

# WATERWORKS

FEDERATION OF LAKE ASSOCIATIONS, Inc.

Fall 1993 Volume 9 Number 4

## Drowning Lakes Rescued

Old Forge Group Celebrates  
25 Years of Helping Nature

*by Glenn Coin, reprinted from the  
Observer-Dispatch, August, 1993*

Twenty-five years ago, something a little more unpleasant than lily pads floated on Fourth Lake.

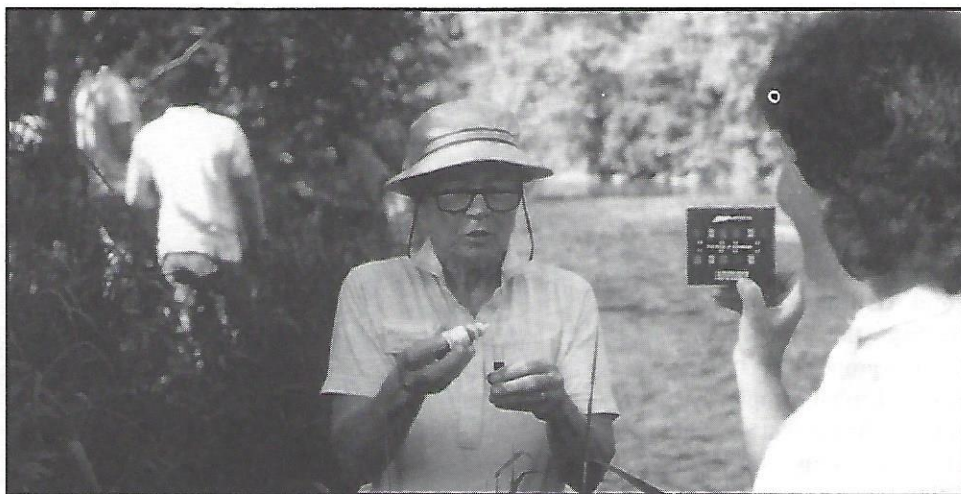
"My wife noticed this crud coming out of the lake quite frequently," recalled Thomas McCabe, who owned a place on the lake then. "It was like washing a baby's diaper in the water."

That crud was raw sewage spilling out of septic tanks and toilets into the Adirondack waters. Tests found fecal bacteria teeming in the lakes at levels far higher than allowed by the state Department of Health.

Worried that the state might shut down the Old Forge Beach - a key link in the tourism dependent region's economic chain - a handful of landowners held an emergency meeting in a living room, appointed a committee and began cleaning up the lakes.

From that humble beginning grew the Fulton Chain of Lakes Improvement Association, which now boasts 803 members. The group, still active in protecting the water and shores of the lakes, celebrated its 25th anniversary last week with a party boat cruising the lakes where sewage once floated.

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*Hap Slocombe (left) and Elizabeth Conners read pH test results during the tributary sampling field trip at FOLA's June conference*

## SEPTIC SYSTEMS FROM A LAKE MANAGEMENT PERSPECTIVE

*by Lisa Welch, Senior Planner, Madison County Planning Department*

"Septic systems are a problem on our lake and we want them fixed." This is the typical cry of exasperation I hear from lake users and lakeside residents throughout New York State. It's unfortunate, but the discussion rarely gets beyond these initial cries in many communities, largely because many are looking for the "quick fix" to a somewhat complicated problem.

Septic system issues can be split into two intertwining categories: 1) septic system operation and, 2) septic system regulation. The typical septic system consists of a septic tank, a distribution box, and a leach field. Household waste enters the septic tank where solids settle to the bottom, oil and grease float to the top, and the remaining fluid (effluent) is distributed through the distribution box to a series of leach fields where it is percolated down into and treated by the soil. This system is designed to last approximately 25 years and the septic tank should be pumped every three to five years.

There are many different septic system "designs": from the outhouse to the more complicated raised bed systems. The basic septic system goal, however, is always the same: to protect human health by treating human waste. The most important element of treatment is the "removal" of bacteria from the human environment; those nasty organisms that cause human disease and suffering. The soil surrounding the leach field also has the capacity to remove some of the nitrogen and phosphorus found in septic system effluent.

The second category is septic system regulation. The New York State Sanitary Code is the primary regulation that governs septic systems. It was designed to protect human health by removing harmful bacteria from the human environment; it was not designed to protect lake water quality by reducing nitrogen and phosphorus concentrations.

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## ON THE LOCAL SCENE

## PLYMOUTH RESERVOIR

By Rena Doing

Plymouth Reservoir is a private 90 acre lake located in Chenango County. The lake was formed in the 1800's by damming a hilltop stream. This controlled the flow of water to Canasawacta Creek where mills and farms used the water to power equipment and industry. As technology advanced the water power was no longer needed, but a small lake with many tree stumps and good fishing remained. During the 1930 and 1940's, property lots were sold and small camps were built. In the 1960's, a group of hardworking, seasonal residents formed an alliance to begin the cleanup of the tree stumps. This evolved into the Plymouth Reservoir Lot Owners Association, a voluntary, pass-the-hat organization whose members worked hard to develop a seasonal area where people could enjoy boating and fishing.

For many years it was sufficient to continue with minor repairs and improvements but as residential development increased, (approximately 100 properties presently have deeded lake rights), and some seasonal properties became year-round, the combined effects of mother nature and human influences accelerated aquatic plant growth in the reservoir. Plant growth gradually became more abundant, adding nutrients to the water and stealing the depth with fill. When milfoil became established and started taking over the lake, it became increasingly difficult to fish, sail, or swim. It was soon time to gear up for an all-out attack to save the lake.

Fortunately, the Federation of Lake Associations was available to provide ideas on how we could accomplish our goal of controlling, not eliminating,

aquatic plant growth. Our options were chemical applications, mechanical weed harvesting, or a new idea of triploid grass carp. We discovered that the cost and DEC permitting requirements for chemical use were beyond



*Chet Choinka (left) and Jim Davern on the Homemade Mechanical Weed Harvester at Plymouth Reservoir*

our resources. We realized that this would only be a short range control, requiring continued applications at considerable expense. The next available resource was mechanical harvesting.

In 1989 the lake association surveyed the residents and the general consensus was to set up a weed harvesting program. Again, finances were a problem. Membership in the lake association was not a requirement of deeded lake rights property owners when properties were sold. Increased memberships were therefore necessary to have all residents share in solving the problem, the way our founders did, and to maintain our property value.

Many property owners have been very generous. Although membership increased, however, we still lacked 100 percent cooperation. As part of a fund raising effort, we started holding Sunday breakfasts. Residents donated time and supplies to make them a success. This also gave residents an opportunity to talk and

get acquainted. We had 50/50 raffles, raffles of donated merchandise, spaghetti dinners and increased our drive for monetary donations.

In 1991 and 1992 we hired contractors to harvest as many weeds as possible. It wasn't enough to do the entire lake but it was a start and the more weeds removed, the less to add back to the lake.

Realizing it would be impossible to continue this way, we searched for a way to purchase our own harvester. Cost was still beyond our resources so we decided to build our own mechanical harvester. We kept up our fund raisers, and a generous resident donated an old party boat that was

used for parts and a motor. We visited the local bank to secure a note, hired a welder, and picked the brains of many industrious residents. In June 1993 we launched our own mechanical weed harvester. The harvester is approximately 18 feet long and 6 feet wide. The conveyor is 10 1/2 feet long. It cuts and collects the weeds and delivers them into the boat where they are evenly distributed by a crewman. When there is a sufficient load, the boat pulls into shore, the conveyor is reversed, and the weeds are deposited. They make excellent mulch.

This summer we harvested twice as many weeds thanks to the generous time of our residents. Our retired residents really made the harvesting program successful because of the time they devoted. When vacationing residents were available they jumped on the bandwagon to lend a hand. We had mechanical bugs to work out and needed better scheduling but our goal was met and hopefully all our residents realize the importance of continuing with this project.

*(continued on page 7)*



### Message from the President

## What Would You Like to Know?

The Federation of Lake Associations may have answers for you through our Clearinghouse Service. This service to our members provides information from a data bank stored on computer at the office, and/or technical assistance from any number of Scientific Advisory Board members. This service is *free* to all members in good standing. Just call or write to the Federation office.

Federation members may contact our office for information on references and publications, water resources videos, water quality monitoring programs, surface water programs for school children, resource hotlines, national clearinghouses and newsletters, "on-line" computer services, management consultants, lake and

watershed ordinances, by-laws, and more.

Give us a try! If the Federation does not have the information at hand, we can refer you to other resources.

This free service is provided to help our members make the appropriate lake and watershed management decisions for supporting their water quality standards.

If members have information or ideas to contribute on any of the above list or other activities (such as fund raising, lobbying, socials, etc.) please let us know. Also, if your association or organization has a newsletter, please include FOLA on your mailing list.

- Elaine Horstmyer

## FOLA's Mission...

The FOLA Board of Directors is developing a new mission statement. The most recent proposal is...

*"To protect water resources by assisting local organizations through public dialogue, education, information exchange and collaborative actions."*

Please contact FOLA Board President Elaine Horstmyer at (315) 655-9777 or the FOLA office if you have comments. □

## Leadership Conferences

The Federation of Lake Associations recently held leadership conferences in Syracuse and Schenectady. The interactive workshops, organized and presented by Dianne Russell of the Institute for Conservation Leadership in Washington, D.C., were designed to help leaders of lake associations and other non-profit organizations to effectively recruit and manage volunteers and raise money. Workshop participants had a chance to enhance their leadership skills, to develop effective methods for motivating active volunteers, and to create plans to generate funds for their own lake and watershed projects. Both workshops were co-sponsored by the Environmental Protection Agency. □

## FOLA's Scientific Advisory Board Provides Valuable Services To Federation Members

For the past ten years, the Federation's SCIENTIFIC ADVISORY BOARD (SAB) has provided invaluable guidance and technical advice to the FOLA Board of Directors and to FOLA members. The SAB is a group of scientists that offers scientific and technical advice on matters concerning New York State lakes and their watersheds. Questions that are submitted by FOLA members are often referred on to a member of the Scientific Advisory Board for review and comments. The SAB also identifies and coordinates research needs for FOLA, determines the agenda for the annual FOLA conferences, and provides a scientific overview of the Citizens Statewide Lake Assessment Program. The Board conducts its activities on an interdisciplinary basis, providing advice on fisheries, aquatic plants and algae, watershed planning and development, water quality, and more.

### SCIENTIFIC ADVISORY BOARD

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# INVADERS ON THE MOVE IN NEW YORK WATERS

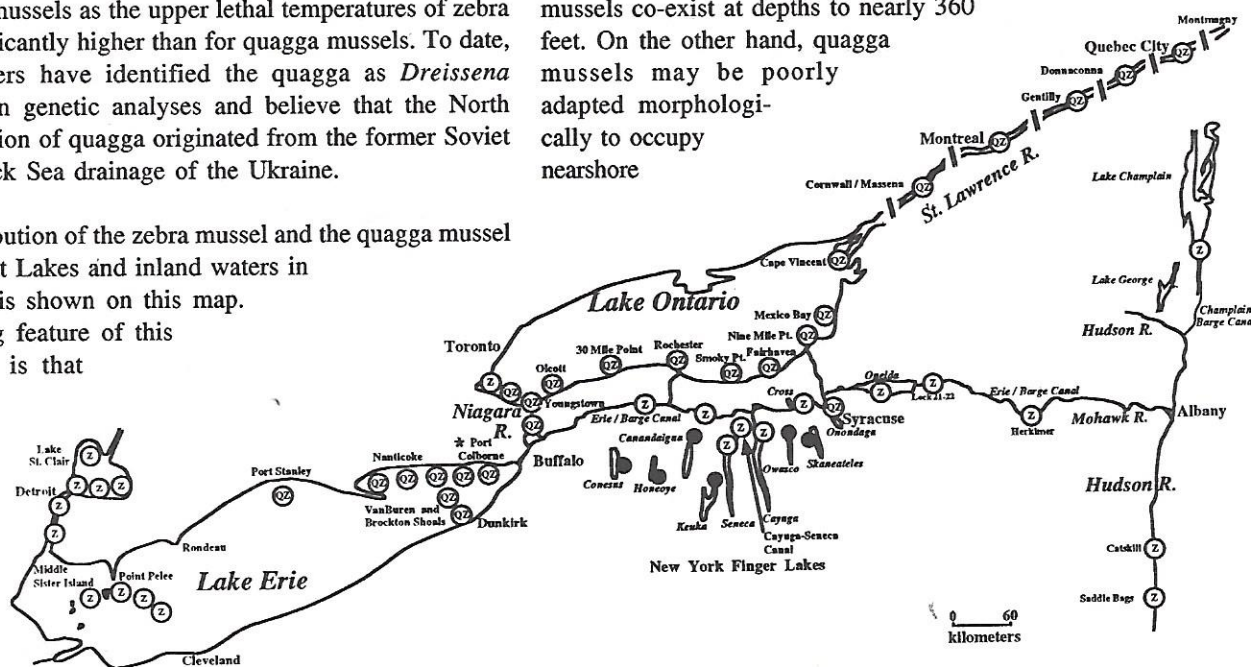
## A Zebra and "Quagga" Mussel Update

by Edward L. Mills, Senior Research Associate, Cornell University

The zebra mussel (*Dreissena polymorpha*) has received widespread attention in recent years because of its potential impact on food webs of freshwater lakes and its impact on industry via its fouling of water intake pipes along lake shores. In 1991, a second species of *Dreissena* was discovered in Lake Ontario and adjacent waterways and was given the working name of "quagga" after an extinct African relative of the zebra. Current evidence suggests the quagga became established in the Great Lakes (i.e. Lake Erie) as early as 1987 and both mussel species were likely transported to North American waters in the ballast water of transoceanic ships. Morphologically, the most distinguishing feature of the quagga is that it lacks the flattened ventral side characteristic to the zebra mussel. There also appears to be a physiological separation between the two mussels as the upper lethal temperatures of zebra mussels are significantly higher than for quagga mussels. To date, Cornell researchers have identified the quagga as *Dreissena bugensis* based on genetic analyses and believe that the North American population of quagga originated from the former Soviet Union in the Black Sea drainage of the Ukraine.

The current distribution of the zebra mussel and the quagga mussel in the lower Great Lakes and inland waters in New York State is shown on this map. The most striking feature of this distribution map is that the mussels have

tions of zebra mussels competing for space and/or food could explain why quaggas appear to be excluded. In Lakes Erie and Ontario, the current spatial distribution of quaggas in relation to that of zebra mussels could also be a response to factors other than water temperature. For example, the quagga mussel could merely be occupying the areas in Lakes Erie and Ontario which were not colonized earlier by zebra mussels. Quagga mussels, initially outnumbered by zebra mussels which became firmly established in nearshore waters, may simply be occupying deeper waters (90 feet in Lake Erie and over 400 feet in Lake Ontario) because of the availability of unused space. The lack of space may also be forcing both species to deeper waters. This argument is supported by the fact that zebra and quagga mussels co-exist at depths to nearly 360 feet. On the other hand, quagga mussels may be poorly adapted morphologically to occupy nearshore



### SPREAD OF QUAGGA AND ZEBRA MUSSEL IN THE LOWER GREAT LAKES AND INLAND WATERS OF NEW YORK STATE

colonized the Great Lakes and water bodies associated with rivers and canals. Large inland lakes like Oneida, Cayuga, Seneca, and Champlain are all connected to rivers and canals and all have established dreissenid populations. Undoubtedly, zebra mussel populations will eventually become established in other inland lakes but their spread to these waters will take longer than was initially thought.

In Lakes Ontario and Erie, the proportion of quagga mussel increases with depth and declines with increasing water temperature suggesting that this mussel may be a cold deepwater form. In addition, quagga mussels are sparse or absent along inland waterways and lakes of New York State that are infested with zebra mussels. Why these inland water bodies are unsuitable for the persistence of quagga populations is unknown, but heavy infesta-

depths which are subject to turbulence and wave action. Quaggas are flattened laterally, compared to the ventrally flattened zebra mussel; this may allow the latter to become more firmly attached to hard bottom substrate materials and less prone to detachment. More intriguing is the apparent ability of both quagga and zebra mussels to survive at depths in Lake Ontario (>150 feet) where temperatures rarely exceed 40 degrees Fahrenheit. Recent laboratory findings do indeed indicate that the quagga is less tolerant of high water temperatures compared to the zebra mussel and support the field findings that adult quagga mussels can survive in the deep cold waters of lakes. Consequently, colonization of the deep waters by the quagga mussel represents a new threat to the integrity of deep water lakes of New York State and elevates the potential ecological significance of introduced mussels to North American freshwaters.



**FULTON CHAIN OF LAKES***(continued from page 1)*

The association takes credit for dramatically improving the quality of the lake water, persuading governments to replace pesticide spraying with biological controls for black flies, and helping to enact local sanitary and development laws.

The association oversees the Old Forge pond and First through Fifth lakes. Sixth and Seventh lakes have their own association.

Group members also say they've spawned a citizen's movement across the Adirondacks, with similar associations popping up along other lakes in the past 25 years.

"They've impressed me as being a

responsible group of people who are willing to cooperate in a public-private partnership to make the Fulton Chain of Lakes an even better place," said state Assemblyman Anthony Casale, R-113.

What impresses some observers is the group's staying power. While many environmental groups form to do battle on a particular issue and then dissolve, the lakes association still is going strong. For example, the group still pays for septic tank tests, one of the first tasks it undertook in 1968. That program started on a voluntary basis, but now the Town of Webb hires an enforcement officer to do spot checks. The association pays the officer's salary, about \$3,600 a summer.

The group has put up its money in other ways. After persuading Casale to sponsor legislation in 1990 that imposed speed

limits and other boating regulations on the lakes, the group split the cost with the Herkimer County Sheriff's Department of a radar gun and buoys. They plan to buy a machine to analyze the breath of suspected drunken boaters.

"It shows a real commitment when you put your money where your mouth is for such a long period of time," said Don Kelly, a codes enforcement officer for the Town of Webb.

The group isn't done, either. They've played detective the past few years, shooting aerial photographs of presumed sewage dumping in the lakes. This year, said member Ed Stafford, they'll enlist the aid of a state police helicopter, which will take infrared photographs of any suspected sewage. Stafford said that may trace the pollution back to its source. □

## *Good Publications for Watershed Homeowners and Lake Users*

### **"Answers to Common Lake Questions"**

The third edition of this 38-page booklet by Jody Connor and Robert Estabrook is available from the Biology Bureau, New Hampshire Department of Environmental Services, P.O. Box 95, 6 Hazen Drive, Concord, NH 03301 (603-271-3503). The publication answers questions about the formation of lake associations, lake sampling, fish kills, beach construction, bacteria, algae, weeds, septic systems, acid rain, shoreline protection, and much more. This is a well-written publication for all lake users.

"Pond and Stream Safari, a Guide to the Ecology of Aquatic Invertebrates", is another good publication if your group is involved with stream invertebrate sampling. It contains excellent illustrations, identification charts, and activities for teachers and conservation leaders. The 57-page book is packaged in a folder that contains worksheets, game cards and other supporting materials. You can obtain a copy through your Cornell Cooperative

Extension office for \$9.63, or directly through the Cornell Media Services Distribution Center at (607)255-2080 for \$12.75 per copy.

**Nonpoint Source News Notes** is a bulletin that covers the management of nonpoint sources of pollution and watershed restoration. This free newsletter is published eight times a year by the Terrene Institute under a cooperative agreement with the US EPA. To be placed on the mailing list, fax your name, address, phone number, and fax number to (202)260-1517.

**Watershed Events** is a free quarterly newsletter published by the EPA. It provides information on the development and uses of watershed protection approaches. To be placed on the mailing list, contact Janet Pawlukiewicz, Office for Wetlands, Oceans, and Watersheds, U.S. EPA (WH-556F), 401 M. Street SW, Washington, DC 20460.

**"Fish and Fisheries Management in Lakes and Reservoirs"** (EPA-841-R-93-002) is a helpful manual that provides information to lake and fisheries managers. It contains information on the importance of developing an integrated lake management plan that addresses all components of a lake and its watershed. For copies of this manual contact: Susan Ratcliffe at (202)260-5404, (FAX)202-260-7024, U.S. EPA, Clean Lakes Program (WH-553), 401 M Street SW, Washington, DC 20460.





## SEPTIC SYSTEMS

*(continued from page 1)*

It does this by setting minimum septic system design standards and operations which must be followed throughout New York State. In Madison County, as with most areas of the State, each local government, that is, the town, village, or city, has adopted and enforces a sanitary ordinance that is at least as restrictive as the State Sanitary Code.

The local codes enforcement officer is usually responsible for enforcing the sanitary ordinance and he or she does this primarily through the issuance of building permits - when a new home is built, it must have a septic system that meets the minimum State Sanitary Code standards. The other means of enforcement is a "signed" complaint, usually made by a neighbor, against a particular septic system. The codes enforcement office investigates the septic system by looking for signs of failure that may pose a human health threat. This usually entails looking for sewage on the surface of the ground and conducting a dye test. A dye test usually confirms what the eyes and nose can already detect. If the system "fails," the owner is required to remedy the situation. It should be stressed that the codes enforcement officer is not out looking for failing septic systems - they respond to complaints.

The County Health Department, or the State Department of Health where a county department does not exist, retains approval of alternative systems (raised beds and sand filters) which are required on difficult sites, for example, very small lots located along lake shores. They are also responsible for "ensuring" that local governments are adequately enforcing the sanitary code. It should be noted that the county and/or State are not out looking for remiss codes enforcement officers, or failing septic systems; they will only intervene when there is a complaint.

For the most part, this is the "way of the septic system world" in Madison County. A lake association essentially had one option when it comes to government intervention under the current system: file a written complaint against a particular septic sys-

tem. If the lake association does not get any action after filing a written complaint, they can call their local representative, and/or the county or State health department.

So, what's a lake association to do? Plan A: many well-meaning members show up at lake-related meetings demanding that the county, or State, "do something." Madison County responds by explaining the existing regulatory framework as described above, and then recommend that they return to their local codes enforcement officer for further action. Unfortunately, snitching on their own neighbor is not what lake association members had in mind.

What's the next alternative? On to Plan B: start lake association septic system program. Most of the lake associations in Madison County have attempted "Plan B" to some degree. At the very least, they have a volunteer septic system dye inspection program. Lake associations provide the dye and an inspector - if the system "passes," the owner gets a "clean bill of health." This is a good start. If most of the systems pass the dye test, we know that there isn't a grave human health threat on the lake. Dye testing can also be used to educate the public on septic system issues. It should be noted that on many lakes in the County, there is strong social pressure to have a dye test performed so many homeowners oblige. It should also be noted, however, that almost all of the systems mysteriously pass.

After the County completed a written survey of lake-side septic systems, we were surprised to find that most of the respondents had septic systems that passed a dye test, which the owner proudly announced on the survey form. Most owners had some knowledge of their system, that is, they know what it consisted of and approximately where it was located. However, many reported that their system was 20 to 40 years old, was on a very small lot, was fairly close to the lake shore, and had never been pumped

or inspected. In addition to these characteristics, many owners reported systems that had questionable designs, for example, cesspools, or had trees or driveways located over the system. Surely these systems were having an impact on the lake, but they passed that dye test. Dye tests can form a false sense of security - even though a system may pass the dye test, it may be grossly inadequate at treating waste water. A real-life example of this predicament was a 25 - 30 year old lake-side system that had passed a dye test. The conscientious owner had the tank pumped as recommended, but when the tank subsequently filled with water within a few days, the owner became suspicious of the metal tank, and uncovered it to find it riddled with holes. The old tank was subsequently replaced.

Some lake associations take Plan B a step further by distributing septic system maintenance brochures, and have sponsored low-cost septic system pumping and low-flow toilet programs which can be very successful. In some cases the association convinces the local board to adopt a more stringent sanitary ordinance. These ordinances usually require a regular dye test via a permitting system for all septic systems within a certain distance from the lake. These ordinances are still designed to protect human health; they don't address the important septic system issue of phosphorus and nitrogen removal. And be aware that stricter ordinances are not always welcomed. One town adopted a more stringent sanitary code and the lake associations were decidedly opposed! This is because the only alternative to a failing system on a small lot was a holding tank which can be expensive to maintain, particularly for year-round dwellings. Lake associations that demand government action may find that "big brother" can be more of a bully than an ally.

On to Plan C. There are other, less common methods available that take a more comprehensive approach to septic systems. To address those old leaking tanks that pass dye tests, the town could adopt



a sanitary ordinance that requires a more extensive septic system inspection than a dye test. This would include, for example, an examination of the tank to ensure that it is intact and an examination of the leach field to ensure it is adequately treating effluent. The alternative, however, to a "failing" system under this approach may be very expensive for the owner. There are septic system management districts, similar to a sewer district, which raises tax revenues to fully manage and maintain septic systems. This approach could provide financial assistance to owners faced with replacing their old system with an expensive alternative. There are alternative community systems that treat septic tank effluent, but use a septic tank at each house for settling out solids. Community systems are less expensive than conventional sewer systems, but they also require a significant public investment. And, of course, they also promote development which can be unwanted.

Most of the alternatives listed above require government intervention. A lake association, however, could improve septic systems through a more vigorous, voluntary septic system program. The associa-

tion could provide extensive septic system inspections that would include its age, design, maintenance, etc., and technical, or even financial, assistance to those homeowners that needed system repair or replacement. In addition, lake associations could be constantly providing public education on proper septic system design and maintenance, and water use reduction. There is also the full-blown sewer which is usually too expensive for most communities. They can also promote development which can be unwanted. This type of program requires a great deal of effort on behalf of the lake association.

"Septic systems are a problem on our lake and we want them fixed." Easier said than done! There are options, however. "Plan B," voluntary dye testing and educational programs, is a good start for many lake associations. If you are a more experienced lake association, a comprehensive septic system inspection program may be a viable goal. Government intervention is also an option, but the current system is not very palatable, and more stringent regulations may not achieve the desired result. The bottom line? Roll up your sleeves and get to work! Where there is a will, there is a way. ☐

## PLYMOUTH RESERVOIR

(continued from page 2)

In conjunction with our mechanical harvesting we needed a long range plan to control weed growth. We decided to pursue the use of Triploid grass carp. The idea was to begin weed control with the harvesting and to stock 2 - 3 triploid carp per acre for long range control. We started the NYS DEC permit process in 1992 and recently obtained our permit. To raise additional funds, we started an "Adopt-a-Carp" program. This was a successful venture which enabled us to begin stocking this fall. We will be monitoring how effective the carp are on weed control and will continue monitoring our water quality through the CSLAP program.

We still need to encourage our residents that 100 percent support is needed to be effective, and fund raisers must continue to meet our obligations. Our work towards continued lake improvement and lake monitoring is necessary to insure our investment and assure future generations they will have a healthy lake to enjoy. ☐

### SPONSOR A NEW MEMBER TODAY

\*\*\*\*\*

The Federation of Lake Associations is looking forward to new members and lake associations who will benefit from our many services. A special initiative had been developed to attract new members at NO COST to the new member. Existing members are encouraged to sponsor new members for only \$10.00 for a one year membership. Our hope is that the new members will renew their membership after being appraised of FOLA's quality services and significant purpose "To enhance and protect New York's freshwater lakes." If you are a current member and would like to sponsor a new member, simply fill out the form below and mail with \$10.00 payment to the Federation of Lake Associations, 2175 Ten Eyck Avenue, Cazenovia, NY 13035. If you are not a member and would like to become one, simply mail the form in with a \$10.00 payment. The Federation looks forward to welcoming all new members.

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Our thanks to **AQUATIC CONTROL TECHNOLOGY, INC.** for helping to sponsor this issue of Waterworks. They are specialists in the design, permitting and implementation of aquatic vegetation management programs. *Aquatic Control* provides innovative and effective solutions to difficult water management problems. Several of their projects have received the North American Lake Management Society's (NALMS) prestigious Technical Merit Award or have been designated as US EPA Clean Lake Success Stories.

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Waterworks is published four times a year. Individuals who wish to submit articles, calendar items, art work, or photography to Waterworks are welcome to contact the editor, Anne Saltman at 2175 Ten Eyck Avenue, Cazenovia, NY 13035 (315) 655-4760. Points of view expressed in this newsletter do not necessarily reflect the views of the Federation of Lake Associations, nor does any mention of trade names and commercial products constitute endorsements of their use.

*About the Federation of Lake Associations, Inc.*

The Federation of Lake Associations is a coalition of organizations dedicated to the preservation and restoration of all lakes, ponds and rivers throughout New York State. We welcome and encourage the memberships of lake associations, property owner groups, fish and game clubs, corporations and individuals. The Federation is incorporated under two mirror organizations with the same officers and board of directors.

*The Federation of Lake Associations, Inc. purposes are:*

- \* to provide a clearinghouse of environmental information and expertise in all matters pertaining to lake management;
- \* to promote by education the wise use and appreciation of the lakes in New York State;
- \* to provide a pool of technical knowledge and expertise to advise and assist member associations and individuals;
- \* to establish liaison with other environmental groups and agencies;
- \* to provide a coordinating structure for lake-related research projects.

*The Federation of Lakes, Inc. purposes are:*

- \* to monitor and report to members on legislation and administrative actions affecting the waters of New York State;
- \* to support and lobby for legislation and administrative actions which promote the sound management of the waters of New York State.

For a full membership package, including a listing of products and services, please contact the Federation at 2175 Ten Eyck Avenue, Cazenovia, New York 13035, or telephone (315) 655-4760.

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