

THE MICHIGAN
RIPARIAN



DEVOTED TO THE MANAGEMENT AND WISE USE OF MICHIGAN'S LAKES AND STREAMS

Published Quarterly – February, May, August and November



**UPLAND CHANNEL ON LITTLEFIELD LAKE IN
ISABELLA COUNTY**

See page 13 for more information on upland channeling

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EDITORIAL



Don Winne

It is important that the people of Michigan understand more clearly that we can no longer be the aggressor against our water resources.

Our history is a path of greed against our pine forests until they were gone by about 1900. We cut down the beech trees which were one of the main sources of food for the carrier pigeon, and at the same time slaughtered them by the thousands for restaurant menus until they became extinct by 1906. Lake trout were nearly fished out in the Great Lakes by the late 1900s.

We have ditched, drained and/or filled wetlands contiguous to lakes destroying many spawning areas for native fish populations.

In the last 50 years, boats with increasing horsepower have been launched on lakes less than 30 acres in size, and have been operated on those lakes at speeds up to the state maximum of 55 miles per hour.

We now see this greed manifesting itself against land. It is a two-pronged approach. We are turning good productive land into industrial conglomerates and expansive malls. At the same time we are covering our land with cement and other impervious surfaces. We are paying the price in flash floods and erosion of soil from stream banks and unprotected development. The water from rain and snow melt which would have recharged our aquifers is now rushing down our creeks, rivers and streams to the Great Lakes.

How long do we continue our attack against our natural resources?

Donald E. Winne

The Michigan Riparian welcomes letters to the editor, articles for publication, comments, suggestions, and article ideas. If you wish to write an article or just have an idea for one, it would be best to write us a short note or give us a call to discuss it.

—The Editor

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MINNESOTA TAKES ACTION TO STOP THE SPREAD OF EXOTICS

MINNESOTA LEGISLATURE TAKES ACTION:

- 1987 – The Minnesota Department of Natural Resources was designated the lead agency for control of purple loosestrife, an invasive plant of particular concern for the state’s wetlands.
- 1989 – The Legislature officially assigned the DNR an additional coordinating role for Eurasian Water Milfoil control.
- 1991 – The legislature called for the DNR to develop and coordinate a statewide program to prevent the spread of ecologically harmful exotic wild animals and aquatic plants. Many species, in addition to purple loosestrife and Eurasian Water Milfoil, fall under the DNR’s statewide responsibility. They include harmful exotic species that are currently found in Minnesota, such as zebra mussels and ruffe, as well as harmful species that have the potential to move into Minnesota. Other assignments by the legislature to DNR follow.

RESPONSIBILITIES ASSIGNED TO THE DNR TO CONTROL EXOTIC SPECIES

The DNR is assigned responsibility for designating **INFESTED WATERS**. Water bodies are designated **INFESTED** if they contain certain harmful exotic species such as Eurasian water milfoil, zebra mussels, ruffe, round goby, white perch and spiny water flea. The current (2000) infested waters lists are included in Appendix B of the Annual Report for the year 2000.

The Legislature (1991) mandated that the DNR Conservation officers conduct inspections of trailered boats on Minnesota highways. The purpose of these inspections was to look for Eurasian watermilfoil, issue citations to violators and to inform the public about the potential spread of harmful exotic species.

In 1992, the Legislature required 10,000 hours of inspections of watercraft leaving “infested” water bodies containing harmful aquatic exotic species such as Eurasian watermilfoil, spiny water flea, and zebra

mussels. Subsequently, a watercraft inspection program was established by the DNR in 1992 to accomplish this mandate. In 1993, legislation was passed increasing the number of inspection hours to 20,000 starting with the 1994 boating season. In 1999 this statute was amended to allow inspections on both infested and uninfested waterbodies.

In the year 2000, inspections began in May and continued through the end of October. Within this 26 week period, 22,002 inspection hours were logged and 51,508 watercraft/trailer units were inspected.

BOATS WITH ATTACHED PROHIBITED EXOTIC SPECIES MAY NOT BE LAUNCHED ON MINNESOTA WATERS

LAUNCHING PROHIBITED: A person may not place or attempt to place into waters of the state a watercraft, trailer, or plant harvesting equipment that has aquatic macrophytes, zebra mussels, or prohibited exotic species attached.

REMOVAL AND CONFINEMENT: A conservation officer or other licensed peace officer may order: (1) the removal of aquatic macrophytes or prohibited exotic species from a trailer or watercraft before it is placed into waters of the state; (2) confinement of the watercraft at a mooring, dock or other location until the watercraft is removed from the water, and (3) removal of a watercraft from waters of the state to remove prohibited exotic species if the water has not been designated by the commissioner as being infested with that species. A person who refuses to obey an order of a peace officer or conservation officer to remove prohibited exotic species or aquatic macrophytes from any watercraft, trailer, or plant harvesting equipment is guilty of a misdemeanor.

Subd. 4. **Warnings; civil citations.** After appropriate training, conservation officers, other licensed peace officers, and other department personnel designated by the commissioner may issue warnings or citations to a person who:

- (1) unlawfully transports prohibited exotic species or aquatic macrophytes;

(continued on page 10)

(2) unlawfully places or attempts to place into waters of the state a trailer, a watercraft, or plant harvesting equipment that has prohibited exotic species attached;

(3) unlawfully anchors, anchors, or operates a watercraft in a marked area of a Eurasian water milfoil limited infestation; or

(4) intentionally damages, moves, removes, or sinks a buoy marking, as prescribed by rule, Eurasian water milfoil.

Subd. 5. Civil penalties. A civil citation issued under this section may impose civil penalties up to the following penalty amounts:

(1) for transporting aquatic macrophytes on a forest road as defined by section 89.001, subdivision 14, road or highway as defined by section 160.02, subdivision 7, or any other public road, \$50;

(2) for placing or attempting to place into waters of the state a watercraft, a trailer, or plant harvesting equipment that has aquatic macrophytes attached, \$100;

(3) for transporting a prohibited exotic species other than an aquatic macrophyte, \$100;

(4) for placing or attempting to place into waters of the state a watercraft, a trailer, or plant harvesting equipment that has prohibited exotic species attached when the waters are not designated by the commissioner as being infested with that species, \$500 for the first offense and \$1,000 for each subsequent offense;

(5) for angling, anchoring, or operating a watercraft in a marked area of a Eurasian water milfoil limited infestation, other than as provided by law, \$100; and

(6) for intentionally damaging, moving, removing, or sinking a buoy marking, as prescribed by rule, Eurasian water milfoil, \$100.

Subd. 6. Watercraft license suspension. A civil citation may be issued to suspend, for up to a year, the watercraft license of an owner or person in control of a watercraft or trailer who refuses to submit to an inspection under section 84D.02, subdivision 4, or who refuses to comply with a removal order given under section 84D.13.

2000 ANNUAL REPORT HIGHLIGHTS (Selected Items):

(Minnesota Department of Natural Resources).

1. Eurasian watermilfoil was discovered in 15 additional Minnesota waters, the largest number of waters discovered with milfoil in a single year since 1989 (eight new infestations are connected to waters already known to be infested). There are now 121 waters known to have Eurasian watermilfoil.

2. Divers discovered numerous small zebra mussels on substrate at several locations in the St. Croix River. This discovery led to the designation of the St. Croix River downstream of river mile 25.4 (just north of Stillwater) as infested waters. Zebra mussels were reported by lake residents and confirmed by DNR to be in Lake Zumbro and the Zumbro River downstream of Lake Zumbro.

3. Approximately 1.5 million purple loosestrife eating beetles were released at more than 250 sites. Beetles have now been released on 567 sites, one-quarter of the known purple loosestrife infestations in Minnesota. Significant damage to purple loosestrife has occurred at 30% of the sites where the beetles have been planted. There were 64 cooperators who helped rear the insects.

4. Four road checks were held by DNR conservation officers. They were assisted by volunteers from the Minnesota Conservation Corps. Aquatic vegetation was found in, or on, an average of 17% of all watercraft/trailers inspected. Warnings and violations were issued to all violators.

5. Funding is supplied by a \$5.00 surcharge on watercraft registrations. It generates 1.2 million dollars annually. (Editor's note: A \$5.00 license fee in Michigan would generate about 1.5 million dollars per year. This amount of revenue would make it possible for the state to do a better job of inventorying and controlling exotic species in Michigan.)

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Attorney Writes

By Clifford H. Bloom

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I would like to thank all of the readers for the outpouring of positive feedback triggered by my column in the last issue of the *Riparian Magazine* entitled “The Top Ten Excuses—Are You Kidding?!” Perhaps with the exception of the article entitled “Chutzpah” from several years ago, last issue’s column apparently generated the most enthusiasm of any of my columns.

Although my last column addressed excuses used by many municipal officials who refuse to consider anti-funneling or other lake-related regulations, I did not discuss why funneling itself can be bad and constitutes poor planning. That is the topic of this issue’s column. Following are some of the reasons why funneling constitutes a problem which municipalities should deal with decisively.

1. Conflict

Allowing more than one family (and quite often many families and numerous people) to cross and utilize a relatively small piece of property to access and use a lake is a prescription for problems and conflict. What makes the situation worse is the fact that most funnel development devices or lake access properties are not only jointly owned, but also jointly utilized. Anyone who has jointly owned a piece of property or equipment (for example, a boat) with another person (let alone 5, 10 or 50 others) knows that the potential for disagreement, conflict and outright animosity is great. For example, in a high number of situations involving private roads, such conflicts occur. Furthermore, disputes that would otherwise be resolved with normal properties tend to escalate to apocalyptic proportions where lakefront property is involved. All of these conflict points are present in funneling situations.

Lakefront properties also tend to breed more disputes and conflicts than conventional real estate. Even where single-family owned lakefront lots are 50, 75, or even 100 feet wide, there are a high number of disputes regarding property lines, placement of docks, boat usage, and similar matters. It is not difficult to see how such disputes are magnified where many families share a small lake access strip which is only 50 feet, 20 feet, or even narrower in width. Tempers flare. Backlot owners utilizing the common lake access site must share a small property with others and feel a loss of control.

Conflicts regarding funnel access properties are generally of two types. First, there is almost invariably conflict between the many families utilizing the common lake access property and the adjoining riparian owners on either side. Such conflicts can include the placement of docks, conflicting boat moorings, crossing property lines, noise keeping riparian property owners up at night, and similar problems. Second, there is often also conflict between and among those backlot owners themselves who have the right to utilize the joint lake access property.

Absent municipal regulations, how does one allocate conflicting uses on a small common lake access property? Swimming in a limited area is inherently inconsistent with waterskiing or motorboating in the same area. For every square inch of scarce lakefront and bottomlands property occupied by dockage and shorestations, that is another square inch which cannot be utilized for swimming, boating, or waterskiing. Where one family owns a 100-foot-wide lakefront lot, it is easy to decide what uses will occur—the property owner or the family decide. With a commonly-used and jointly-owned small lake access property, there usually are no clear lines of authority. Conflict is virtually inevitable.

2. Safety

There are a myriad of potential safety hazards attendant to commonly-used lakefront properties which are not present with other types of real estate.

These hazards include drowning, dangers associated with fast boats and sharp props, diving into shallow waters, and conflicting uses. Funneling only makes matters worse since it concentrates a greater number of people in a much smaller lakefront area.

3. Fairness

It strikes many people that funneling is inherently unfair. The purchasers of lakefront lots pay a premium for lakefront property. Their lots must meet the minimum lot size requirement, which also often includes a minimum lake frontage width requirement such as 70, 80, or 100 feet or more. Lakefront property owners pay much higher taxes than backlot owners. Lakefront property owners have to keep their lakefront clean, including extensive raking. On lakes where a special assessment for weed control exists, lakefront property owners pay a full assessment.

Conversely, backlot owners with lake access appear to have most of the practical advantages of lakefront lot ownership without the costs and obligations associated therewith. Backlot owners pay much less for their properties, yet demand full riparian rights. Backlot owners pay much lower taxes than lakefront property owners, even though they have the right to utilize the entire lake surface. Backlot owners want full dock and boat mooring privileges, even though they own only a small fraction of a lakefront lot collectively with others.

Permitting funnel developments also appears contrary to the normal development of residential properties around lakes and leads to unfair overcrowding of lake properties and the lake itself. Funneling leads to two, three, four, and even more “tiered” development. Many would argue that funneling is unfair “piling-on” around lakes.

4. Adverse Environmental Impacts

Concentrating a large number of lake users on a small piece of property and lakefront tends to exacerbate the adverse environmental impacts of lake usage. A larger number of lake users along the shoreline will naturally cause more adverse effects upon the shoreline and water. Cattails and water plants get trampled. More intensive usage can cause erosion. More watercraft causes noise and water pollution.

5. Practical Problems

Most municipalities extensively regulate commercial and multi-family uses, as well as private roads and similar matters. Why shouldn’t such municipalities also extensively regulate funnel developments and commonly-used lake access sites? A jointly-used lake access property is a multi-family use. All of the arguments utilized for regulating multi-family apartment complexes and uses are equally applicable to funnel developments.

There are many characteristics of jointly-used lake access properties which are not present with a single-family-owned lakefront lot. For example, the lakefront tends to be located much further away from backlots which utilize a common lake access property than is normally the case with dwellings located on single-family lakefront lots. The lack of bathroom facilities on a commonly-used lake access site can create problems. Experience has shown that it is more likely that trash will be left at the lakefront where joint lake access property is involved.

Practically, if the local municipality does not regulate funneling and common lake access sites, no one will and the problems will accumulate. Good municipal zoning and planning anticipates problems and prevents or minimizes them before they occur. As such, anti-funneling regulations are a reasonable and prudent planning technique.



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REGISTER EARLY FOR CLMP 2002

ML&SA encourages lake associations to register early to take part in CLMP for 2002. A limited number of lakes taking part has been set for such tests as Spring and Summer phosphorus, Chlorophyll a, Dissolved oxygen, Rapid Algal Assessment, Fish Aging and Growth, and Aquatic Plant Mapping.

The program is open to all lake associations and individuals who would like to monitor lakes in Michigan.

In prior years enrollment began in December, this year the enrollment began in October to benefit those associations who did not have year round meetings and found it hard to enroll for certain programs that had a deadline of March 5th.

In 2001, 197 lake associations in both Lower and Upper peninsulas took part in the Secchi (water transparency) and other types of sampling. Three new pilot programs were offered in 2001 and will be repeated in 2002.

**PLAN NOW TO ATTEND ML&SA's 41st ANNUAL CONFERENCE,
April 26, 27 & 28, 2002.
BOYNE HIGHLAND RESORT, HARBOR SPRINGS, MICHIGAN**

Natural Resources Commission Policy on Upland Channeling

The Commission adopted Policy No. 4507 on May 2, 1977. That Policy provides the following:

Preamble: The practice of upland channeling, for any purpose, can have a serious effect on the land and water resources of the State. Some effects are readily apparent and occur at once, others are not and may take years to become evident. It is recognized that channeling may sometimes improve the attractiveness of residential building sites for citizens of the State and aid in making the water resources of the State more readily available to the general public. These amenities, however, must be carefully weighed against the possible severe disruption of groundwater systems, overcrowding of the recreational water areas, health and sanitation problems, increased dredging and maintenance of waterways at public expense, and water safety considerations. Upland channeling can only be accomplished under a permit issued by the Department, which may specify conditions.

General Policy: “The Department shall not abet, support, promote or give encouragement to, and shall oppose by any legal means, the creation of any upland channel development anywhere in the State that will threaten the capacity of our land and water resources to sustain a quality environment for the citizens of the State. Upland channel projects on the inland lakes and streams will not be approved if the proposed development will cause overcrowding or overuse of the adjacent waters, it is not in conformance with local zoning and land use controls, or if it is likely to injure the public trust or interest in wildlife and fish, or the riparian rights of owners of the affected water. Those projects involving a major controversial development will require the preparation of an Environmental Impact Statement. Permits that are issued by the Department shall specify conditions that will insure conformance to this policy.”

Department of Environmental Quality proposed rules for enforcing the **Inland Lakes and Streams Act, Act 451, Public Acts of 1994, as amended, would change NRC’s 1977 policy against upland channeling.**

R281.819 Marina Construction and Operating Permits

Rule 17. In addition to the other provisions of these rules, in making a decision on a marina construction application the department shall require the following:

1. An application for a marina construction permit shall provide the following in addition to other required information under rule 281.812:
 - (A) A copy of the deed to the riparian property(s).
 - (B) A statement from the owner(s) that, for all structures in an inland lake or stream, access to and from the marina to boatable waters shall be achieved over the applicant’s riparian interest area.
 - (C) A copy of a recent aerial photograph superimposed with all existing and proposed, man made structures lakeward or below the ordinary high water mark and showing the adjacent riparian property lines.
2. The ingress and egress width between a riparian interest line and any dock or watercraft shall be a minimum of one and one half times the length of the longest watercraft utilizing the access or a permanent easement is secured and recorded from the adjacent owner whose riparian or property interest is affected.
3. Marina docking facilities shall be constructed in upland basins to the extent feasible and practicable.

Michigan's wetlands are disappearing, environmentalists say

Kalamazoo Gazette, August 14, 2001

THE ASSOCIATED PRESS

AUBURN HILLS—Michigan once had the toughest wetlands laws in the country. But environmental groups and state agency officials say state statutes have fallen behind federal requirements.

Wetlands include marshes, swamps and similar areas between water and dry land. They are important for filtering pollutants, providing erosion control and harboring soils and plants needed by fish and wildlife, according to the Environmental Protection Agency.

Michigan and New Jersey are the only states with their own wetlands programs. Other states are regulated by the U.S. Army Corps of Engineers.

In 1984, the federal government allowed Michigan to be the first state to regulate its own wetlands because it had tough standards.

After Gov. John Engler took office in 1991, the state stepped up the granting of permits to developers, according to state employees and records.

A bill passed in 1992 limited local authority to protect wetlands, said Dave Dempsey of the Michigan Environmental Council.

Business groups say that without a policy change, Michigan's economic development would have suffered and, in many cases, property rights would have been violated if the state had prevented developments.

In December, the EPA was preparing to release a report urging Michigan to update its policies and toughen enforcement.

But in January, a U.S. Supreme Court decision sharply limited the role of the federal government to regulate some wetlands, saying state laws superseded.

The Bush administration proposed new rules last week that weaken federal wetlands restrictions.

"The state's attitude has definitely changed," said Dennis Hall, who oversaw Michigan's wetlands program from 1986 to 1991 as director of the land and water management division of the Department of Natural Resources. "There's more pressure from top on state employees to just let developers do what they want regardless of the impact." State officials say they have remained vigilant about enforcing wetlands preservation.

"The wetlands program is without question the toughest one that we administer," said Ken Silfven, a spokesman for the state Department of Environmental Quality. "As you can imagine, people often resent being told what they can or can't do with their property."

Silfven said critics who accuse the state of abandoning wetlands are wrong.

"It's time for people who say that to put up or shut up," Silfven told the Detroit Free Press for a Tuesday story. "Look at our record. We stand by our numbers. There is vigorous enforcement."

In 1996, a state audit showed the DEQ was not properly responding to complaints about wetlands violations and that it lacked an inventory of wetlands, as required by law.

Two years later, the nonprofit group Public Employees for Environmental Responsibility, which was made up of state employees, issued a report titled "See No Evil: The Gutting of Michigan's Wetlands."

Inkster officials recently approved a real estate development project on a 12-acre site.

The real-estate company hired a consultant who found wetlands on the 12-acre site. But the consultant concluded it was made up of six separate wetland areas, each with fewer than 5 acres, and not covered by state law.

The DEQ official who supervises environmental cases in metro Detroit said the Inkster wetlands may have been worth protecting, but the DEQ has to follow state law.

"We've lost a tremendous amount of wetlands, especially in areas that don't have many wetlands left," said Mary Vanderlaan, the DEQ district supervisor. "Wetlands are very valuable and should be protected, but that's not what the statute requires" in the Inkster case."

Wayne County has lost 84 percent of its wetlands, said DEQ officials. Oakland has lost 46 percent and Macomb 74 percent.

WETLANDS FACTS

- At least 350 wetlands smaller than five acres are not regulated in Michigan, as they are in every other state and under federal law.
- In counties with fewer than 100,000 residents, isolated wetlands of any size are not regulated, as they are in other states.
- Seventy-eight percent of artificial wetland projects, created to replace natural ones that are destroyed, were deemed failures.
- The number of criminal prosecutions of wetlands violators dropped from 45 in 1996 to 28 in 2000.



Drilling Under Great Lakes Muddies Political Allegiances

By Pam Belluck, The New York Times, Friday, July 6, 2001

PINCONNING, Mich. — About a quarter-mile inland from the cattail-covered shore of Lake Huron, squared in by trees and reachable only by rutted gravel road, lies one of the latest beachheads in the escalating battle between environmentalists and energy hunters.

It is a three-acre patch of dusty ground with a well in the middle, its pipes arcing into the earth to bring up natural gas and oil from the rock deep under the lake. This well and six others like it in Michigan are the only places in this country where there is drilling for oil and gas under the Great Lakes, the world's largest source of fresh water.

But now, with the Bush administration calling for increased domestic drilling everywhere, even sandy lakeshore wells like this one in Pinconning are suddenly in the spotlight, scrambling political allegiances in the process.

As Congress takes up the issue of whether to drill for oil and gas in the Great Lakes, Republicans in particular have been put in the uncomfortable box of deciding whether to support a Republican administration or heed the popular opposition to drilling in their home states.

Conservatives like Senator Peter G. Fitzgerald of Illinois have found themselves making antidrilling statements that sound indistinguishable from those of liberal Democrats. On the Democratic side, especially among candidates for governor in industrial Michigan, politicians seem to be competing to appear the most environment-friendly.

The issue has taken on an urgency, not only because of the Bush energy plan, but also because Michigan's Republican governor, John Engler, announced plans earlier this year to lift a 1997 state moratorium on new drilling, which he imposed himself. The state's energy experts estimate that the move could bring up to 30 new wells on the shores of Lakes Michigan and Huron.

Environmentalists oppose the governor, saying the drilling could threaten the lakes and the wildlife areas on their shores.

In response, two bills have been introduced in Congress to try to curb the drilling. One, approved by the House of Representatives in June with support from several Michigan Republicans, would prohibit the United States Army Corps of Engineers from issuing new permits for drilling in the Great Lakes. The bill is awaiting Senate action.

Governor Engler says the bill would have no effect on drilling because the existing wells do not have Corps permits and only the state has the authority to issue them. A corps official suggested Mr. Engler might be correct, indicating Congress would find itself embroiled in a question of states' rights.

The official, Don Reinke, biologist with the Detroit district regulatory office, said the Corps would have the authority only if it determined that the new wells affected the "course, condition, location or capacity of a navigable water," which, he said, the current wells do not.

The Senate is also considering a bill, introduced by Senator Debbie Stabenow, Democrat of Michigan, that would ban drilling in the Great Lakes until the National Academy of Sciences assessed the environmental impact.

The environmental threat is the subject of considerable debate. The wells would not be on the water — none of the eight Great Lakes States allow such offshore drilling, although Canada does. Instead, the energy companies with interest in the lakes practice what is known as slant or directional drilling, in which a well is drilled on land about 1,500 feet from the shore and the pipes tunneled at an angle under the lake.

Supporters of drilling say such an operation makes it virtually impossible for oil or gas to leak into the water, and

they say the existing seven slant wells on the Great Lakes or 350 others drilled under or near other Michigan lakes have caused no problems. And they cite a 1997 study by the Michigan Environmental Science Board, a government advisory panel, saying that directional drilling poses "little to no risk" of contaminating the lakes' water, but carries a "small risk" of leaks at the well head that could cause ecological harm.

"The whole idea is to be able to tap resources in an environmentally sensitive way," said Ken Silfven, a spokesman for the State Department of Environmental Quality, which regulates the drilling companies.

Mike Barratt, vice president of NewStar Energy USA Inc., which operates the well in Pinconning, said the fears of damage to the Great Lakes from oil drilling were overblown. The threats to the environment include five million tons of petroleum products barged every year on the Great Lakes, Mr. Barratt said, and "one million boats, personal watercrafts, and guess what's used to propel them?"

"I'm not going to build a condo with sewage discharge in the water," he said. "I'm not going to build a golf course on the bluffs. All I'm doing is building a hole."

But public interest groups say even a small risk is not worth taking in the Great Lakes, which also border Illinois, Indiana, Minnesota, New York, Ohio, Pennsylvania and Wisconsin, and provide drinking water for 33 million people. They say threats to the environment include contamination of ground water, brine spills and the release of toxic hydrogen sulfide gas.

"The real risk is the shoreline, the heavy footprint that drilling and processing leave on the landscape," said Cameron Davis, executive director of the Lake Michigan Federation, a public interest group. "You're talking some of the most fragile habitat."



DISEASE DEVASTATING MICHIGAN OAK TREES

ANR Communications, MICHIGAN STATE UNIVERSITY, East Lansing, MI 48824-1039
Contact: L. Johnson or D. Fulbright; Telephone: 517-432-1555 or 353-4506; August 15, 2001



The latest new exotic tree disease to make the headlines in Michigan is similar in some ways to better known tree killers such as Dutch elm disease but in other ways quite different.

For one thing, says Dennis Fulbright, Michigan State University plant pathologist, it's not an exotic disease, accidentally imported from Europe or Asia — it's a native North American disease. Like Dutch elm disease, it's caused by a fungus that can be transmitted by insects or passed from tree to tree through root grafting. But it's a relatively new disease in Michigan — it's been present in Michigan forests for only 20 to 30 years. There it actually may play a positive role in forest regeneration by clearing out large trees and making openings where smaller ones can find growing space.

Most oak wilt infections are associated with human activity, Fulbright says — namely, construction damage to trees or the movement of infected firewood. And it is exploding into what amounts to an epidemic.

The symptoms usually appear in July.

In red oaks (recognized by their leaves, which have pointed tips), leaves turn reddish to bronze at the edges. They may wilt and curl and then drop, or they may turn dark brown and remain attached to the branches. Symptoms usually start at the top of the tree and progress uniformly downward.

“Regardless of the color of the leaves, if red oak leaves fall on your lawn in July, that's a strong indication that it's oak wilt,” Fulbright says.

Many red oaks die within a few weeks of wilting. In the year that the tree dies, the bark often cracks and splits because of matlike fungal structures called pressure pads that form underneath it. These pads are covered with fungal spores and produce an odor that attracts insects, which may then

carry the spores to other trees. Brownish streaking is usually evident in the sapwood of an infected tree showing wilt symptoms.

In white oaks (leaves have rounded lobes), leaves on infected trees generally turn from green to tan, beginning at the tip and progressing through the length of the leaf. Leaves curl and remain attached to the tree. Usually only a few branches on an infected white oak will wilt. Streaking in the sapwood is less evident in infected branches, and fungal pads and cracked bark are rarely found in white oaks.

“Problems other than oak wilt can cause the decline and death of oak trees,” Fulbright points out. “Ill health in oak trees can be due to a combination of soil moisture — too much or too little — nutrition, weather, boring and defoliating insects, pollution, construction damage, root diseases and other factors. On the other hand, diagnosis of oak wilt in white oaks isn't easy, so tree deaths attributed to oak decline or defoliation by gypsy moth could actually have been due to oak wilt.”

Once a red oak is infected with the fungus, it dies within two to six weeks of wilting. In white oaks, wilting may kill large branches but seldom kills the tree until several years of infection have occurred.

Red oaks usually become infected through their roots. Root grafting occurs when the roots of two trees intermingle and grow together. The fungus moves from the infected tree to the uninfected one through these root connections. White oaks are more likely to be infected by spores carried by insects attracted to the odor of sap from recently pruned or otherwise damaged areas.

Controlling the insects is not a feasible way to protect trees, Fulbright notes, because the most important insect vector of the disease is the common

picnic beetle, that small, hard, black, bullet-shaped beetle that gets into overripe fruit, damaged ears of sweet corn, and food at picnics, graduation open houses and other outdoor eating events.

“A better approach is to avoid pruning oak trees from April through at least the end of June,” he advises. “Prune during the cold months instead. If you must prune during the warm months or if trees suffer storm or construction damage, clean up such damage immediately and spray pruning wounds with commercial pruning sealer within 24 hours to discourage insect visits to the wounds.”

Other preventive measures include protecting oaks against construction damage and bark injuries from mowers, weed trimmers and other landscape equipment. Infected branches on white oaks and red oaks killed by oak wilt should be cut down and the wood removed before April 1 and sent to a sawmill or chipping facility. Oak firewood can also be a source of the fungus. (See the Extension bulletin mentioned below for information on special handling for firewood from infected trees.)

When oak wilt begins to spread through a neighborhood, it takes a communitywide approach to deal with it, Fulbright says. Though cutting down dead trees is the primary means of controlling oak wilt, it doesn't stop transmission through root grafts, he points out. Trenching between trees to disrupt the root-to-root contact is expensive but necessary and effective in protecting red oaks. Root grafting occurs less often in white oaks, he notes. For white oaks, preventing and quickly repairing injuries is key.

For more information on oak wilt, contact your county MSU Extension office and ask for bulletin E-2764, “Oak Wilt in Michigan.” The cost is 75 cents.



MUCC Board Takes Position on PWC's

Michigan Out-of-Doors, July, 2001

On the issue of personal watercraft use, the Michigan United Conservation Clubs Board of Directors has voted (Policy No. BR030295) to urge:

- Changes to the Michigan Marine Safety Law to make training and education of all PWC users mandatory, with the cost covered by fees.
- Prohibiting operation of PWC on streams and public lakes less than 100 acres in size, and on or through emergent vegetation on any waters.
- Restricting PWC speeds to slow, no-wake within 100 feet of the shore or any boat on all public waters.
- Strengthening enforcement action against PWC users found to be flagrant violators of marine safety laws, with penalties to include possible confiscation of watercraft as well as fines.

Safety

PWC are very easy to purchase but not easy for inexperienced riders to operate safely. With no brake or clutch to aid in maneuvering, the machines are extremely difficult to steer at high speeds when the throttle is cut. Much can be said about safety, but suffice it to say that never have so few craft had such a negative impact on so many water users. Injuries and deaths often involve inexperienced riders who collide with other craft.

So what can we do about inappropriate behavior from PWC and other watercraft, intentional or otherwise? Well, I've always believed that knowledge is power. Much of my information on PWC impacts came from the Blue Water Network's Web site and *Jet Ski Position Paper*.

On the local level here in the U.P., Scott Zupanc, his sister Terry, and other concerned members of the Paint Lake Association got a number of signatures on a petition to prohibit highspeed boating and submitted the petition to the township and then to the Michigan Department of Natural Resources. It is important to note that, in Michigan, you cannot specifically target PWC, but you can get a no-wake ordinance passed and have signs put up. The DNR says that if a boat planes, it is making a wake.

"The main thing the people on the lake resent is the noise," said Al Gendron, an avid fisherman and a resident of Paint Lake. "But then, when the jet skis are out, the waves make it very difficult to fish."

Law enforcement officers have been good about responding to complaints, Gendron said, and the petition has gone to Lansing. He is optimistic: Residents have a better chance of getting a no-wake ordinance if their lake is small, and Paint Lake is just over 300 acres in size.



PLAINTIFFS CLAIM VAN BUREN COUNTY COURT DECISION DENIES THEM THEIR RIGHTS.

In an unpublished decision dated July, 2000, the Michigan Appeals Court affirmed the granting of a summary disposition by the Van Buren County Circuit Court in the complaint of Donald and Beverly Krause v. Keeler Township. The Krauses alleged that the Township Ordinance regulating launching and docking of boats denied them their use and enjoyment of their property easement on Round Lake in Keeler township.

In 1997 Keeler Township adopted Ordinance No. 97-1 which prohibited (1) the overnight storing or keeping of boats on a lake or shore adjacent to a separate frontage except a privately-owned separate frontage, and (2) the placing, using, or maintaining of docks and moors that abut a public access site.

The Krauses filed a complaint against the Township alleging constitutional violations as well as an adverse possession claim. The Plaintiffs docked and moored boats and erected docks and piers on Township property. They claimed that their easement included these rights.

The Appeals Court affirmed the trial court's decision that the plaintiff's easement rights were limited to the use of the land for "bathing beach and park purposes."

The Michigan Supreme Court has clearly held that the use of an easement must be confined strictly to the purposes for which it was granted. "Bathing beach and park privileges" include such activities as swimming, sunbathing, fishing and picnicking, but does not include constructing docks or piers and docking or mooring boats on the water.

Since the plaintiffs did not have the right to permanently moor boats and erect docks or piers under their easement, they were not deprived of property rights.



DISCHARGES FROM CONCENTRATED ANIMAL FEEDING OPERATIONS CAUSE ENVIRONMENTAL PROBLEMS

The following letter was sent to Region 5 EPA Administrator regarding environmental problems in Hudson area of Hillsdale and Lenawee counties. The letter was written by Janet Kauffman, a resident of Hudson, Michigan.

Region 5 EPA Administrator:

I know you're aware of the illegal discharges to surface waters from 7 of the 9 Hudson, Michigan dairy CAFOs. But after reviewing DEQ files from the last months, it's clear that there are multiple and ongoing discharges from several of these operations. How many more discharges must we live with? How polluted must the streams and lakes be before the EPA acts?

I'm extremely concerned about the degradation of water quality in this area—a region known until recently for its clear waters and clean air. The stream of my farm has freshwater mussels, native brook lamprey, a rich floodplain with a paw paw community of 200 trees, and a diversity of flora including threatened species. Biologists from USGS have documented the mussel species, and were compiling a native features list for the wooded floodplain. It's a beautiful, rare and endangered ecosystem. To protect this precious resource, I've been working with a Bean Creek (Tiffing) Watershed group.

We've worked for 2 years to educate CAFO operators on watershed issues, to insist that the state of Michigan fulfill its obligation to enforce the Clean Water Act. But nothing, nothing has happened. Discharges continue. Nothing has improved, and in fact, things have gotten worse. The E-coli counts in my watershed downstream of one CAFO, were more than 16,000/100ml when volunteers took a baseline sampling on August 28. When will the EPA act?

The discharges continue. DEQ Notice Letters are sent, but there is no serious enforcement—even the DEQ order for Comprehensive Nutrient Management Plans are delayed or ignored with no penalty. Only one operation that has discharged, Hartland Farms, (under EPA Administrative Order) has fulfilled the requirement for a CNMP. And in spite of that, Hartland Farms discharged manure this summer—again—without a penalty.

I'll attach the most recent listing of discharges, with details from DEQ files. Another operation, Bruinsma Farms, just discharged to a County Drain this week, its second violation, and will receive the usual, benign, unenforceable Notice Letter soon. This defiance of the law, by both CAFO operators and by the State, cannot continue. We have been doing all that we can to protect our watersheds. We appeal to the EPA, to do its job, help us, and protect our natural resources.

Janet Kauffman, PhD
14671 W. Cadmus Road
Hudson, MI 49247
517-448-4973

WHERE DOES THE OXYGEN IN LAKES COME FROM?

The main source is from photosynthesis of plants. It is produced during daylight hours and down to the depth of light penetration.

The other source is from the atmosphere by wind and wave action. Air is 21% oxygen.

WHY IS DISSOLVED OXYGEN IN LAKES IMPORTANT?

All aquatic plants and animals need oxygen to survive. Trout need 7 parts per million of oxygen to survive. Bluegills, bass and perch need 5 parts per million to survive, and carp and suckers can survive on 4 parts per million.

The amount of oxygen in a lake varies during each 24 hours. The maximum amount occurs at the end of the day. Plants use oxygen at night so the minimum amount of oxygen occurs at about daylight.

The amount of dissolved oxygen in water is temperature dependent—the colder the water, the more oxygen it holds.

MICHIGAN WATERFRONT ALLIANCE

P.O. Box 346

Three Rivers, MI 49093

616-273-8200

Web site MWAI@MLSWA.org

Legislative Agenda for 2001

Revised 6-5-01

1. We oppose legislation that would attempt to change current case law re public access at road ends prohibiting lounging, sunbathing and docking or marinas.
2. We support legislation changes to control boat noise on inland lakes.
3. We support legislation amending MNEPA 9 (part 301), formerly Michigan Lake and Streams Act, to require the DEQ to:
 - a. Regulate the number of boats and length of docks when issuing a marina-operating permit
 - b. Define a marina
 - c. Require DEQ to develop and utilize a carrying capacity formula when issuing marina-operating permits.
4. We are in support of a Partnership for Management of Michigan's Inland Lakes.
5. We support legislation that would set a minimum age of 16 to operate all watercraft over 8-horsepower.
6. We support tighter control on the sale, distribution and transport of nuisance exotic species as they relate to Michigan lakes and watersheds.
- 6a. Be it resolved that MWA encourages the state legislature to adopt legislation that would:
 1. Inventory the waters of Michigan where Eurasian milfoil exists.
 2. Acquire and categorize available information of all attempts to control or eradicate the plant and determine the success of control efforts.
 3. Identify actions to be taken by the state.
 4. Designate funding to pay for the control costs.
 5. Enact penalties for transport of nuisance exotic species.
7. We oppose the selling and / or diverting of the waters of the Great Lakes' watershed.
8. We support current or future legislation that expands the current Michigan bottle deposit law.
9. We would support the introduction of legislation that would establish a Citizens Oversight Committee for the DEQ.

MWA

MEMBERSHIP APPLICATION

The minimum annual dues for individual membership in Michigan Waterfront Alliance is \$25.00. Commercial and individual donations are needed and appreciated.

Please Print:

Name (First) _____ Last _____

Street _____ City _____ State _____ Zip _____

Phone (D) _____ (N) _____

County _____ Township _____

Lake or Stream Association (if established) _____

Make Checks payable to: **Michigan Waterfront Alliance**

All Contributions and Dues payments should be sent to the **Michigan Waterfront Alliance, P.O. Box 204, Long Lake, MI 48743**

“ML&SA—Uniting to protect Michigan’s water resources”

MICHIGAN LAKE & STREAM ASSOCIATIONS ESTABLISHES PARTNERSHIP WITH EIGHT HIGH SCHOOLS AND LAKE ASSOCIATIONS

ML&SA receives grant funds from three Foundations to establish a pilot program between eight high schools and eight lake associations.

The program to measure the chemical parameters of lakes began with a call from Randy Cook, Chemistry teacher at Tri County High School near Howard City in Montcalm County, to Pearl Bonnell, Director of Operations of Michigan Lake & Stream Associations.

Randy had developed his own teaching manual while using a TI-92+ Graphing Calculator to do nine parameters while conducting stream testing with his students at Tri County High School. Cook presented his project to a Professor at Grand Valley State University while working at the GVSU last summer.

Cook’s next step was to involve more high schools and lake and stream associations in the testing program. GVSU recommended that he contact Bonnell at ML&SA.

Dr. Niles Kevern and Don Winne viewed the manual and attended a meeting held in the early spring of 2001 in Grand Rapids where Randy explained his teaching of the monitoring of Chemical elements in lakes and streams. The attendees approved the adoption of a similar program for other high schools around the state.

Bonnell contacted ML&SA member associations to discover their interest in working with their local High School in establishing a cooperative program to study the chemical and biological relationships within their lakes. The idea was enthusiastically supported and schools were then contacted. The interest among high school science teachers and their



From left to right: Randy Cook, project director; Tony Zygiel, Norway High School and Bill Van Wolvelaere of Hamilton Lake Association.

school administrators was astounding. Sixteen high schools said that they would like to participate. Eight schools were selected for the pilot program, with four more to be enrolled in the fall of 2002.

Funds were received from the Porter Foundation, Wege Foundation, and the RGK Foundation to purchase equipment, manuals, supplies, and other needs. Equipment will become the property of the schools that complete the program.

All high schools in the program will be united over ML&SA’s web server so that the schools can share their information as the school year progresses.

The high schools, lake associations, and science teachers are listed below. It is planned to have these schools report on their programs at the ML&SA Annual Conference at Boyne Highland in April 2002.

- Norway High School, Upper Peninsula, Tony Zygiel, Teacher Hamilton Lakes Association, William Van Wolvelaere
- Edwardsburg High School, Kevin Bartz, Teacher Painter Juno Christiana Lake Association, Nancy Bowman
- Watervliet High School, Phyllis Moore, Teacher Paw Paw Lake Association, Delavan Sipes
- White Cloud High School, Edward Canning, Teacher Robinson Lake Association, Jerrylin Miller
- Bear Lake High School, Sharon Reinhardt, Teacher Bear Lake Association, Jerry Matthieu
- Gaylord High School, Jeff Kalember, Teacher Otsego Lake Association, Lee Bird
- Fennville High School, Jason Keeler, Teacher Hutchins Lake Improvement Association, John Lindahl
- Interlochen Arts Academy, Jack Randall, Teacher Crystal Lake Watershed Foundation, Stacy Daniels



Tri County High School students Megan Warner (left) and Karina Kalbfleisch stand with Rick Johnson, Speaker of the Michigan House of Representatives, in front of their exhibit at the Capital Building on October 9, 2001.

(continued on page 22)

Randy Cook, a teacher at Tri County High School, Tri County Area Schools in Howard City, received news on October 11, 2001 of a \$25,000 cash award – no strings attached – during a surprise visit from State Superintendent of Public Instruction Tom Watkins and State Board of Education President Kathleen Straus, as part of the Milken Family Foundation’s National Educator Awards Program.

“Teachers like Mr. Cook make a significant difference in the lives and futures of our children,” Watkins said. “This



From left to right: Kathie Straus, President Michigan State Board of Education; Randy Cook; David Borth, Director of Grants & Special Projects, Big Rapids Public Schools (a former Melkin award winner); and Tom Watkins, State Superintendent of Instruction pause for a picture after awarding Randy Cook one of the 2001 winners of the Milken education award.

marks our 12th year of recognizing excellence in education with the Milken Family Foundation, and we are pleased to acknowledge the vision and dedication these educators bring to their profession.”

The program was created by the California-based Milken Family Foundation to provide public and financial recognition to teachers, principals, and other education professionals who advance the notion of educational excellence. The program is conducted in conjunction with the Michigan Department of Education.

“Outstanding educators are the essential ingredient in student achievement, encouraging children to perform to their fullest abilities and to develop a love of learning,” said Lowell Milken, Foundation chairman. “Each and every day, these educators provide students with the confidence and tools to succeed.”

Cook, a high school science teacher at Tri County High School, holds bachelors degrees in chemistry and education from Cedarville College, and has completed 24 hours toward a masters degree in secondary education from Grand Valley State University.

“He incorporates foundation and corporate sponsorship into an outstanding science program that brings technology

that would not be readily available to all of our high school age students,” said Jim Scholten, Tri County Area Schools Superintendent. “His fine work and application of technology has allowed our students access to research experiences normally reserved for students in a higher education setting. He is an asset to our district.”

In addition, he has authored a laboratory textbook on water quality testing, and serves as the Project Director of a statewide initiative, in partnership with the Michigan Lake and Stream Association, to perform water quality testing in 8 pilot schools across the state.

The criteria for the selection of outstanding elementary and secondary school teachers, principals, and other education professionals as Milken Educators include all of the following:

- Exceptional educational talent as evidenced by outstanding practices in the classroom, school, and profession
- Outstanding accomplishment and strong long-range potential for professional and policy leadership
- Engaging and inspiring presence that motivates and impacts students, colleagues, and the community

Michigan has participated in the Milken National Educator Award Program since 1990.

Students at Tri County are going into the community equipped with hand-held technology that allows them to collect and analyze real-world data. After discussing environmental issues, they go and collect water samples where they test acidity using a pH probe, and then test the level of sulfate ions using a colorimeter to see if acid rain has affected the water source. They test for turbidity, conductivity, ammonium ions, hardness due to calcium ions, salt runoff by testing chloride ion concentration, dissolved oxygen, and dissolved carbon dioxide. They compare their test results with published governmental maps showing ion concentrations. A partnership has been established with Calvin College and Grand Valley State University which allows the students to perform quality assurance by running samples through ion chromatographs at each respective place. All data is placed on a web page established specifically to publish their results.

This program has been funded by donations from many different state and national foundations providing over \$25,000 in contributions creating a partnership between this public school and philanthropic organizations.

