

AKETIDES

The newsletter for people interested in Wisconsin lakes

Making Waves Recreational Boating in the 90's--Part II

Volume 21, No. 2 Spring 1996 According to Webster, our English term "boat" comes from the German root "boot," meaning to hollow out; hence, a hollowed out tree trunk for floating on the water. Boy, have we come a long way!

In this second installment on boating, Lake Tides will compare the use of motor boating with that of personal watercraft. Recently, we at Lake Tides "let our fingers do the walking" to speak with state boating law administrators from across the nation. One question we asked was: "How are you dealing with the issues that come with PWC growth?"

Personal Watercraft (PWC)

If you think only a few impetuous members of our society straddle the cool plastic of a PWC, think again! Current figures estimate that between 750,000 and 800,000 PWCs are presently in use in the United States. Sales topped 200,000 with a retail value of more than \$1.1 billion in 1995; 34% of all power watercraft sold were PWCs.

So, What's the Worry?

Colorado's Boating Safety Education Specialist, Dennis George, said "Personal watercraft represent about 7% of the state's watercraft and 30-40% of the accidents." In Kansas, Boating Law Administrator Jeff Gayer noted that 10-15% of Kansas watercraft are PWCs and they are involved in "around 40% of boating accidents." Arkansas' Boating Law Administrator, Mike Wilson, confirmed the trend with "a small percentage of PWCs accounting for 2035% of accidents." Coast Guard figures show national PWC injuries jumped from 532 in 1990 to 1,338 in 1994. Eight out of ten PWC accidents involved collisions with other vessels.

Another gripe about PWCs is the high pitched whine the machines make. Still others raise concerns about the possible environmental impacts of these craft operating at high speed in shallow water wildlife habitats.

At first blush, some states are reacting to complaints by proposing a flurry of legislation limiting the use of PWCs. One example of note took place in Vermont in 1994. Vermont's Water Resources Board passed the "Use of Public Waters Rules" (10 V.S.A. ss 1424). Essentially, the rules formalized and protected the existing boating uses of all Vermont lakes. The rules also prohibit the use of personal watercraft on lakes with a surface area less than 300 acres, lakes that have less than 30



Wisconsin Lakes Partnership

contiguous acres outside the shoreline safety zone (200 feet) and on lakes with a 5 mph speed limit or where gasoline engines are prohibited. These prohibitions on PWCs can be modified on a case by case basis in response to petitions. Wisconsin's bill AB 769, introduced by State Representative Mary Hubler, would be similar to Vermont's. It would limit PWC operation on lakes of 300 acres or less. Some folks feel that legislation such as Vermont's, that limits the use of PWCs to large lakes, would unfairly single out PWCs and cause overcrowding on certain lakes.

At the recent Wisconsin Lakes Convention in Stevens Point, a panel of notable representatives of various interests in water recreation discussed the matter and shared their insights into the question of PWCs. John Birkenbine, Director of the Personal Watercraft Industry Association, brought up an interesting point. Birkenbine noted that "many PWC owners are snowmobilers and ATV users that saw PWCs as a great extension to these other motorized pastimes. These folks may not have purchased the PWCs at marinas and are not traditional boaters." According to Birkenbine, "These people don't know boating etiquette for the water." He said that the industry is committed to a massive educational mission, largely because "we are in a first generation of personal watercraft owners."

The industry as a whole is working to overcome perceived design deficiencies. The often described "mosquito like" high pitch noise is a major objection for many non-users. Bob Young, manager of Honda Marine, noted that the same technology Honda has used in its "environmentally friendly" four-stroke outboard engines could be used to quiet and clean up PWCs.

PWC accident rates are statistically lopsided. John Johnson, assistant to the National Association of Boating Law Administrators, based in Lexington, Kentucky (we hear they have a respectable basketball team there), noted that the bulk of those accidents involved persons using rental PWCs. The industry is working with governments and dealers to correct this predicament. Most states only require the use of a personal flotation device and a minimum age for the operator.



So, What Do We Do?

The argument of behavior versus mechanism is familiar in today's society: guns vs shooters; autos vs drinkers; boat design vs operators. Banning boat types will probably not solve all the difficulties caused by increasing water use. As populations increase, freedom tends to decrease. Solutions will be found by compromise, by listening, and by respecting the opinions of others.

In future issues of **Lake Tides** we will examine what you can do to be safer and unruffled when you visit our wonderful waters. We will also survey what other states are doing to deal with the growing use of America's waterways. Some of the answers may surprise you.

Many PWC owners are snowmobilers and ATV users that see PWCs as an extension of their other pastimes.



You Can't See the Water for the Trees... BMPs for Water Quality

In 1994 and 1995 members of the Wisconsin Lakes Partnership joined DNR foresters, forest products industry reps and other stakeholders to develop a set of Best Management Practices (BMPs) for logging near water (LT Vol. 20, #1-Spring 1995). The members worked through a wide assemblage of difficult issues: fueling spills, forest roads, harvesting, wetlands, chemicals and riparian zones. The results included a statewide education program, a field manual and the formation of volunteer teams to evaluate selected sites for baseline information. Jim Kissinger was a member of one of the first teams.

BMP—it sounds like a new chemical, but you're wrong. It all started on a Tuesday night, July 17 1995, at Trees for Tomorrow Natural Resources Education Center in Eagle River. Over 60 people with diverse interests were selected to participate in a BMP monitoring team as part of Wisconsin's Forestry Best Management Practices for Water Quality Program.

After a 7:30 breakfast on Wednesday, we started with classroom instruction learning about BMPs and the monitoring program in detail. We were briefed on how to evaluate logging sites and formed monitoring teams which would evaluate sites throughout the state during one week in the fall.

On that first afternoon we traveled to two field sites to practice what we had learned in the morning. That evening we had a meeting to discuss the concerns and questions brought up by the day's events. We were still chewing on these particulars when we adjourned at 9:30 pm.

In the fall, our team reassembled to evaluate ten logging sites affecting water quality adjacent to wetlands. Using a 12-page evaluation form, we graded the application of BMPs and the impact these practices had on water quality. Many times we had to refer to our 76-page manual to clarify our grading on categories--such as Riparian Management Zones. These zones are land and vegetation areas next to lakes and streams where management practices are modified to protect water quality, fish and other aquatic resources. There were 24 categories to be graded, if and when they were applicable to a particular site. You can imagine the interactions among seven distinct people with diverse interests, but

when we got off base it came back to the basic premise—how does it affect water quality.

The three categories of riparian zones-lakes and navigable perennial streams, navigable intermittent streams, and nonnavigable streams--were difficult to grade. As you might imagine, these were subjective judgments which at times elicited heated debate.

Another issue which created discussion on particular logging sites was defining a wetland. How big does an area need to be for it to be considered a wetland? Our state and federal representatives seemed to have different opinions on this question. A practical and understandable definition still needs to be worked out in order to be more accurate in the grading process.

The scores given on each site were provided to the landowner, consultant, or logger as a learning tool. This process is advisory in order to encourage better application of BMPs with negligible impact on water quality.

The BMP Monitoring Program is set up to last three years. This year's workshop will be held near Sarona this July. In the fall, field teams will once again inspect sites around the state. The value of this program depends upon the sincerity of those involved. As a land owner, I will be more aggressive in applying and monitoring these BMPs within my own wildlife habitat and forestry stewardship plan.

Submitted by Jim Kissinger, WAL Board Member, of Eau Claire and Little Sissabagama Lake in Sawyer County. You can imagine the interactions of seven distinct people with diverse interests...



BMPs Deliver

To date, the educational facet of the Forestry BMP program has delivered 15 one-day educational training sessions. Over 800 loggers, woodland owners, private and government professionals have learned to prevent or reduce non-point source pollution by effectively applying BMPs.

The brochure "Forest Practices for Water Quality in Wisconsin," describes the program and can be used to obtain the BMP Manual. To get a brochure or a schedule of the BMP education and training workshops, contact Steve Holaday, Forest Hydrologist, Wisconsin DNR, Box 7921, Madison WI 53707-7921 or call 608/264-9247.

Investing in Our Lakes

Over \$1.3 million granted to 16 groups for lake protection projects. In March, the Department of Natural Resources awarded over \$1.3 million in lake protection grants to 7 local units of government, 5 lake districts, 1 lake association, and 3 nonprofit conservation organizations. The 16 projects were selected from a total of 37 that applied for over \$4 million in estimated project costs.

Through the **Lake Protection Grant Program**, local units of government, tribes, sanitary districts, lake districts, qualified lake associations, and qualified nonprofit conservation organizations can obtain a 75% reimbursement, up to \$200,000 for projects designed to protect or restore lakes and their ecosystems. A 25% local match is required. Eligible activities include the purchase of property, restoration of wetlands, development of regulations and ordinances, watershed management, lake restoration, and pollution prevention. The next application deadline for projects is November 1, 1996. For more information contact your DNR district Lake Management Coordinator or Leslie Gauberti, Lakes Partnership-DNR at 608-267-0497.

Shoreland Zoning Study Underway

Input from citizens needed in study of shoreland zoning codes. One of Wisconsin's important lake protection tools is the shoreland zoning program. A one-year EPA funded project to analyze the clarity and effectiveness of NR115 (the Shoreland Zoning Administrative code) in meeting statutory objectives is underway. DNR staff have been • *reviewing scientific literature*, • *looking at how other states deal with these issues, and* • *talking with people working in shoreland zoning and related fields.* For the project to succeed it will need input from a variety of people and organizations affected by the current and any proposed changes to the shoreland zoning program.

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Judy Jooss has agreed to represent the Wisconsin Association of Lakes and will be funneling input from WAL members and friends to the shoreland zoning project. Please contact Judy if you would like her to pass along your perspectives at 1154 Lucille Ave., Twin Lakes WI 53181; PH: 414-877-9301; FAX: 414-877-4329; or e-mail: jjooss@aol.com. The DNR project coordinators are **Sue Jones** and **Tom Bernthal** and can be reached at WDNR-WZ/6, PO Box 7921, Madison WI 53707; FAX 608-264-9200; **Sue**: PH 608-266-8032 or e-mail: joness.@dnr.state.wi.us or **Tom**: PH 608-266-3033 or e-mail: berntt@dnr.state.wi.us. Look for more on this study in future issues of *LakeTides*.

O... YOU WANT TO BUY A HARVESTER

Little Lake is having big problems. Eurasian water milfoil has invaded. Bays are becoming weed-choked and impassable. Recreational boaters and anglers are upset. Shoreline property owners see their lakefront deteriorate and know that something must be done. The Little Lake Association takes action and purchases a weed harvester. The problem is solved! The water quality improves! Large pike are again caught in abundance, loons return to nest, and property values soar! Everyone is happy!

Sound like a fairy tale? <u>It is!</u> Although weed harvesting can do much to help improve the long term quality of a lake, the key words here are *help* and *long term*. Anyone that enters into a harvesting program must realize that there are no miracle cures for an aging lake and that harvesting alone will not improve water quality or change the nature of their lake. Hard work, patience, and tolerance are all required for a successful program. With those things and a little bit of luck, lake residents will still be talking to each other after the first few years of the program.

Let's take a look at a few things that other lakes have found beneficial in starting and continuing a harvesting program.

A Management Plan that sets realistic goals and objectives is not only good sense but it is required for state funding. A good plan will define how the harvesting program will work and look at water quality issues that may affect weed growth. The plan may be done with the help of the Department of Natural Resources or an outside consultant, but must have input from local residents. <u>All lake residents</u> must see the plan and understand it. Without resident support, the program will fail.

The harvesting operation must be

clearly defined. Key elements would include information on what areas will be harvested or not cut at all. What species of plants will be the target? What will be done about floating weeds that are cut by the harvester or motor boats? How will the areas between the piers be maintained? What happens when the wind blows out of the same direction for two weeks and the windward shoreline can't be cut? What about dead carp? Sound like strange questions? They will all be asked.



The operation of the machine must be

defined. Past experience says that the fewer people that run a harvester, the fewer maintenance problems you will have. Can you afford to have full time staff? If volunteers run the machine, who will tell them where to cut? Who will be in charge of the daily machine maintenance? What is the procedure for breakdowns, and where will the machine be repaired?

Breakdowns and weed harvesting are synonymous. Harvesting is sometimes like trying to mow a yard full of rocks at night, without a moon or any lights. A good program will have enough money set aside to replace items like cutter bars, hydraulic pumps and motors, conveyor belting, control cables, etc. What is the plan if the diesel engine blows up? Not only should a financial plan for emergencies be in place, there should also be a list of parts suppliers, welders and repair personnel. If repairs are done in-house, who will do them? People understand that things break, but quickly lose patience when the harvester sits on shore for days while the weeds grow in front of their homes.



Communication and education are the two most important aspects of a successful harvesting operation. The management plan should also address what happens to the weeds now that they are harvested. Is a transport required to get them to the shore conveyor or will it be just as efficient to drive the harvester back and forth? Are unloading sites available and if so, do the neighbors understand about the noise and the times of operation? What do you use to haul the weeds? Some lakes use trucks and some use trailers that are pulled by a truck or tractor. If a truck is used, does the driver need a commercial driver's license?

Now that the weeds are on the shore, where will they be dumped? It is best to have several sites in reserve just in case someone doesn't like the smell of rotting weeds. Dump sites must be chosen that do not allow runoff to pollute your lake or someone else's. Choose a site that has some drainage or it may become a muck hole when the water starts running out of the weeds.

While all this activity is taking place during the summer, be sure to keep daily records of areas worked, the types of plants cut, the number of loads and down time due to breakdowns. It is important to communicate this information to all the lake residents. Keep them informed in whatever way you can on the what, why, and how of the operation. Communication and education are the two most important aspects of a successful operation.

If you survive the first season, the harvester will have to be removed from the lake and winterized. Cleaning the unit prior to storage is extremely important. Once thoroughly cleaned, the entire machine can be inspected for worn or broken parts and cracked welds. Repairs can then be done immediately. Some lakes winterize the equipment themselves while others choose to have the manufacturer provide this service. Don't wait until the ice is on the lake to make this decision. The final question: where will you store the beast?

If all this sounds like I'm trying to discourage you from a harvesting program, that is not the case. I truly believe that a good harvesting program is the best way to fight nuisance aquatic plants. If you can answer the questions above and avoid the pitfalls that some of us have run into, you will have a good harvesting program.

Submitted by Charlie Shong, Lake Pewaukee Sanitary District. Charlie manages the lake's aquatic plant management program. Lake Pewaukee annually budgets \$100,000 for aquatic plant harvesting and \$25,000 for wetland restoration as part of their aquatic plant management plan.

CALENDAR

- May 2-4 -- "Shining Shores: From Lake Superior to Big Stone Lake," Minnesota Lakes Conference, Duluth [MN Lakes Assn., 800-515-5253]
- June 8-16 -- Yahara Lakes Week, coordinated by the Dane County Lakes and Watershed Commission [call 608-257-0118 for a calendar of events]
- June 22 -- Burnett County Issues and Answers Forum, "Taxation and Water Quality," 9:00 am-2:00 pm, Burnett County Government Center-Siren, \$5.00 covers materials and lunch [John Preissing, 715-349-2151]
- June 22 -- Northwoods Lake Fair, 10:00 am-4:00 pm, Hodag Park in Rhinelander [John Czarnezki, 715-365-2750]
- August 3 -- Florence County Lake Fair, 9:00 am-12:00, Florence Natural Resource & Interpretive Visitor Center [Mike Kroenke, 715-528-4480]
- August 17 -- 4-Corners Lake Fair, 10:00 am-4:00 pm, Shell Lake Beach and Community Center [Beverly Stencel, 715-635-3192]
- August 17 -- Neenah Creek Watershed Tour, Lake Mason in Briggsville [Richard Toebe, 608-339-4268]
- November 13-16 -- NALMS International Symposium, "People, Lakes and the Land: Puzzling Relationships," Minneapolis Radisson South Hotel [Steve Heiskary, 612-296-7217]



Rare Aquatic Plants of Wisconsin

There is often a perception that rare plants only occur in isolated, pristine locations. This is true for some species, but others may be found in disturbed sites or in habitat remnants that are surrounded by development. Often rare and remarkable elements of the natural world are over-looked simply because they are not recognized. Louis Pasteur once said, "In the fields of observation, chance favors only the prepared mind."

The more we appreciate rare plants, the better we can understand their characteristics, range and distribution. If you find an aquatic plant that you think may be a rare species, please notify the DNR's Bureau of Endangered Resources. Collecting a rare specimen is probably not a great idea. Check with the Bureau of Endangered Resources if you have any question about collecting. If the population is small, take close-up photographs of leaves, flowers and fruits in great enough detail for positive identification instead of picking the plants.

There are 20 aquatic plants listed as rare by the Wisconsin Natural Heritage Inventory. They are categorized in three ways:

1) Wisconsin Endangered Species: Any species whose continued existence as a viable component of the state's wild plants is determined by the DNR to be in jeopardy on the basis of scientific evidence.

2) Wisconsin Threatened Species: Any species which appear likely, within the fore-seeable future, on the basis of scientific evidence, to become endangered.

3) Species of Special Concern: Any species about which some problem of abundance or distribution is suspected but not yet proved. The main purpose of this

category is to focus attention on certain species *before* they become threatened or endangered.

Rare Aquatic Plants of Wisconsin

Status

Submergents Lake cress (Armoracia aquatica) Water starwort (*Callitriche hermaphroditica*) Large water starwort (*Callitriche heterophylla*) Floating Marsh Marigold (Caltha natans) Waterwort (*Elatine triandra*) Farwell water milfoil (Myriophyllum farwellii) Water-thread pondweed (Potamogeton *capillaceus*) Algal-leaved pondweed (Potamogeton confervoides) Spotted pondweed (Potamogeton pulcher) Sheathed pondweed (*Potamogeton vaginatus*) Vasey pondweed (Potamogeton vaseyi) Small yellow water crowfoot (Ranunculus gmelini) Twin-stemmed bladderwort (Utricularia geminiscapa) Purple bladderwort (Utricularia purpurea) Small purple bladderwort (Utricularia resupinata)

Emergents

Brook grass (Catabrosa aquatica) Angle-stemmed spikerush (Eleocharis quandrangulata) Robbins spikerush (Eleocharis robbinsii) Plantain shoreweed (Littorella americana) Heart-leaved plantain (Plantago cordata)

In the next issue of *Lake Tides* we will highlight Wisconsin's **endangered** submerged aquatic plants. Descriptions of all 20 plants rare listed above, along with illustrations, will be profiled in "*Through the Looking Glass*," a new aquatic plant guide available this fall.

By Susan Borman, Wisconsin DNR-Western District Aquatic Plant Specialist.

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Through the Looking Glass: The Ecology of Lakes

The 18th annual Wisconsin Lakes Convention is a memory. This gathering is one of the largest of its kind in the nation, and this year's was bigger and better than ever. The convention is the culmination of much work and the kick-off for the year ahead.

Wisconsin's senior statesman, Gaylord Nelson, noted in his keynote address that many of today's strategies for our nation are planned with equal weight for the economy and the environment. The Senator reminded us that the economy is a "wholly owned subsidiary" of the environment. If we despoil the environment there will be no economy. He reminded us that the root of most of today's major issues are the consequences of overpopulation.

George Meyer, DNR Secretary, reviewed the Department's reorganization process and reassured the assembly that the Agency would continue to be a strong partner with lakes. Secretary Meyer noted that many of the components of the reorganization philosophy were modeled on the Wisconsin Lakes Partnership.

The lakes community has grown over the years and learned to master challenges with maturity and wisdom. We are learning how to listen to other opinions... we know compromise... and respect. This year's convention moved further down this path. The convention brought representatives from the outboard motor and personal watercraft industry, the mining industry and Native American nations. Folks from the sailing and paddle sports organizations, agencies, and environmental groups joined us to discuss solutions to the challenges we share. Working together we can mold an admirable future for our state's lakes.

Stewardship Awards:

Volunteers play a large role in the Lakes Partnership. Awards were presented to **Mary Bierman**, Individual; **Loon Lake-Wescott**, Group; and **Steve Field**, Public Service. Youth groups who received signs for their Adopt-A-Lake projects included: **Rice Lake Middle School, Augusta High School, Tomah School District, Fox Lake, Lucky Hills 4-H Club, and North Lakeland Elementary**.

Several sessions of this year's convention were video-taped. To purchase copies of these tapes, call the UWEX-Lakes Office at 715-346-2116.

The 1997 Lakes Convention will be held in Stevens Point on April 3-5. See you there!

PROJECT WET WORKSHOP SCHEDULE

Attend a Project WET Workshop... coming to an area near you this spring and summer!



- April 27 -- Ripon College, Berlin [Don Tincher or Pat Arndt, 414-361-2012] April 29/May 2 -- Forestry Building, Solon Springs [Paul Hlina, 715-378-4292]
- May 21 -- EE Learning Center, Waukesha [Jack Finger, 414-521-8748]
- June 12 -- TJ Walker Middle School, Sturgeon Bay [Ann Quale, 414-746-2810]
- June 13 -- Aldo Leopold Nature Center, Monona [Suzanne Wade, 608-265-3257]
- June 17 -- Riveredge Nature Center, Newberg [Terrie Cooper, 414-675-6888]
- June 18 -- Monroe County, Tomah [Bryce Richardson, 608-269-4929]
- June 24 -- Riveredge Nature Center, Newberg [Terrie Cooper, 414-675-6888]
- July 8-12 -- Trees For Tomorrow, Eagle River [enrollment through UW-Superior, Don Tincher, 414-361-2012]
- July 8-12 -- Facilitator Training, UW-Stevens Point enrollment required [Libby McCann, 715-346-3366]

July 10 -- WAVAI Conference, Holiday Inn-Middleton [Pam Packer, 608-264-8948]

- July 22 -- Riveredge Nature Center, Newberg [Terrie Cooper, 414-675-6888]
- August 12 -- Riveredge Nature Center, Newberg [Terrie Cooper, 414-675-6888]

"The economy is a whollyowned subsidiary of the environment."



How Green Was My Valley... and Lake

I'm quite concerned about my neighbors who have their lawns treated with chemicals by a number of "lawn service" companies. Won't these chemicals leach into our lake since many of the lawns are in close proximity to the water?

For some people, a major goal is to have a lush green lawn that's the envy of the local golf course. For others, a more natural landscape is favored. If you're concerned with your lake's water quality and the health of its ecosystem, it's important to consider how essential a lawn is to you and how much lawn you need.

The area from the water's edge to about 500 feet inland can be considered a "ribbon of life." In a natural state, this area supports a considerable variety of wildlife and contains a wonderful diversity of plant and insect species. This riparian area can provide privacy for your home, and serves as a travel corridor and home for birds, mammals, many small reptiles and amphibians.

While lawns don't provide the greatest wildlife habitat, they do help keep our lakes and streams clean by allowing rainwater to filter into the soil rather than running into storm sewers. However, maintaining manicured lawns and landscape plants sometimes requires the use of chemicals.

So, getting back to your question—many homeowners and lawn care companies combine <u>fertilizers</u>, <u>herbicides</u> and <u>insecticides</u> in a series of applications throughout the spring, summer and fall. These multistep programs are promoted as the sure and easy path to the perfect lawn. But, your lawn may not need all the chemicals provided in these multi-step programs. To determine which treatments your lawn needs, the best bet is to get your soil tested.

K If a soil test determines that you need fertilizer, remember that improper use can cause water pollution. Many fertilizer materials, including leaves and grass clippings, contain nitrogen and phosphorus. When these nutrients wash into lakes and streams they promote algae blooms and aquatic weed growth, lower dissolved ox gen levels in the water, and may release ammonia—which is toxic to fish. Select a low- or no-phosphorus fertilizer on your near-shore lawn areas.

Herbicides are widely available: however their use should not be routine. They should be used only with the most difficult weed problem. If you decide to use herbicides, consider spot treatment rather than treating the entire lawn.

Most lawn insects are beneficial and use of insecticides can also affect birds, pets and people. On lawns where harmful insects exist, natural control practices may reduce the threat.

On the occasions when chemical applications are to be used, caution should be taken. Many communities have passed lawn care ordinances that govern the use of pesticides (including herbicides). These ordinances were motivated by concerns over human health, pets, wildlife and water quality. These ordinances, at a minimum, require that affected residents post their lawns after pesticide application. You may also register with the Dept. of Agriculture, Trade and Consumer Protection (608/224-5296) for pre-notification by commercial applicators. The deadline is March 1, but you can get on the list for next year and possibly get the names of applicators in your area to contact yourself.

So, **yes** you have a right to be concerned about what goes on your neighbors' lawns. Applying unneeded pesticides and nutrients in a generic, multi-step fertilizer program from lawn service firms can be expensive for the homeowner and harmful to the environment.

For more information on lawn care alternatives, contact your county Extension office and request the *Yard Care and the Environment Series*.



QUERY OF THE SEASON

Submit your questions to <u>Lake Tides,</u> <u>Query of the</u> <u>Season.</u>



Lake Tides - 8506

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REFLECTIONS:

On Political Leaders:

What are the natural features that make a township handsome? A river--with its waterfalls and meadows, a lake, a hill, a cliff or individual rocks, or perhaps a forest or ancient trees standing singly. Such things are beautiful; they have a high use which dollars and cents never represent. If the inhabitants of a town were wise, they would seek to preserve these things, though at a considerable expense; for such things educate far more than any hired teachers or preachers, or any present recognized system of school education. I do not think him fit to be the founder of a state or even of a town who does not foresee the use of these things, but legislates chiefly for oxen, as it were....

January 3. 1861, Henry Thoreau