental concerns when they participate in a series of encampments at the University of Wisconsin Stevens Point's Central Wisconsin Environmental Station. Seven different programs are offered to meet the needs of a variety of youth groups:

Three Natural Resources Careers Workshops for high school students: June 5-10, June 26-July 1, August 14-19. $160.

High School Natural Resources Careers Workshop for high school minority students: July 24-30.

Senior Girl Scouts: August 21-27.

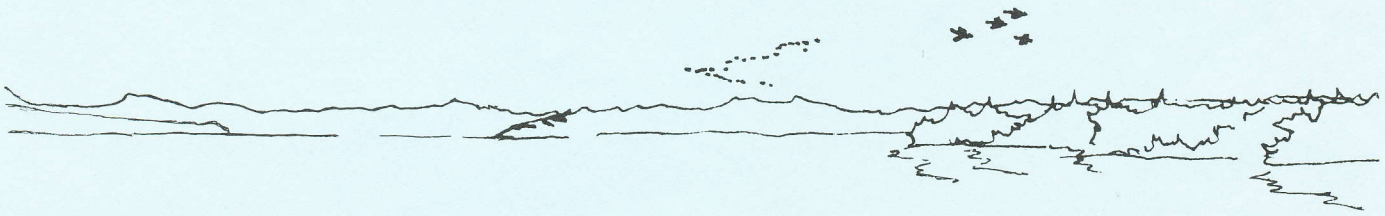
Boundary Waters Canoe Trip for 14-15 year-olds: July 9-20. $375.

Nature Adventure Camp for 9-11 year-olds: June 12-17 and 19-24. $160.

Nature Adventure Camp for 11-13 year-olds: July 31-August 5 and August 7-12. $160.

Timbertop Nature Adventure Camp for 9-13 year-olds in learning disabilities programs: July 10-22. $385.

For more information, write: Summer Camps, Central Wisconsin Environmental Station, 7290 County MM, Amherst Junction WI 54407.



Reflections

Once in a lifetime, perhaps, one escapes the actual confines of the flesh. Once in a lifetime, if one is lucky, one so merges with sunlight and air and running water that whole eons, the eons that mountains and deserts know, might pass in a single afternoon without discomfort. The mind has sunk away into its beginnings among old roots and the obscure tricklings and movings that stir inanimate things. Like the charmed fairy circle into which man once stepped, and upon emergence learned that a whole century had passed in a single night, one can never quite define this secret; but it has something to do, I am sure, with common water. Its substance reaches everwhere; it touches the past and prepares the future; it moves under the poles and wanders thinly in the heights of the air. It can assume forms of exquisite perfection in a snowflake, or strip the living to a single shining bone cast up by the sea.

Loren Eisely, The Immense Journey

Spring 1988
Vol. 13, No. 2

LAKE TIDES

A newsletter for people interested in Wisconsin lakes

IN THIS ISSUE:

Lake Management Program

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