Why Not a Weevil?

They arrived one rainy afternoon, all 29,000 of them, at Gilbert Lake in Waushara county. Gilbert Lake is one of 12 lakes in the state participating in the Wisconsin Milfoil Weevil Study, a project conducted by the Wisconsin Cooperative Fishery Research Unit at the UW-Stevens Point in cooperation with the Wisconsin DNR. The milfoil weevil is an aquatic insect which feeds on specific parts of the milfoil plant and lays its eggs on the growing tip. There are two main objectives to the study. One goal is to determine the distribution of weevils in the lakes of Wisconsin while learning more about their life-histories. The other objective is to determine the efficacy of using weevils to control Eurasian watermilfoil. The 12 participating lakes were stocked with weevils during the summer of 1997; the lakes will be monitored in the summer of 1998 to assess the impact of weevils on milfoil abundance.

Aquatic Plant Management

The variety of tools used in the control of aquatic plants has steadily evolved over the past few decades. The heavy use of chemical treatmetns in the 1940s is slowly giving way to the development of aquatic plant management and protection plans in the 1990s. That aquatic plant issues are no longer couched in terms of "aquatic nuisance control" but rather "aquatic plant management and protection" shows that there is a trend towards recognizing the role of plants in providing habitat and food for fish and wildlife. The need to manage systems more holistically is slowly gaining greater acceptance.

Of Nesting Loons and Sensitive Areas

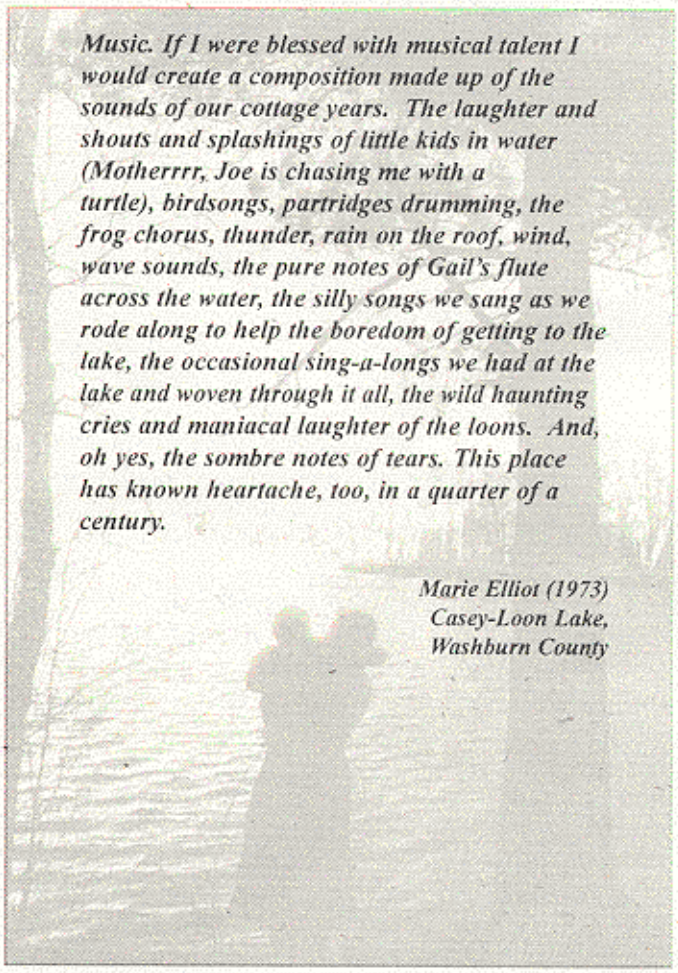
Round Lake in Chippewa County, 216 acres in size with an average depth of 10 feet, is known by the locals as a great place for fishing, boating, waterskiing and swimming. Lake residents became concerned about the potential impact of these recreational uses on the rare plants and nesting loons on the western and southern shorelines. With the assistance of the DNR and town board, the Round Lake Management District succeeded in creating a slow no wake zone around these sensitive areas. The DNR and other groups provided funds for the cost of buoys and signs. The issue of user conflicts is temporarily, at least, forestalled.

1997	1998
$1.4 million added to Lake Protection Grants for lake classification, marking the culmination of a 13-point Northern Lakes Strategy.	20th Annual Wisconsin Lakes Convention held in Stevens Point. Over 15,000 participants in attendance over the last two decades.
	Lake Tides (circulation over 20,000)

Once upon a lake...

Reflections on the Wisconsin Lakes Partnership

One hundred fifty years on Wisconsin Lakes



Music. If I were blessed with musical talent I would create a composition made up of the sounds of our cottage years. The laughter and shouts and splashings of little kids in water (Motherrrr, Joe is chasing me with a turtle), birdsongs, partridges drumming, the frog chorus, thunder, rain on the roof, wind, wave sounds, the pure notes of Gail's flute across the water, the silly songs we sang as we rode along to help the boredom of getting to the lake, the occasional sing-a-longs we had at the lake and woven through it all, the wild haunting cries and maniacal laughter of the loons. And, oh yes, the sombre notes of tears. This place has known heartache, too, in a quarter of a century.

Marie Elliot (1973)
Casey-Loon Lake,
Washburn County

Doug Moore

Wisconsin Lakes Partnership

Wisconsin Lakes Partnership
University of Wisconsin-Extension
Department of Natural Resources
Wisconsin Association of Lakes

A day in the life of the Wisconsin Lakes Partnership...

The following stories were chosen to illustrate the industry and creativity of Wisconsin's citizens, the Wisconsin DNR, UW-Extension and other organizations and agencies as they work together in the interest of lake protection.

A Tale from the Wind Lake Watershed: On the Spirit of Shallow Lakes

With a certain desperation, residents of Wind Lake in Racine County searched for an answer. Wind Lake was suffering from several sources of pollution: highway and school construction projects, a subdivision development, and inflow from Big Muskego, a shallow lake located upstream. At the same time, residents on Big Muskego lake were acutely aware of their own water quality problems. A history of secondary sewerage effluent discharges and agricultural run-off and a large rough fish population had created turbid water quality conditions. The Wind Lake Management District whipped into action and initiated a full-scale diagnostic feasibility study, resulting in several major rehabilitation efforts within Wind Lake and the Wind Lake Watershed (which includes Linnie Lac, Little Muskego, and Big Muskego). The Wind Lake Management District invested state lake protection grants to purchase 81 acres of wetlands to improve the quality of water entering the lake. The District also reduced lakeshore herbicide use and initiated the adoption of soil disturbance ordinances.

Upstream in Big Muskego, significant activity was also underway. One of the major components of the Big Muskego plan included a water level drawdown designed to help eliminate the carp population (370,000 pounds ultimately eradicated), reestablish habitat for plants, fish and invertebrates, and oxidize nutrient-rich organic matter. For a year and a half, residents on Big Muskego were forced to sacrifice their view of the water and evening boat excursions for the sight of an exposed lakebed and heaps of dead rough fish. An alum treatment (designed to reduce nutrient levels and control phosphorus recycling) in Bass Bay and Wind Lake and several other efforts within the watershed completed the effort. Federal, state and local organizations worked together as a team and contributed funding for this project.

Since the 1997 drawdown, water clarity in Big Muskego is the best it has been in over 30 years. Plant biodiversity has increased, along with an increase in waterfowl and other wildlife. The native fish population is thriving. Residents on Wind Lake and Big Muskego are pleased with the way this story unfolds…

Shallow Lake Initiative

Over thirty percent of the lakes in Wisconsin are shallow water lakes. Within the last decade, Wisconsin citizens have grown to better understand the unique challenges of managing shallow lake ecosystems. This success, a seed planted by our lake partnership, will grow stronger and bear fruit into the next millenium. The "Shallow Lake Initiative" a funded program that supports aquatic plant habitat and water quality restoration, is a good example of this.

And in Manitowoc County …

… the results were a bit surprising. Through a study made possible with a lake planning grant, it was discovered that 70% of the phosphorus coming into English Lake was entering from the east side of this agriculture dominated watershed. The English Lake Advancement Association rallied around a plan to achieve the greatest reduction in phosphorus loading possible. The Manitowoc County Soil and Water Conservation Department along with the consulting firm, Northern Ecological Services (Green Bay), designed a wetland/retention basin to slowdown runoff and settle out solids and nutrients that would otherwise enter the lake. The basin will be put in place in the spring of 1998.

From the Upper St Croix/Eau Claire Watershed...

9:30 a.m. The 1997 Watershed Education Series co-sponsored by the Upper St. Croix Lake Association and the St. Croix (Gordon) Flowage Assocation is beginning... This Monday morning talk was just one of a sequence of presentations on various lake and watershed related topics, from protecting habitat around the home and yard to

1800s — Logging is major industry in the North.

Approximately 1,100 sawmills in operation in the state.

1898 — First lake association formed in southeastern Wisconsin.

1910 — Birge and Juday (early limnologists) initiate research in the North (Vilas and Oneida Counties) and compile an inventory of the environmental characteristics of hundreds of lakes.

1914 — *Diana Shooting Club v. Husting* (early Supreme Court case) recognizes that navigable waters are owned by the public. This case adds to the body of law that makes up the Public Trust Doctrine.

1930 — Exotic, Eurasian watermilfoil, invades Wisconsin inland lakes.

Approximately 113 sawmills in operation in the state.

1941 — Average boat horsepower: 3.6 hp.

1959 — Wisconsin Federation of Lakes (WFL) formed.

We would like to thank the Cable Natural History Museum for giving us permission to use the title of its latest exhibit, "Once Upon A Lake," for our publication.

Lake Research

Funding for lake research and demonstration projects has long been a part of the DNR's Lake Management annual budget. Most of the projects were targeted towards solving unwanted rooted aquatic plant and algae problems and many of the projects were suggested by lake managers and the public. One of the most recent studies, "Impact of Motor Boats on Water Quality in Wisconsin Lakes" had strong support from lake property owners. An earlier funded study, "Wisconsin Lake Ecoregion Project," was the basis for a subsequent whole lake aeration demonstration project to control algal blooms in Cedar Lake (Polk County). Several other projects included: hypolimnetic withdrawal and treatment for phosphorus control at Devil's Lake (Sauk Co.); aquatic plant control by alum injection into lake sediments; and ecological assessment of a deep cut mechanical harvesting project.

Green Lake Chronicles

There is never a dull moment at Big Green Lake in Green Lake County... A few years ago, the Green Lake Preservation Society spear-headed an effort to control pyramid development on shorelands. Pyramid development occurs when water access is provided through a single lot for several backlot owners. An amendment to the county zoning ordinance now requires that shore access lots for new pyramids be zoned "recreational." Such a request requires a public hearing and approval by the county board, thus giving additional oversight to the rezoning process. The Society is heavily involved in local planning issues with members regularly appearing at hearings, circulating petitions and contributing articles to the local newspaper. The members have been referred to as "those people who write letters." The Green Lake Sanitary District has received two lake planning grants to track nutrient loading and model the impact of different development scenarios on lake water quality. This effort is part of an initiative to prepare a comprehensive management plan for Big Green Lake and the surrounding watershed.

Lake Protection Grants

Lake Protection Grants have assisted in the purchase of approximately 2500 acres of land statewide, critical to the protection of lakes and lake ecosystems. Many of these areas are undeveloped wild shores and whole lakes. Chippewa County purchased 3 small wild lakes at one time, thus helping advance the objectives of the Northern Initiatives Shoreland Protection Program.

1989

Motorboat gas tax funds new Lake Planning Grants.

1990

Average price per foot of lake frontage in Vilas County: $250

1992

WALD and WFL merge to form Wisconsin Association of Lakes (WAL).

WAL works to increase funding to Water Resources Account from the motor boat fuel tax. Funds used to establish Lake Protection Grants and create state lake management specialist positions.

1993

Adopt-A-Lake Program established to encourage youth involvement.

1994

First zebra mussel invades Wisconsin inland lake (Silver Lake, Kenosha Co.)

Average price per foot of lake frontage in Vilas County: $900

1995

Project WET (Water Education for Teachers) joins the Wisconsin Lakes Partnership youth initiatives. Over 1,000 educators reached in the first two years.

1996

200 lake districts and 400 lake associations operating statewide.

Wisconsin Association of Lakes League of Students (WALLS) formed to allow students to become more involved with WAL.

Life on the Edge (over 20,000 copies distributed)