

Schroon Lake: A Eurasian Watermilfoil Control Success Story

by

Steven A. LaMere, CLM, Adirondack Ecologists

Schroon Lake is a 4,126 acre, early mesotrophic lake situated in the eastern region of the Adirondack Park. The lake, which has two basins, is bounded by two counties (Essex and Warren) and three townships (Chester, Horicon, and Schroon), and it is part of the Hudson River drainage. It has a mean depth of 56 feet and a maximum depth of 152 feet. A majority of the shoreline, with the exception of a few areas in the east and northeast region of the lake, is developed.

I first became professionally involved with Schroon Lake and its management in 1994 when the Schroon Town Supervisor called and asked me if I would be interested in designing and implementing a water quality study program on the lake. Accepting his invitation, I prepared and presented the newly-formed Schroon Lake Study Committee, made up of town officials, shoreowners, and sportsmen, with a 3-year research proposal. The research regimen called for both tributary and lakewater testing during the spring (after ice-out), mid-summer, and fall (after fall turnover) of each year. Water quality parameters analyzed consisted of ortho and total phosphorus, total nitrogen, nitrate, chloride, sulfate, pH, alkalinity, conductivity, total dissolved solids, and turbidity. Lake water Chlorophyll and calcium levels were also measured.

Due to funding constraints, no aquatic vegetation research was initially planned on the lake. However, when the SLA (Schroon Lake Association) offered to underwrite the expense of additional lake research, I recommended that a lake-wide aquatic macrophyte (vascular plant) survey be performed on the lake. Schroon Lake is a beautiful waterbody offering a variety of recreational opportunities; the fishing is excellent and the superb lakewater quality entices thousands of residents and tourists each year to the lake for boating, water skiing, swimming, and camping. It is these very qualities that pose an increased risk of an exotic species introduction to the lake. It was my fear that non-indigenous species like zebra mussels (*Dreissena polymorpha*) or Eurasian watermilfoil (*Myriophyllum spicatum*) might become introduced into the lake.

This apprehension was compounded by the fact that several lakes in the immediate area of Schroon Lake already possess thriving populations of *M. spicatum*, and that several public access points to the lake (e.g., a state campsite and boat launch, a private marina, a town-owned boat launch in Schroon, etc.) exist. With increased use comes increased risk and an increased responsibility on the part of local officials, shoreowners, and users of the lake to prevent degradation to the lake.

Consequently, an aquatic macrophyte survey was designed and performed during the late summer and early fall of 1995. Nine sites, which represented potentially the most likely areas of introduction into the lake, were chosen as research plots. The aquatic macrophyte and macroalgal (e.g., *Nitella* and *Chara*) communities at each site were inventoried by a diver and voucher specimens were collected. Data relative to the species present and their relative abundances were obtained. In addition, a sample of each aquatic plant observed was preserved in an alcohol solution in a mason jar and the complete collection was presented to the SLA at its annual meeting as an educational tool to its membership.

(continued on page 4)

NYSFOLA'S mission is to protect the water resources of New York State by assisting local organizations and individuals through public dialogue, education, information exchange and collaborative efforts.

from the **President**

Dear members,

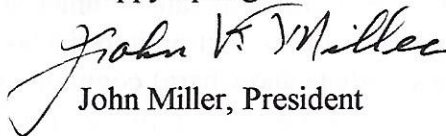
As our seasonal work plans take shape, I am pleased to announce that the NYSDEC has awarded grants that will allow us to continue the Watershed Planning and the Volunteer Pollution Control programs. Needless to say NYSFOLA is grateful for this funding, as it will allow our member organizations to protect the environmental integrity of their lakes.

Last year was the "kick-off" year for the Citizens' Volunteer Pollution Control Program, as you know, VPCP is designed to locate and rehabilitate sources of non-point pollution from faulty septic systems. Two important factors that contribute to the program's success are the non-threatening approach to property owners and the ability of an association to organize volunteers to conduct the lake survey.

Five pilot lakes were selected last year to participate in the Volunteer Pollution Control Program. They include Friends Lake, Duane Lake, Lake Moraine, Lincolndale Lake and Thunder Lake. Friends Lake successfully completed their survey, while the rest of the lake associations are in various stages of progress.

If your association is interested in either the Watershed Planning Program or the Volunteer Pollution Control Program, it would be prudent to contact our NYSFOLA office. (1-800-796-FOLA) Formal sessions will also be conducted at our Spring Conference which will be held at the White Eagle Conference Center on April 30 to May 2nd. Our conference committee has been working hard to ensure an interesting, productive experience for our delegates. I hope to see you there.

Happy Spring!!



John Miller, President

Points of view expressed and products advertised herein do not necessarily reflect the views and policies of NYSFOLA or its members. Mention of trade names and commercial products shall not constitute an endorsement of their use.

NYSFOLA Officers-Board of Directors

John Miller- President
315-895-7502

Lewis Stone- President-elect
518-656-9078

Willard Harman- Vice President
607-547-8778

Jack Baldwin- Secretary
716-346-5882

Donald Keppel- Treasurer
716-769-7231

Regional Directors-

Don Cook - Dec.-March 716-293-2482
April- November 716-237-2172

Don Keppel- 716-769-7231

George Kelley- 315-852-6431

John Miller- 315-895-7502

Kathleen McLaughlin-

Chris Rant- 518-674-8653

Bob Roessle- summer- 516-283-4327

winter- 813-923-4258

Jack Douglas 315-656-3806

Other Directors-

Lettie Chilson 716-293-2482

Craig Doran- 716-396-0400

Doug Gniewek 518-371-1676

Jay Ledden- 315-638-8283

Steve LaMere 518-597-3130

Polly Renckens- 607-547-8880

Rebecca Schnieder- 607-255-2110

David Wright- 914-962-1039

Scientific Advisory Board-Chairman

Dean Long- 518-885-0913

WATERWORKS-

Please send articles, comments or editorials to-

Don Keppel- Editor

2701 Shadyside Rd.,

Findley Lake, NY 14736

Fax/phone- 800-796-FOLA

E-mail- fola@cecomet.net

Homepage-http://www.nysfola.org

Cracking Down on Invasive Species

President Clinton on February 3 signed an executive order to coordinate a federal strategy that will address the growing environmental and economic threat animal and plant species that are not native to ecosystems of the United States.

"Many Americans are too familiar with gypsy moths and other non-native insects that devour gardens and trees," Clinton said in a statement. "Few realize, however, that countless other non-native plants and animals are upsetting nature's balance, squeezing out native species, causing severe economic damage, and transforming our landscape."

Interior Secretary Bruce Babbitt, Agriculture Secretary Dan Glickman, and Commerce Under Secretary James Baker told a news conference that the order creates an Invasive Species Council. The council will develop a comprehensive plan to minimize the economic, ecological, and human health impacts of invasive species **and determine further steps to prevent the introduction and spread of additional invasive species.**

The council, to be chaired by Glickman, Babbitt, and Commerce Secretary William Daley, will work in cooperation with a variety of groups-including states, tribes, scientists, universities, shipping interests, environmental groups and farm organizations-to combat invasive plants and animals.

"This is a unified, all-out battle against unwanted plant and animal visitors that threaten to wreak major economic and environmental havoc," said Glickman. "Asian long-horned beetles destroy trees. Leafy spurge reduces the productivity of grazing land by 50 to 75 percent. Zebra mussels clog water intake pipes, shutting down electrical utilities. These are serious threats."

The recent announcement signals an expanded effort to combat invasive species. The president's order directs federal agencies to use their authority to prevent the introduction of invasive species and to restore native species. It also directs the new interagency council to come up with an invasive species management plan within 18 months.

Aggressive federal actions are already under way, including measures to prevent the entry of invasive species, eradicate them before establishment, control them once established, and conduct outreach and education for the general public.

Many entomologists and ecologists believe the spread of exotic species is one of the most serious, yet least appreciated, threats to biodiversity. Invasive species have been linked to the decline of almost half of the 958 US species that are considered endangered or threatened.

The total economic impact of invasive species on the US economy is estimated to be about \$123 billion a year. For every acre of US forest lost to fire in 1995, two acres were lost to invasive weeds, according to US Department of Agriculture officials.

The announcement of the executive order came one day after officials in Chicago started chopping down hundreds of trees to stop the spread of the Asian long-horned beetle, which has infested trees in at least eight states. After the beetle was discovered in Brooklyn, New York, more than 2,000 trees had to be destroyed, costing the federal and state government more than \$5 million.

The US Department of Agriculture has prohibited the importation of untreated wood packing material from China, which has previously carried the Asian long-horned beetle into the United States. The department has proposed extending the ban to other countries.

The rule took effect in December, and a few crates have been sent back to China though most have been properly treated, Agriculture Department officials say.

Chinese officials toured the infested areas in Chicago last year and questioned whether the source of the beetle was China, arguing that it might have hitchhiked from Korea or Japan. But since then, China has struggled to comply with the new rules.

Editors note; This article was printed in the March 1999 issue of "The Forestry Source"

Travel the Internet with us!!!

For all the computer buffs it is now possible to contact the NYSFOLA Office by E-Mail.

We can be reached at :- fol@cecomet.net
 or check the homepage at:- <http://www.nysfola.org>
 NALMS can be reached at:- <http://www.nalms.org>

Schroon Lake; a Milfoil Success Story

(from page one)

On September 25, 1995, I discovered a small bed of Eurasian watermilfoil in the navigation canal of the private marina. This bed, which measured less than about an acre in size, had clearly been present in the lake for at least three growing seasons. What is not clear is whether this exotic species had been introduced into the lake at the marina's private launch site or whether a boat coming in to the marina to get gas had been responsible for its transportation. Regardless of the mode of transportation, it was apparent that it would be difficult to get this infestation under control as it was already well-established and located in a high "boat traffic" area. The one factor that we had on our side was that I had discovered the infestation prior to it becoming too extensive in size to manage with a reasonable amount of effort and expense.

During the following winter, I took the opportunity to educate the lake study committee members about the various nuisance vegetation control techniques available. Throughout this process I continually emphasized the importance of "tailor-making" a control program specific to the problem on Schroon Lake. My primary objective was to manage the infestation in a realistic, cost-effective, and environmentally-sound manner. After careful consideration, I recommended that a combination of two physical control techniques, hand harvesting and the application of benthic barriers, be employed to manage the milfoil problem.

Benthic barriers or "mats" are placed on the lake bottom to cover nuisance aquatic vegetation. These barriers can be made from several different types of material (e.g., plastic, fiberglass, fabric, nylon, etc.) and they work by compressing macrophytes and blocking out sunlight penetration to them, thus affecting the ability of the plants to photosynthesize. Barriers can often exert effective control within a month of application, and as a consequence they can be moved to two or even three different locations within the lake during the same growing season. Due to the non-selective control nature of benthic barriers, however, they are normally only used in areas where milfoil is clearly the dominant species of vegetation present.

The most significant drawback to using benthic barriers is the expense of the material itself; it is not unusual for material to cost in excess of \$9000.00 per acre. Thus, barrier applications are normally restricted to areas smaller than one or two acres in size. Through my industry contacts I was able to locate a product **\$9,000 an acre!!** used by a local paper company that could suitably be utilized as a benthic barrier. This tough, plastic material comes in rolls about 75' long and 18' wide and it is used on the paper machine's dryer conveyors. Microscopic perforations throughout the material allow water to pass through, but prohibits plants from growing through it. In addition, these perforations allow hydrogen sulfide gas produced in the bottom sediment to escape through the material. This is important because some benthic barriers do not let bottom gases escape and eventually, as gas builds up, the barrier will become raised off the lake floor.

Through negotiations I was able to get the 9,000 square feet of material that we needed for the project donated by the paper company. Everyone benefited from the transaction; we did not have to pay for benthic barrier material, and since we were able to secure Best Use Determination (BUD) status for the material, the paper company was able to take a tax write-off on the donation. The material was thoroughly washed to remove any residual chemicals from it and it was stored outside for several months before being used.

Hand harvesting is a highly selective method of controlling milfoil, and it is the preferred technique for controlling relatively small infestations comprised of scattered milfoil plants. Hand harvesting is normally performed by SCUBA divers possessing expertise in aquatic botany. The diver(s) will "pull up" milfoil plants by their roots from the lake bottom, and the harvested plants are carefully bagged and removed from the lake. The level of skill of the diver becomes very important when, as was the case on Schroon Lake, an aquatic plant species that is on the New York State Threatened Plant List is interspersed throughout the area where the milfoil is to be controlled.

continued on page 5

(from page four)

Once the Aquatic Plant Management Plan was designed, I contacted the various state agencies to determine which entity would assume jurisdictional authority over the proposed project. The Adirondack Park Agency (APA), a state regulatory agency which oversees development and related projects in the six million acre Adirondack Park, assumed the role of lead jurisdictional authority. The necessary paperwork was prepared and submitted by my office and permit was issued by the APA to initiate the project.

The project got off the ground during June of 1996. I installed the donated benthic barrier material in 10' long by 10' wide sections or "panels" over the thickest areas of infestation. Rebar frames were built to help make the panels more manageable and also to keep the material weighted down on the lake bottom. Scattered milfoil plants situated outside of the areas of dense infestation were selectively removed via hand harvesting. By late September of 1996, the majority of the adult milfoil plants in the marina navigation canal had been removed. The entire budget for the first year's control effort was less than \$2,000.00.

Maintenance control efforts in 1997 and 1998 have been successful in managing new growth sprouting up from underground stolons or 'sprigs' too small to see during the previous control season. The annual milfoil control budget runs anywhere from \$1,350.00 to \$2,000.00, not including survey expenses.

To ensure that new milfoil infestations do not become established in other areas of the lake, I perform routine annual reconnaissance inspections in the 'high risk' areas of the lake (i.e., areas adjacent to the marina, the boat launch sites, etc.) Employing this technique, I have been able to locate and hand harvest milfoil plants that have been transported out of the marina and have become established in adjacent areas, thus minimizing the potential for spread of this invasive species.

In addition, I have established a volunteer "lake watch" task force, made up of SLA members, to perform "spot checks" around the lake for milfoil. These individuals have been trained by myself to recognize Eurasian watermilfoil, and each layperson volunteer is responsible for inspecting a certain section of their lake for milfoil on a regular (bi-weekly) basis.

I am happy to say that it appears that we are staying on top of the milfoil situation in Schroon Lake. The key to our success has definitely been early detection of the problem. The ongoing success of our control efforts have been the result of hard work, ingenuity, and good science. Other contributing factors have been a willingness of the marina owner to underwrite the expense of the control efforts, a spirit of cooperation exhibited by town officials and shoreowners, routine reconnaissance inspections funded by the SLA, and the cooperation of the Adirondack Park Agency. Preventive maintenance has quite possibly saved Schroon Lake from the fate that so many of New York's lakes have already succumbed to.

There are two important lessons to be learned here: (1) do not wait until you discover Eurasian watermilfoil in your lake before you become active in its prevention, and (2) take decisive and appropriate action when and if it is discovered.

Editor note: Steve LaMere is the owner of Adirondack Ecologists, a lake management consulting firm located in Crown Point, New York. He is a Certified Fisheries Scientist and currently is the only NALMS-Certified Lake Manager in New York State. He can be reached at (518-597-3130 or P. O. Box 515, Crown Point, NY 12928)

**It is not too late to register for the Conference!!
call the office for information**

"WATERWORKS" would appreciate information on your Lake Association. I would like to have a page set aside each issue for a different Association. Let's make your's next! Forward your write-up to the office by mail, fax, E-mail or pony express, but start now. Pictures can be included.

Thank you, Editor



Ask Dr. Lake

Dear Dr. Lake-

That old fool next door told me last fall that the lake was "working", as if it was doin something 'cept just sittin' there. But when I looked out at the water, it was green and smelled awful and looked worse! If you ask me, the lake wasn't working but was all fouled up. Did the old fool have it all messed up again, or am I missing something...? This is the same guy that told me that them there "sea monkeys" that I bought from the back of a magazine already live in our lake!

Buddy System, Lake Adaysicle, NY

Dear Buddy,

Believe it or not, the old fool was right... well, sort of. Every year, most NYS lakes greater than 15 feet or so form distinct temperature layers starting in the spring and early summer, with the top layer warmer than the bottom layer. In some lakes, if you dive down below about 15 feet, you can usually feel the water get pretty cold just as your ears are starting to pop. In many other lakes, like the chilly lakes in the Adirondacks, you'd have to dive down a lot further and hurt your ears a lot more to get to this cold water.

Anyway, as the weather gets warmer, the top layer gets warmer, while the bottom layer stays pretty cold. This upper layer, called the **epilimnion** (literally *over* (French) the *open water* (Greek)) is separated from the lower layer, the **hypolimnion** (literally unbelievable neon arms and legs), by a very thin layer called the **met-alimnion**, where the temperature changes rapidly over a very short vertical distance (the most rapid change occurs at the **thermocline**). While the temperature differences between these layers are very distinct, these layers are established because of their density differences. You may know that water is densest (heaviest) at 39°F- the designation of this temperature demonstrates both a divine sense of humor (why 39?) and the unique qualities of water. If colder water were denser, then lakes would freeze from the bottom up, causing major problems for ice skaters and ice augur salesmen (and incidentally obliterating all aquatic life in shallow waterbodies each winter). The increasing density differences between layers decreases the ability of the wind to keep the lake well mixed until eventually stable layers are in place. These layers remain until fall air temperatures decrease, causing the temperature (= density) differences to be sufficiently reduced to allow complete lake mixing. A similar but less dramatic situation occurs under the ice, when slightly colder but less dense subsurface water overlies a dense 39° bottom layer.

So is this working? Well, "working" is usually another way to describe the process by which these thermal layers break down and the lake mixes again, usually referred to as "**turnover**". It can occur rapidly, much like the way we all finish projects on Friday afternoons, completing the process within a few days, or can occur in stages over a long period, delayed by calm, warm days or accelerated by cold, windy ones.

continued next page

..so what does this have to do with a green lake...?

So why the greenness? When the lake remixes, all the stagnant water from the lake bottom emerges at the lake surface, often gasping for oxygen that was depleted over the course of the summer. Under these conditions (referred to as **anoxia**, a process in which lost oxygen can damage a lake much like an ox (ia) can remodel the china shop), chemical reactions between bottom waters and bottom sediments can cause the formation of hydrogen sulfide (with the fragrance of rotten eggs) and release of phosphorus from the sediments to the overlying water, added to the accumulation of materials raining down from the lake surface over the dog days of summer. When turnover occurs, this smelly, nutrient-logged water will mix with the surface waters and often promote the growth of algae at the lake surface. This is why lakes often turn green in the fall. The turnover process is natural and represents a lake in good "working" order, so in that regards your favorite neighbor is correct. However, the acceleration of nutrient buildup and subsequent dumping to the lake surface in the fall is often the sign of a more systematic "foul-up", in your words, so in that sense your senses were keen.

...well, at least he was wrong about those sea monkeys...?

And about those sea monkeys.... When I was a limnokid, some magazines used to run advertisements for "sea monkeys" (sometimes called "water fleas") that can be added to your pond to clean up the water. A small vial was claimed to keep an entire pond crystal clear.

While one suspects that the validity of such a claim is akin to the validity of the glasses sold on the next page that provide x-ray vision or the ability to "see through clothes", there is actually some truth to this advertisement. The tiny creatures purported to clean water are actually zooplankton, usually *Daphnia*, microscopic animals (appx. 1mm long) that feed on algae. Since algae is the primary inhibitor to increased water transparency, the removal of algae by zooplankton will often cause an increase in lake water clarity.

The problem with these advertisements is the claim that a small vial of these algae chompers will lead to water so clear you can read a newspaper sitting on the bottom of the lake. This might be true, temporarily, if your lake is the size of a (small) glass of water. However, a typical 100 acre, 20 foot deep lake contains *Daphnia* in the millions to billions range, with a biomass of hundreds to thousands of pounds. A small vial of the critters will make little difference in a typical lake.

But even if you could add sufficient numbers to augment the existing population, one should also wonder why large numbers don't naturally exist in the lake? Rather than decreasing the algal biomass, the end result may be the increase of predators on the stocked zooplankton, whether they be other zooplankton or larger animals, such as certain kinds of fish. **Bio-manipulation**, the process of manipulating an already complex biological system by shifting the fragile predator-prey relationships in the food web, can create significant and unexpected side effects. So while your lake inevitably already has some of these zooplankton, a substantial manipulation of the fish-zooplankton-algae balancing act might help to bring down the whole big top. And that seems like a big price to pay for making a lake seem a little more like a swimming pool.

Information, Networking, Newsletter Contest, Silent Auction, Lake Steward Award, Food and Entertainment: Join your fellow Lake Association members at our Annual Conference April 30 - May 2, 1999 and be informed!

The Barlows Get a Cornucopia of Protection for so Little

by Robert Roessle, NYSFOLA Director

Fred and Joan Barlow were ecstatic with the recently purchased cottage located on a beautiful clear lake as were their children ages 6, 9 and 10. Joan planned on spending the entire summer vacation there with the children and Fred would commute weekends from the city where he was employed by a large bank. The lake would be just great for swimming, fishing and small boating, truly a fantastic vacation home for fun and relaxation. They would be leaving the hot and humid city where their children often complained, there is nothing for them to do.

On their first weekend there they met their next door neighbors, John and Doris who had their place for the past 14 years. They seemed so very nice as did their children who were a few years older than the Barlows.

Later that day Mary Ann Savino from the other side of the lake stopped by and asked for the Barlow's support by joining the Lake Association. She said the annual dues was \$50.00 and that they held two meetings a year, one on the 4th of July weekend, the other Labor Day weekend. This is a time when most of the residents would be there.

Fred didn't commit to join the Association, but he was thinking and reflecting on how he had gone a little overboard in extending his finances to buy the summer vacation home, plus the extra property tax burden and now what he hadn't planned on was the replacement of the rotted deck. Fred Barlow advised Mary Ann that he would think it over. As he walked away, he muttered, "two social meetings for \$50,- who needs it."

Sometime later when he told his next door neighbor his decision to flag, at least for now, joining the Lake Association, John quickly advised him that the sole purpose of the association is to maintain the quality of the lakes water, keeping it free from pollution for safe swimming and to control the proliferation of unwanted vegetation. John then asked Fred if his home and car are insured, and then proceeded to answer his own question, and said you insure your home and car to protect your investment against fire, theft and liability. He then stressed that the lake association is totally made up of property owners, and this group is the only insurance that we have against the intrusion of pollutants from entering the lake. He went on by emphasizing, that once we lose our battle to save our lake from pollution, you can be certain all property values will drop dramatically. It would no longer be a place you and your family would enjoy.

Furthermore, who would buy a cottage on a polluted lake? Fred got to thinking again. He was thinking that \$50 really wasn't **that much** to pay for the kind of lake insurance that protected his investment. So he got back to Mary Ann and wrote a \$50 check. Mary Ann then provided some history of their association. She stated that 7 or 8 years before they had the lake tested for total and fecal coliform. These tests proved to be dangerously high and a serious health problem. Further tests disclosed that 3 of the older cottages had cesspools that were defective and leached into the lake, the cause of the high coliform count. When new septic systems were installed the coliform count dropped to safe standards and swimming was again permitted by the Board of Health.

continued on page 10

***Many people don't know what's cooking,
until it boils over!!!***

CSLAPpenings

We have had a busy winter at the Lakes section in Albany, and the melting snow and approach of spring increases the activity level here. Labeling bottles, copying paperwork and dusting off the Seechis is part of routine spring cleaning to prepare the more than 100 lake association volunteers for CSLAP summer 1999. Pending, of course, budget snafus, resolution of laboratory questions, and so on, we are aiming for a start of early June for you to sample, and again hope to include a bottom water sampling profile for those appropriate lakes. Volunteers --although CSLAP is bigger than ever, this year we are attempting to ease and improve the process for you on your regular sampling efforts. Please be sure to read the 'instructions enclosed with your bottle package, and forward your requests, comments or suggestions. Last year CSLAP volunteers collected over 700 samples at New York lakes --you all are great !!

This season we will be adding more new takes to the program -welcoming lake association volunteers from different areas of the state. Those new lake association members who receive an invitation to join CSLAP in 1999, by submission of application to NYSFOLA and invitation from DEC, will be asked to attend CSLAP training at the FOLA conference on May 1. However, if you are an experienced CSLAP volunteer and would like a "refresher" on your sampling skills, you may sip up for the training session (if space allows)! You will not be graded!

Results from last year's sampling are beginning to be compiled and analyzed into report form. The report in final form will likely not be ready before your 1999 sampling starts. As in previous years, all CSLAP participants who need a preliminary summary of their results for newsletters should contact us as soon as possible, allowing a reasonable grace period before deadlines.

We hope you are enjoying the quiet of late spring, before the ice melts on your lake. Please don't hesitate to contact us at 518-457-0734 (Scott Kishbaugh), 518-457-3345 (Betsy Hohenstein), or 800-796-3652 (Don Keppel) with your questions, comments, and profundities.

CSLAP Training at the Conference

CSLAP training will be furnished at the conference for all volunteers whose lake has been accepted into this years program. You will be notified in the near future as to lake status. Others can attend the training but possibly will be restricted due to personnel availability and watercraft. Attending the training does not automatically place your lake into CSLAP.

The Barlows get a Cornicopia of Protection (from page 8)

Mary Ann went on to say that there was a period when lake vegetation increased so much that it made swimming all but impossible, unless of course you took your boat out to the center of the lake. After the Association undertook an educational program whereby fertilizer restrictions were recommended and where biodegradable fertilizers were also recommended over those containing nitrates, phosphates, etc. that were inadvertently running off shorelines and into the lake. This runoff was a major contributing factor to the proliferation of aquatic plant growth.

Fred then asked how seasonal residents with little to no knowledge or experience on lake survival matters could do their part to accomplish this miraculous turn-around of a failing lake into a clean, clear, pollution free one.

Mary Ann responded with a broad smile and said that it takes every property owner to become aware of a proper "diet for a small lake" and that the New York State Federation of Lake Associations in conjunction with the NYSDEC has published a book with the same name. The NYSFOLA book provides guidance, expertise, and offers assistance to any lake association. Prevention against lake pollution may best be a reality by adhering to NYSFOLA recommendations, and thus the best and cheapest insurance policy a lake association can get.

Some short time later, Fred was sitting around the outdoor picnic table with his wife and three children extolling the benefits of joining the Lake Association, and for as little as \$50.00.

Conference information

A registration application is included with this issue of WATERWORKS, also a copy of the preliminary agenda. This agenda may be altered as we approach the final month before the conference but it does give the basic guidelines of the presentations. Unless due to other unforeseen commitments the presenters are as planned. Again this year we will be at the White Eagle Conference Center and use the cottages for lodging. Last year, we had to use other lodging and this year to attempt to avoid that condition please send your application back as soon as possible. The conference center has reserved all the rooms for our use until April 10, 1999. After that date they will attempt to fill vacancies on a first come first served basis and the possibility exists that late registrants will not be lodged at the Center. We must appreciate the fact that all lodging units can only make expenses if the rooms are nearly all full. Please register early to avoid these conditions. After April 10 if we receive your application and no rooms are available at White Eagle your registration fee will be adjusted to only charge for the conference and meals as needed. Attempt will be made to have information available as to other local lodging. You will be notified by phone if your registration does apply to these circumstances. Make sure your phone number is on the registration sheet.

Remember to nominate a member of your lake association as this years **Lake Steward**, this is an award to the person most fitting to this position from all of the nominees.

Did you send in a newsletter from your organization to be judged at the conference for the **NEWSLETTER of the YEAR**. If not, please do so immediately.

Don't forget about the **SILENT AUCTION!**

Available at the office of NYSFOLA!!!

"DIET for a Small Lake"; Joint Publication of NYSFOLA and NYSDEC relative to watershed and lake.

Detailed instructions for preparing a Lake Management Plan; complete descriptions of Lake Restoration and Watershed Management Techniques; Comprehensive discussion of Lake Ecology.

Cost:- \$10.00, plus \$2.00 s&h

"Managing Lakes Through Community Participation"; 25 minute video, Why Associations are formed, how they get started, tackling priority issues, case study, ties with local government and lake community.

Cost:- \$15.00, plus \$2.00 s&h

"Water Quality Monitoring in Lakes and Tributaries"; video; demonstrates the techniques used for water quality monitoring, based on procedures used for CSLAP. Useful for starting a monitoring program.

Cost:- \$15.00, plus \$2.00 s&h

"NYSFOLA 1995 Conference Proceedings"; attend the 95 Conference at Cooperstown from your armchair.

Cost:- \$3.00 includes s&h

*Are your dues paid? Services can only be continued with your help.
Please stay current!*

1999 Membership Dues-

(computed on calendar year)

Lake, Watershed and other Associations;

Small Association, 10-74 members	\$35.00
Medium Association, 75-149 members	\$75.00
Large Association, 150 or more members	\$150.00
Park Districts (Town, County etc.)	\$200.00
Individual Membership	\$20.00
Member of Lake Assn. in good standing	\$10.00
Corporate Membership	\$200.00
Student	\$10.00

Member Information:-

Lake Association _____
 Contact Name _____
 Address _____
 City, State, Zip _____
 Telephone _____

Fee\$ _____
 Donation\$ _____
 Enclosed\$ _____

Lake location (county) _____

Send payment to NYSFOLA office ;
 Phone/fax- 1-800-796-fofa
 E-mail— fola@cecomet.net

NYSFOLA
 2701 Shadyside Rd. PO Box 342
 Findley Lake, NY 14736

Calendar of Events

April 10, 1999: Malformed Frogs in the Lake Champlain Basin, Suny Plattsburgh. Contact the Lake Champlain Committee at 802-658-1414

April 20 - 24, 1999: National Conference on Enhancing the States' Lake Management Programs. NALMS Spring Conference at Chicago, for information contact Bob Kirschner at 312-454-0400

April 24, 1999: 3rd Annual Ohio Limnology Conference and 13th Annual Ohio Lake Management Society Symposium, Oxford, OH. For information contact Bob Mason-513-728-3551 ext.226

April 30 - May 2, 1999: NYSFOLA Annual Conference at White Eagle Conference Center, Hamilton, NY. For information contact NYSFOLA at 1-800-796-3652.

August 3, 1999: Adirondack Waterfest, Fort Hardy Park, Schuylerville, NY. For info contact Marc Usher of the Greater Adirondack RC&D Council at 518-623-3090

Silent Auction!

Again this year we need your assistance. Our Silent Auction will be held at the Annual Conference and the more items on the auction block the more fun for everyone.

Please contact local businesses and request an item to be donated to NYSFOLA to place in the Auction. The name of the donator will be displayed along with the item. Crafters and artists are welcome to donate.

If you wish to make a personal donation, purchase items and send or bring to the Conference. If sending items please make sure they arrive in Findley Lake by April 27, 1999.

Let's make this years auction the best one of all times. Bring your checkbook and participate!

WATERWORKS

NYS Federation of Lake Associations, Inc.
2701 Shadyside Rd. P.O. Box 342
Findley Lake, NY 14736
Tel/Fax 1-800-796-FOLA
E-mail- fola@cecomet.net

Bulk Rate
U.S. Postage
PAID
Findley Lake NY 14736
Permit No. 1