



Newsletter 2005

Publisher: TLC

Volume No. 9

Issue No. 1

Date: Summer 2005

Three Lakes Council: Call To Arms

Welcome to the 2005 edition of the Three Lakes Council Newsletter. Thanks to the talents, knowledge, and hard work of many volunteers, we have much to report. During the past year, we've taken a long, hard look at our organization – its mission, leadership and strategy – and we've made some changes to fortify and better position the Council for the future, but our most important challenge still looms, and that is attracting more of your support to achieve our objectives.

The purpose of the Three Lakes Council is five-fold:

- To improve and safeguard water quality and the condition of Lakes Oscaleta, Rippowam and Waccabuc.
- To inform and educate the community in the Three Lakes watershed about safeguarding and improving the quality of the waters and watershed.
- To encourage and support the management, preservation and acquisition of valuable wetlands, shoreline and other undeveloped portions of the Three Lakes.
- To address issues that may be impacting the enjoyment of the lakes by residents of the community.
- To study and report on potential issues relevant to these purposes and to coordinate community action when necessary.

This newsletter serves the second purpose – to inform and educate the community – but it can only accomplish this aim if you read it, learn from it, and share that knowledge with family members and neighbors. The success of our efforts depends on your interest and active

participation. You determine the fate of our lakes.

Over the past winter, a small team of Council volunteers took on the task of reviewing and updating our by-laws and organization structure, and one central truth became glaringly apparent. For more than 30 years, our three lakes have relied on a steady stream of volunteers and the heroic efforts of one man – Dr. Peter Treyz – to champion their health and water quality. As impressive as Peter is (see our tribute to Dr. Treyz inside), he was the first to recognize the insufficiency of such an approach as development along our lake shores accelerated, as summer residents became year-round residents, as septic systems approached the end of their useful lives, and as storm drains proliferated. Under his leadership, the Three Lakes Council hired Cedar Eden Environmental in 2002 to confirm with scientific data what we have long suspected, that the Three Lakes are steadily eutrophying

as a result of increased phosphorus loads. To help stem this damaging tide, we need to reduce the amount of phosphorus entering Lake Oscaleta by 25%, Lake Rippowam by 26%, and Lake Waccabuc by a dramatic 50%. It won't be easy, but it is doable.

Led by a new slate of officers and bolstered by an expanded set of targeted committees, the Three Lakes Council is directing even greater focus and more resources to address our priorities. Most important, our Board of Directors has been refreshed to ensure that all eight lake associations are represented and involved as we make decisions about how best to preserve our lakes. Your Board and Committee Chairpersons are listed in this newsletter. Please call on them whenever the need arises. I also encourage you to bookmark and monitor our website (www.threelakescouncil.org), where we post our meeting times, meeting



Bryan and Ben Colley with State record-setting hybrid bass



Peter at Grandma's



Peter and friend Kevin Daley on Lake Oscaleta



Peter as young dad



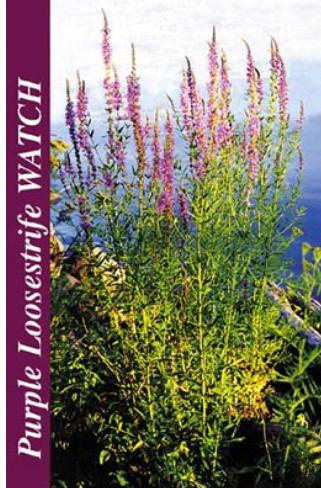
Treyz first Twin Lakes home



Treyz home burns in 1981



Peter, the educator and advocate



TLC vs. Aquatic Invasives



Part of the Treyz clan on Rippowam

Thirty-plus years and 23 grand-children later,
Dr. Peter Treyz can look back with pride on all he
has accomplished on behalf of our environment

minutes, newsletters, and Cedar Eden reports, as well as other useful and timely information.

I opened by acknowledging our volunteers. We are indeed fortunate to have so many knowledgeable, skilled, and dedicated people in our community who give of their time and resources for the benefit of us all. But we need more help. It's that simple. Our effectiveness is limited by the funds and hands-on support at our disposal. We have vigorously pursued grant opportunities and will continue to do so, but nothing substitutes for the commitment and energy of those with the most at stake – you. Financial support enables us, but your personal support is the engine that really drives the Council. Please provide both if you can! As you read about our varied activities, think about where you can help and let the relevant committee chair know of your interest.

In closing, let me personally thank and recognize Dr. Peter Treyz, the guiding spirit of the Three Lakes Council since its inception. He has, time and time again, not only sought out but implemented solutions to our environmental challenges. He has expanded the role and influence of this important organization and has worked tirelessly on our behalf, while raising seven children and mentoring 23 grandchildren. He continues to serve the Council as Chairman of the Government Affairs Committee. Thank you, Peter, for being such a great advocate and a fine citizen!

*Jack Sinnott
President, Three Lakes Council*

We have vigorously pursued grant opportunities and will continue to do so, but nothing substitutes for the commitment and energy of those with the most at stake - you.

Dr. Peter S. Treyz: A Tribute

It is said that Dr. Peter Treyz, patron saint of the Three Lakes, emerged fully formed from the waters of Lake Oscaleta, so enduring is his association with our community. From his birth in 1932 until college, Peter wintered in Pearl River, New York and summered at the lake. "My maternal grandparents leased land from Mary Knapp on the south side of Oscaleta and put up a pre-fab cottage they bought from the Sears & Roebuck catalogue for \$1,500," recalls Dr. Treyz. "Of course, I never met my grandfather, who had been principal of Katonah High School, as he had died in the influenza epidemic of 1918."

Peter remembers playing cowboys and indians with friends in the vast, untouched hemlock stand that is now Twin Lakes Village. "When I was a kid, this was an uninhabited peninsula," says Peter. "Rippowam had no houses, except the boat house. Coming through the channel into Rippowam at 6 a.m. was like entering a prehistoric world, all foggy and misty. Even at that age, my friends and I appreciated how unique and special that experience was."

Peter would soon return as one of the first residents of the Twin Lakes Village development in 1960. But first, he attended SUNY Buffalo, where he met and married his wife of 51 years, Betty. Then he proceeded to dental school on a New York Regents scholarship, did his residency at Buffalo State Hospital, and served a year as the dentist in a mental institution called Fairfield Hills in Newtown, Connecticut. "They were actually model patients. Of course, they were heavily sedated," he notes.

In 1960, Peter and his growing family moved to the end of Twin Lakes Road into the house they would occupy for the next two decades. "All of the land in Twin Lakes Village had been purchased by two GIs after World War II for development," notes Peter, "It was marketed as a retirement community for senior citizens, but still

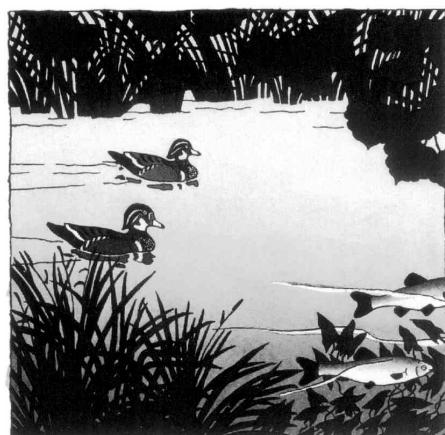
the lots didn't sell, because there was no way to get here easily. 684 had not been built, and the speed limit on the Saw Mill Parkway in those days was 35 miles per hour. We bought our house for \$35,000 and an additional 1-acre building lot for \$5,000." Those were the days.

In 1965, the Treyz family put an addition on the house to serve as the master bedroom and boys' wing. Peter and Betty had seven kids in total – Jane, Peter, Nancy, Doug, Donna, Barbara, and Lisa – four of whom have since made South Salem their home.

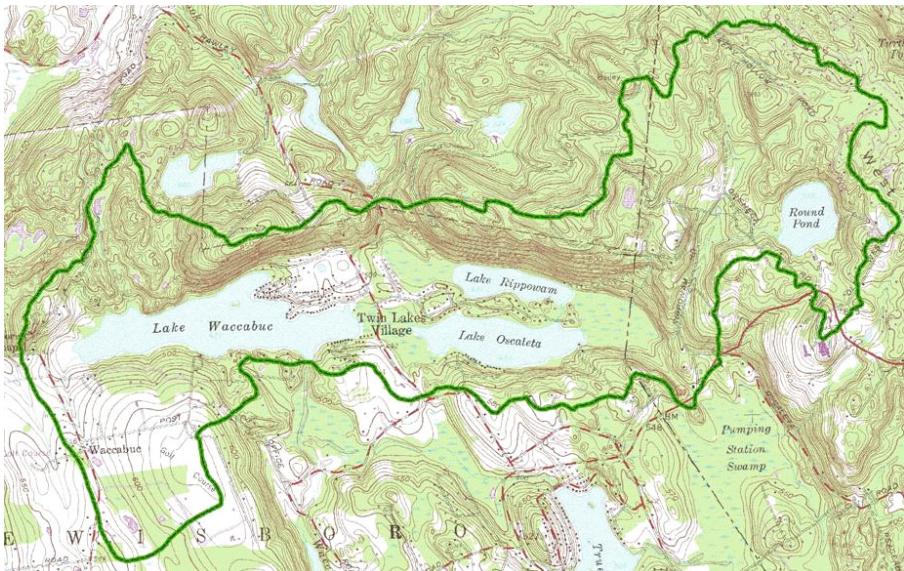
Peter's orthodontic practice began in an office at his home but quickly moved to Katonah, eventually to a building he and his four partners in the Katonah Medical Group had built. He is now in practice with son Doug, daughter Nancy and son-in-law Paul Sutera at 190 Golden's Bridge Road.

It didn't take long for Peter's community spirit to surface. The two wells that served the whole Twin Lakes community were still under the control of one of the original developers, who lived out on Long Island and was often out of contact on his boat. "Dick Reilly and I contacted the owner of our water supply and bought it for \$10,000. We then set it up as a non-profit and offered shares of stock at cost to other owners. We went house to house and offered owners the opportunity to buy a share for \$275. Most bought in."

In 1972, the seeds of the Three Lakes Council took root. "We had talked about it for a while, but what provoked it into being was our resolve



Topographic map of Three Lakes watershed (outlined in green)



to stop a neighbor on Twin Lakes Road from dumping the herbicide 2-4-D into the lakes. He worked for Union Carbide and had amassed a garage-full of this stuff, and was offering it to everyone to control weed growth.

"Wayne Van Tassel, Andrew Wilson and I found out about it, and we went to him and said, 'You can't do that.' Wilson was a lawyer, and he got the necessary injunction. It was then that we decided we needed an organization that would protect the welfare of the lakes. We drew up some initial by-laws, then we solicited members, sent out letters. I was the initial President. Drew was VP. Wayne was secretary. I don't think we had a Treasurer, because we didn't have any money."

The Three Lakes Council's initial charter and early activities were mostly environmental and educational. The Council recorded coliform counts in the three lakes, supervised the installation and later maintenance of the Lake Waccabuc aerators donated by Union Carbide, and, in general, acted as an advocate for the Three Lakes with regulators, government officials, public utilities and other authorities. Over the years various people have served as President – Wayne Van Tassel, Andrew Wilson, Richard Dickens, Gladys Wolkof, Peter Beardsley – but Dr. Treyz has always figured prominently. In fact, his inability to extract himself from his

"pet project" has become his familiar lament during his last twelve years as President. He could not *give* the job away, precisely because observers could see how much of his blood, sweat and tears he put into it.

Thirty-plus years and 23 grandchildren later, Dr. Peter Treyz can look back with pride on all he has accomplished on behalf of our environment... not that Mother Nature has always been kind to him. In 1981, a fire consumed his entire house in the middle of the night. It was a minor miracle that he, his wife, seven children, and a house guest escaped relatively unscathed. But as anyone who knows him can tell you, absolutely nothing knocks Peter Treyz down. He built a new and even more magnificent home on the ashes of the old and celebrated everything he didn't lose in the fire... his family, his community, his little piece of heaven on the Three Lakes, in short, all that matters.

Tara A. Owen

Lake Preservation Agenda

Last May, Michael Martin, President of Cedar Eden Environmental, presented the results of his study of the Three Lakes and his recommendations as to what we could

do to best preserve the health of our lakes (see the 2004 Newsletter on the TLC website for a detailed review of his findings). As you'll recall, Michael determined that the phosphorus loads in all of the lakes were quite high, contributing to a significant decline in dissolved oxygen and, consequently, water quality. He concluded that both Rippowam and Oscaleta were borderline eutrophic, and Waccabuc was already there.

"Eutrophic", for the non-limnologists out there, is not good. It's on the wrong side of the water quality spectrum. Unlike clear oligotrophic lakes, eutrophic lakes have lots of weeds, algae and poor water transparency. The process of eutrophication, if left unchecked, results in the gradual filling in of a lake, a fate we all want to escape. Toward that end, we are in the process of implementing some of Cedar Eden's recommendations. Meanwhile, Michael and TLC volunteers continue to take readings to establish a baseline of data.

Clearly, we are focusing on those activities that would reduce the amount of phosphorus reaching the lakes, and, in that effort, you are all our first line of defense (see article on Homeowner Best Practices). Moreover, the Three Lakes Council has been working with the Town of Lewisboro to implement some of Cedar Eden's broader recommendations. These and other lake preservation activities are outlined below.

Cedar Eden Follow-Up

Water quality monitoring of the Three Lakes continues and will continue on an ongoing basis so that we can accurately determine the quality of the lakes and identify trends. Water quality varies considerably from year to year, primarily due to varying climatic conditions, therefore we need several years of observation to establish a good baseline. On a monthly basis, we take readings at several locations to measure water clarity (using a Secchi disk), phosphorus in the hypolimnion and epilimnion, and chlorophyll.

Temperature and dissolved oxygen profiles are recorded more frequently, particularly in Lake Waccabuc, to determine the impact of our decision not to activate the aerators this year.

Clearly, we are focusing on those activities that would reduce the amount of phosphorus reaching the lakes, and, in that effort, you are all our first line of defense

In order to improve water quality, Cedar Eden has told us we need to reduce the phosphorus levels in the lakes substantially – 50% in Lake Waccabuc and 25% in Oscaleta and Rippowam. The first step toward achieving these goals is to quantify, where possible, the sources of phosphorus. Streams are one of the major conveyors of nutrients from the watershed into the Three Lakes, so we are gathering phosphorus and flow rate data on the streams feeding the westerly end of Waccabuc and the easterly end of Oscaleta.

Michael Martin of Cedar Eden collected stream information in 2004, and we have refined the process this year. Unfortunately, in 2004, the stream flows were very low at the times of Michael's scheduled visits. This year, we are obtaining equipment so that TLC volunteers can take readings during storm events. Storm events are naturally when most pollutants move from the watershed into our lakes.

Drawing any conclusions from the stream data we have collected to date would be premature. Phosphorus levels vary considerably from sampling to sampling, and we need to better correlate that data with flow measurements. But we should have solid information to report in Spring 2006.

We have not abandoned the aerators. Aeration is still a viable option for improving water quality if "sized" correctly. The data we've collected, primarily the dissolved oxygen profiles and phosphorus load being contributed by the streams, will help us accurately establish aerator capacity requirements.

Visit our website at www.threelakescouncil.org

A complete report on Cedar Eden's continuing study and our data gathering activities will be available shortly.

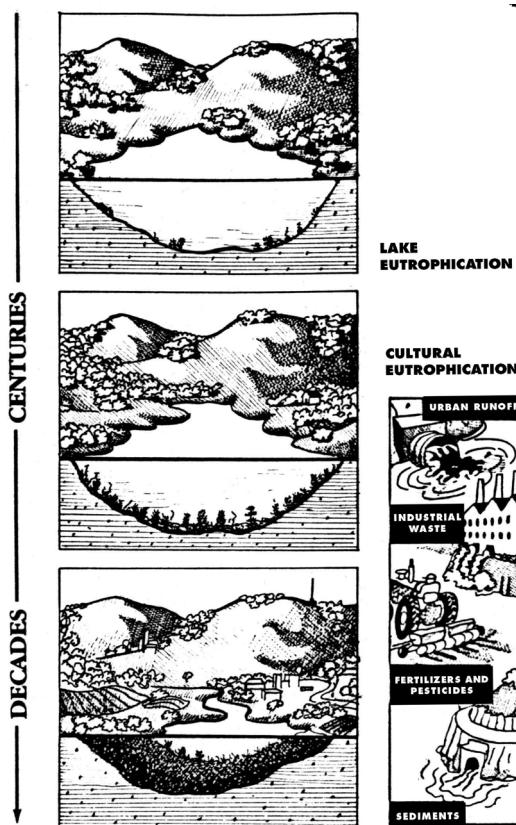
Government Affairs

Several members of the Town government attended the May 2004 Cedar Eden presentation, and we circulated copies of the report to relevant and interested officials. Members of the Three Lakes Council have attended nearly every Planning Board meeting at which a project on Lakes Rippowam, Oscaleta or Waccabuc is up for approval. We advocate on behalf of the lakes by recommending that those seeking to expand the size of their homes (by more than a third) make improvements to the septic system, limit the number of bedrooms, minimize impervious surfaces, plant buffers and/or install infiltrators for runoff. (An infiltrator is essentially an underground container with openings on the side and bottom that collects runoff from downspouts, footing drains, driveway drains, etc. and slowly releases it into the soil, thus filtering out nutrients and pollutants that would otherwise head directly into the lake). These suggested remedies are far from onerous for the homeowner, but make a material difference in terms of prospective phosphorus load.

Storm Drain Remediation

During the past year, Town Supervisor Jim Nordgren, Highway Superintendent Peter Ripperger and Paul Olsen, also of the Highway Department, toured several problem drainage areas with Michael Martin and myself (Paul Lewis). We pointed out the problems and put our heads together to come up with possible solutions. One thing is clear: it won't be easy. Road construction and drainage techniques have evolved substantially over the last 20 or so years, and the Highway Department would do things differently today, but we have to work with what we have.

Eutrophication: The Aging of a Lake



We selected a drainage area to correct by constructing some check dams, and that will serve as a demonstration site this year. Larger projects will require some engineering.

DEP Funds Released

At long last, the Town of Lewisboro secured DEP Funds allocated to Westchester County for Croton Watershed water quality improvement projects. The County Board of Legislators had been loath to release the funds to the northern towns in the County. Council members, along with Town Supervisor Jim Nordgren, met with Legislator Ursula LaMotte to enlist her support in getting the funds released to our towns. We also attended a Ten Town Supervisors meeting in support of this cause. After years of effort, the Town of Lewisboro was given \$312,000 in matching funds to use on water quality improvement projects! We've been assured that some of these funds will be used in our area.

Septic System Improvement

As you well know, one of the major sources of phosphorus in the

Three Lakes is our septic systems, particularly the older systems close to the lake. Many of these systems were put in during the early 1900s and have long since outlived their useful lives. The Three Lakes Council and the Town are working on regulations that will require new septic systems in certain cases of significant home expansion.

To educate lake residents on septic systems' impact on the lakes and new, more environmentally friendly technologies that are on the market, we recently hosted a seminar on septic systems led by former Health Department supervisor Ed Delaney and myself (see article on Septic Seminar).

Methoprene Halted

For the last several years, the County Health Department has been putting Methoprene in storm drains to stem the spread of the West Nile virus, which is carried by certain species of mosquitos. Methoprene interrupts the development of mosquito larvae between the fourth and fifth instar, but the chemical can also cause deformities in amphibians according to certain scientific studies. Since the West Nile mosquito species have never been seen north of Elmsford, the Three Lakes Council felt the potential risk to our amphibian life outweighed the prophylactic benefits of Methoprene and successfully lobbied to have the Three Lakes storm drains exempted from Methoprene application. Earlier this summer, TLC representatives, storm drain map in hand, went around with two members of the Health Department to identify those drains that fed into the lakes, so that they would not have this insecticide placed in them.

We're just beginning our campaign to save our lakes and preserve their natural beauty. We look forward to reaching out with further information in the next few months and hope that you will contribute to this worthwhile cause.

*Paul Lewis
Chairman, Lake Preservation*

TLC Nominating Committee Report

All good things must come to an end, and so – after several years of Dr. Treyz's beseeching us to find his replacement (despite our conviction that he, like the Pope, should be appointed for life) – a small nominating committee set out to identify new leadership for the Three Lakes Council. Gladys Wolkof, Jack Sinnott, Jim Greaves, and I (Paul Sutera) volunteered for this impossible mission, and quickly determined that our first impediment would be the Three Lakes Council by-laws, which had not been updated since the

Council's inception in the early 1970s.

While the basic document was sound, it was filled with "legal-ese" and failed to provide for an orderly leadership transition. Moreover, the responsibilities assigned to the Executive Committee, particularly the office of President, were so onerous that no one was inclined to assume them. As the Council and its mission have evolved over the past three decades, so too has the workload. It was simply too much for any one or two or three people. So, the nominating committee quickly expanded the Council's structure to accommodate six new standing committees – Government Affairs, Membership, Lake Preservation, Website, Newsletter, Social (see

THREE LAKES COUNCIL EXECUTIVE COMMITTEE		
President	Jack Sinnott	jsinnott@optonline.net
Vice President	Paul Sutera	oscaleta2001@optonline.net
Treasurer	Jim Greaves	jgreaves@choicemaster.com
Secretary	Jean Lewis	jeanlewis@aol.com
OTHER BOARD DIRECTORS		
Lake Oscaleta Association Alternate	Joe Tansey Kevin Karl	joetansey@msn.com kkarl97@optonline.net
Lake Waccabuc Association Alternate	Jim Greaves Gladys Wolkof	jgreaves@choicemaster.com N/A
Lakeside Association Alternate	Ron Tetelman Liz Palmer	eberlinpe@aol.com elepa@aol.com
Perch Bay Association Alternate	Randall Glading Bill Hines	randallg@optonline.net N/A
South Shore Association Alternate	Alayne Vlachos Lila Gordon	twinkle160@aol.com lilagordon@wmconnect.com
Two Lake Club Alternate	Paul Sutera Shannon Robinette	oscaleta2001@optonline.net info@threelakescouncil.org
Waccabuc Landowners	Jack Sinnott	jsinnott@optonline.net
Waccabuc Country Club Alternate	Bob Ryan Charlie Herzog	photohook@aol.com cherzog@grey.com
Ex-Officio	Peter Treyz	N/A
Ex-Officio	Ross Weale	rweale@optonline.net
STANDING COMMITTEE CHAIRS		
Government Affairs	Peter Treyz	N/A
Fishing	Joe Tansey	joetansey@msn.com
Lake Preservation	Paul Lewis	lewispa@optonline.net
Membership	Robby Rothfeld	rothfeld@cloud9.net
Newsletter	Tara Owen	tara@taocommunications.com
Social	Paul Sutera	oscaleta2001@msn.com
Website	Shannon Robinette	info@threelakescouncil.org
Aerators	Open	N/A

accompanying table). By delegating important work to these committees, the Three Lakes Council can both expand its existing scope and more effectively confront future challenges. Finally, the nominating committee reinvigorated the Board by soliciting the active participation of all seven lake associations and the Waccabuc Country Club. While this had been the original intention of the Three Lakes Council charter, over the years we had lost representation from several important constituents, so we refreshed the Board structure and membership (see accompanying table).

The nominating committee met several times, soliciting input on the by-laws from the existing Executive Committee and new Board. The revised by-laws are posted on our website, www.threelakescouncil.org, and we urge you to read them as we will ask you to vote on them during the annual picnic on July 30th. You can also get a hard or soft copy from your lake association president or TLC Secretary Jean Lewis at jeanlewis@aol.com.

The nominating committee also asked each Board member to solicit potential nominations for the executive positions of President, Vice President, and Treasurer. Jean Lewis, the present Secretary, agreed to stay on in that position. Many people had offered to help with various committees, but no one volunteered to take on the executive committee positions. So – after Gladys and Jean assured us it would not appear self-serving – Jack Sinnott, Jim Greaves, and I agreed to be nominated and hence elected to the positions of President, Treasurer, and Vice President, respectively.

Dr. Peter Treyz agreed to stay on as the Chairman of the Government Affairs committee, and he and long-time Treasurer Ross Weale have been invaluable in transitioning the Council to its new slate of officers. We commend them for their years of service to the Council and thank them for their continuing support.

*Paul Sutera
Vice President, Three Lakes Council*



Septic Seminar: There is Hope

On May 20, 2005, the Three Lakes Council hosted an educational seminar on septic systems – what they are, how they work, what they do to the lakes... and how we can mitigate that damage with modern techniques and technologies. Roughly 40 people attended this meeting to hear from two speakers, both of them Three Lakes residents with a long history of involvement in our community.

Ed Delaney, president of the Lake Waccabuc Association, shared with us his encyclopedic knowledge of septic systems gained during his thirty years with the Westchester County Health Department. As supervisor of environmental engineering programs, he became well-versed in the design and specifications of the 6,000-plus septic systems in our area. We are very fortunate that he volunteered to share this considerable expertise with the Three Lakes Council.

Paul Lewis, mechanical engineer with DuPont for 42 years, has lived in South Salem since 1946. Over the years, he has served on the Lewisboro Planning Board, the Zoning Board of Appeals, and the Conservation Advisory Council. Most recently, he has spearheaded the Three Lakes Council Cedar Eden Lake Study as

chair of the Three Lakes Council Lake Preservation Committee.

Ed, widely known and appreciated for his wit, started his presentation by welcoming everyone present to the “Wonderful World of Septics.” His talk focused on the basic elements of septic systems, how they have evolved over the years, and the latest septic system technology.

History of Septic Systems

Prior to the 1900s people had outhouses. A hole was dug, and the outhouse was positioned over it. When the pit filled, a new hole was dug, and the outhouse was repositioned. Many of the early residents of the bungalows on the south side of Lake Oscaleta remember well this drill, which continued well into the 20th century.

Gradually, however, indoor plumbing was introduced. Waste went into cesspools that often overflowed, creating health problems and smelly situations for “downstream” neighbors.

In the mid-1930s, the government formally acknowledged the growing health problems caused by cesspools and developed public health codes to prevent the spread of cholera, hepatitis, and typhus. These codes mandated that underground septic tanks be installed.

It wasn’t until the 1970s and 80s that people started to consider what happened to the effluent once it left the septic tank and how it might affect the surrounding environment. Only

then did they recognize that the tank had to be situated away from bodies of water or rock ledges, and that the effluent must go through a filtering medium such as soil or gravel.

Septic Codes

There are two things that people need to understand when they debate bringing systems "up to code":

1. The code that prevails is the code that was in place at the time the house was built, and most of the homes on our lakes meet that standard... although it is admittedly a moving target. Septic regulations have evolved considerably since many of our homes were constructed. And as homes are significantly expanded,

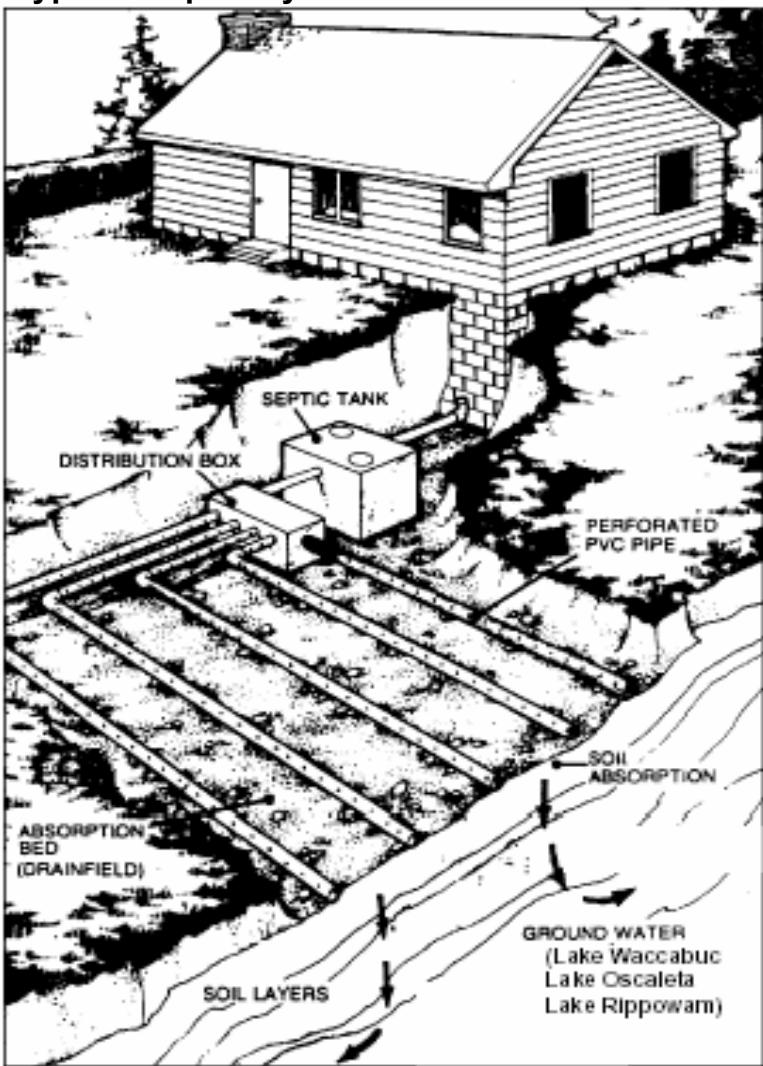
there is room for reinterpretation of the prevailing standard.

2. Governmental agencies don't take into account what is going on *inside* a house. Septic system sizing is based solely on the number of bedrooms.

Your Septic System

The design of your septic system depends upon its age. Its effectiveness depends on its age and its ability to handle the amount of effluent flowing into it. The conventional septic systems that most of us have are based on a technology that dates back 90 years. This type of system has four components (see accompanying exhibit):

Typical Septic System



When sewage enters a septic tank, solid waste settles to the bottom to form sludge. Liquids flow out through the outlet pipe and are distributed throughout the drain field.

1. **COLLECTION** – via internal plumbing that leads to a soil pipe that flows into the septic tank.
2. **TREATMENT** – which occurs in the septic tank itself. Tank designs have evolved over the years from single, possibly metal, tanks with no baffles... to more modern tanks with two compartments and top and bottom baffles that prevent solids from leaving the tank until they are broken down by microbial action.

The purpose of the septic tank is to separate waste into its solid and liquid components. To perform this function, the tank needs to hold the effluent long enough to allow the heavier solids to settle as sludge, and the lighter particles and grease to form scum at the top. Bacteria living inside the tank consume the solids and reduce their volume. The gases that are produced rise and escape through the soil pipe, and from there through a pipe that leads up through your roof. Primary treatment should occur in the septic tank, but you still need to pump your tank periodically to remove those solids, viruses, and grease that stay behind. The sludge that remains in the bottom of the tank builds up over time and will ultimately escape into the absorption area if not pumped out regularly. Eventually, the build up of sludge in the soil absorption field leads to system failure.

3. **DISTRIBUTION** – The distribution box receives the treated waste from the septic tank and distributes it to the fields through several outlets. It is vital that the distribution box is dead level or the effluent will only exit through one or two outlets.
4. **ABSORPTION (FIELDS)** consist of trenches lined with gravel or another material which allow the liquid to be gradually absorbed into the earth. There is no interaction between these absorption trenches; all action is vertical (i.e., the effluent is carried by gravity downward). Therefore, if effluent hits rock or another

- blockage, it runs straight out (and into the lakes) rather than downward where it can be filtered by the soil.

E.P.A. standards regarding field depth have changed over the years. Their original recommendation of 18 inches did not take into account the location of the water table. Westchester County increased the requirement to five feet away from rock and four feet from the water table.

NOTE: There is no septic tank currently available that removes phosphorus. Only the soil surrounding the absorption trenches can do that, and if water table is too close or the soil surrounding the fields depleted (a good bet considering the age of most septic systems in our area), the phosphorus leaches into the lakes. We would consider this system failure, since it harms the lakes. However, because it occurs beneath ground, the Health Department does not recognize it as such; their definition of failure encompasses what you see above ground only (i.e., seepage).

NOTE: All septic systems eventually fail. An anaerobic bio-mat forms at the bottom of the absorption trenches, which initially serves a useful purpose in treatment, but eventually thickens to the point where effluent can't get through it, and the system clogs and backs up. The smell will serve as a signal that both you and the lakes have a serious problem.

Care and Maintenance

Homeowners can do three things to extend the life of their septic systems:

- Don't put things in your septic system that don't belong there:
 - ✓ DO NOT use garbage disposals.
 - ✓ DO NOT pour grease down the drain.
 - ✓ DO NOT treat your system with additives; they kill the active bacteria.
- Maintain your system by having your septic tank cleaned regularly and ask the professional who comes to answer the following questions:

- ✓ How thick was the bottom layer (i.e., sludge)?
 - ✓ How thick was the upper layer (i.e., scum)?
 - ✓ What is the condition of the tank itself?
- Don't overload the system by releasing too much water into it at one time. If the #1 cause of system failure is bio-matting, the #2 cause is overwhelming the system with too much volume.
 - ✓ Check all inflow sources for leaks.
 - ✓ Fix leaking fixtures. A pinhole-sized leak can flood your septic system.
 - ✓ Again, don't use garbage disposals. They load the septic tank with increased amounts of grease, not to mention phosphorous and nitrogen.
 - ✓ Don't drain hot tubs, footing drains, or sump pumps into the septic.
 - ✓ Stagger laundry loads over several days.

There are several new technologies available that can materially improve the condition and efficacy of your old septic system and that are not cost-prohibitive. While these technologies have not been officially approved by the Health Department for new construction, they are available to those of us with existing systems.

How to Fix Failing Systems

There are several new technologies available that can materially improve the condition and efficacy of your old septic system and that are not cost-prohibitive. While these technologies have not been officially approved by the Health Department for new construction, they are available to those of us with existing systems. Ed clarified the confusion on this issue, by pointing out that **Health Department permits**

are required only for new construction.

That said, he stressed that homeowners have to take an active role in implementing and maintaining these alternative technologies. If you install one of these systems, such as the White Knight treatment system, you're required by the state of New York to sign a contract for regular maintenance every 6 months to a year.

- **WHITE KNIGHT** treatment technologies (www.knighttreatmentsystems.com) can be used to retrofit your existing system. If you formerly needed 200 feet of fields, you now need only 70 feet. The system relies on a basket of aerobic bacteria placed inside the tank that eats organic matter, thus eliminating the sludge in your tank and the bio-mat that forms in absorption trenches. While you will not need to pump again, you will need to replenish the bacteria every six months to a year, and the system does require electricity. The cost (including installation) is about \$5,000 to \$6,000, depending upon the amount of excavation required. Maintenance runs about \$200 a year, roughly the cost of an annual pumping. (See last year's newsletter on the TLC website for a detailed article on Tara Owen's experience installing this system).
- **KLARGESTER** (www.klargester.com) makes a compact treatment plant that is an option for densely populated lake neighborhoods where there is insufficient space for fields. However, these systems are a double-edged sword in that they can open previously "unbuildable" lots up for development if permit controls aren't in place. A way around this potential problem is to have the Town mandate that an applicant prove there is room on the site for a conventional system before permitting the Klärgester plant. Otherwise, these systems could induce over-development.
- The **FLUSHMATE** toilet (www.flushmate.com) is an in-house option that can relieve the

strain on your septic system. These toilets use less water yet flush more effectively than conventional toilets. The system traps air as it fills with water and uses water supply line pressure to compress the air. Instead of the “pulling” or siphon action of a traditional gravity unit, the compressed air forces water into the bowl and “pushes” waste out. Flushes use only 1 gallon of water, and the toilet flushes in 4 seconds. The only disadvantage is that it’s noisy. These units cost around \$350.

- Other options available include the PRESBY system, which is an aerobic leaching system used throughout New England, and two types of filters (FILTER SOCKS and ZABEL FILTERS), both of which require regular removal and cleaning, which can be a messy process.

Phosphorus Load

Paul Lewis then explained the impact that septic systems have on the health of the Three Lakes. In a nutshell, septic systems are a big contributor to the phosphorus loads in our lakes, as they do not effectively filter phosphorus from the effluent. Phosphorus, as we note throughout this newsletter, promotes the growth of weeds and algae and accelerates the eutrophication process.

The Three Lakes watershed comprises approximately 2,200 acres, 450 of which is now developed. Developed land contributes one pound of phosphorus per acre per year to the lakes (versus 0.2 lb/acre/yr from forest land). That means that there has been a 450 pound increase in the amount of phosphorus generated each year within our watershed as a result of change in land use.

One pound of phosphorous results in 500 pounds of weed and algae growth, which translates to more than 200,000 pounds of weeds and algae contributed to our lakes each year. For Waccabuc, this problem is compounded by the fact that its inflow and outflow are close together, resulting in a poor flush rate.

The major sources of phosphorus in septic effluent are human waste,

dishwasher detergent and garbage disposals. Human waste accounts for 1.5 grams of phosphorus per day, automatic dishwasher detergent 1.2 grams per load.

Moreover, in Twin Lakes Village, the Health Department has mandated that orthophosphate be added to the water supply to prevent lead and copper from leaching into the drinking water. This is an additional source of phosphorous. On average, each person uses 50 gallons of water per day (e.g., flushing, showering, etc.). This means that a person in Twin Lakes generates 0.5 grams of phosphorous per day. How much of this actually reaches the lakes is unknown.

One pound of phosphorous results in 500 pounds of weed and algae growth, which translates to more than 200,000 pounds of weeds and algae contributed to our lakes each year as a result of development.

In addition to the phosphorus-minimizing techniques we recommend elsewhere in this newsletter (see Homeowner Best Practices article), there is one other solution on the horizon specific to septic systems. The company that markets the White Knight treatment system is testing an aerobic system called KnuRD that is designed to filter out phosphorous. The filter would need to be replaced periodically, but it seems to be a promising technology that we intend to keep our eye on. Reports are that it should be marketed in the not-to-distant future.

Meanwhile, we can all minimize the phosphorus running off our property into the lakes by reducing impervious surfaces (i.e., do not pave driveways), using infiltrators for roof

and hillside runoff, and putting in native plant buffers. Both Ed and Paul emphasized that we cannot wait for a “silver bullet” solution; we have to take steps today to mitigate the damage caused by failing septic systems.

*Bobbie Terman
Additional reporting by Jean Lewis
and Tara Owen*

What You Can Do: Homeowner Best Practices

Earlier this summer, the Three Lakes Council mailed a flyer to all watershed residents, encouraging them to be proactive in reducing the amount of phosphorus entering the lakes. Here, again, are four things you can do today to stop the flow of phosphorus.

1. Practice Lake-Friendly Lawn

Care (and make sure your landscaper does too!)

Don't fertilize. The best way to reduce phosphorous is to eliminate fertilizers, which are generally rich in phosphate. To give you an idea of the magnitude of the impact: a pound of phosphorous can theoretically generate 500 pounds of algae or weeds if all other nutrients are present, as they are in our lakes.

Test soil. If your heart is set on fertilizing, at least have your soil tested to determine if it is really necessary, and if it is, how much to apply.



The Cornell Cooperative Extension will test your soil. Just send a note requesting a soil analysis kit along with a check for \$15.60 to:

CCE – Westchester
26 Legion Drive
Valhalla, NY 10595
ATTN: Martha

You will receive a kit and a bag in which to mail your soil sample for a full analysis. (Call 914-285-4640 for more information).

Use phosphate-free fertilizers. Soils in our area generally contain sufficient phosphate, so choose fertilizers that are phosphate-free. If you hire a lawn maintenance company, *insist* that they use a phosphate-free fertilizer.

Young's Feed & Grain located at 91 Danbury Road (Route 35) in Ridgefield, stocks Green View Spring Fertilizer, Fairway formula 27-0-12. (The middle number denotes the amount of phosphorus). Young's phone number is 203-438-6760.

Water the lawn with lake water. If you live on a lake, then use lake water to water your lawn. It contains all the nutrients your lawn needs, and some of the water will return to the lake with the phosphorous filtered out.

Leave the leaves. Originally our lakes were surrounded by forests, and the leaves on the forest floor protected the lakes. The decomposed leaves formed humus that reduced erosion, absorbed water, and also filtered out much of the phosphate before rain runoff reached the lakes.

Development has replaced much of the forest, making the benefits that leaves provide all the more important. Where you can, leave leaves on the ground, especially on lakefront property.

Control weeds without chemicals. The best form of weed control is through proper lawn care. That's how you give grass a competitive advantage over weeds.

- *Cut lawns to a length of 3 inches or longer.* This longer length enables the grass to develop a healthier root system, which, in turn, helps the grass survive drought, disease, and insect damage. The deeper roots also do a better job of removing nutrients.

- *Mow often.* No more than 1/3 of the grass blade should be cut off at a time. Grass adjusts better to frequent cutting than to infrequent mowing that cuts back more severely.
- *Leave the clippings on the lawn.* They contain valuable nutrients that feed the healthy grass. Frequent cutting reduces the length of the clippings and they will sift down through the grass more easily and then decay, fertilizing the soil.
- *Sharpen the blade on your mower.* This way, the grass is cut clean. Damaged ends allow diseases to enter and also result in a more rapid loss of moisture.

2. Pump Out Your Septic System Regularly

Our septic systems and holding tanks arguably contribute more nitrates and phosphates to the lakes than any other source. It is important to keep these systems well maintained (see article on the septic seminar hosted by the TLC). If you haven't had your septic tank pumped in the last two years, you should do so. When you have the tank pumped, have the pumping service assess the condition of your tank and need for pumping more frequently. Other environmentally-friendly tips include:

- ✓ Install low flush, incinerating or composting toilets.
- ✓ Use low flow pressure devices to reduce the volume entering your tank.
- ✓ Use a garbage can, NOT a garbage disposal unit.

3. Grow A Native Plant Buffer

A vegetative buffer planted along the lakeshore filters out the nutrients that contribute to lake eutrophication. A minimum buffer width of 5-10 feet is recommended. However, greater buffer widths provide both increased filtration and a wildlife habitat benefit. The easiest way to establish a buffer is to let the area along your lake shore go unmowed, and let nature take its course. A quicker method is to plant native plants with deep root systems that can capture the nutrients. Grass roots typically extend down only a few

inches, so other plants are preferable. To learn more, go to www.nativeplantcenter.org.

1. Use Phosphate-Free Dishwashing Detergent

State law has banned the use of phosphates in laundry detergent, but automatic dishwashing detergents still contain phosphates. Trader Joe's (Route 6 in Danbury) and Seventh Generation (www.seventhgeneration.com) sell phosphate-free formulations.

2005 Fishing Report



Fishing continued to be excellent in the Three Lakes this past year, as the cover photo taken last July can attest. With the able assistance of his son Ben, Bryan Colley reeled in this whopper of a hybrid bass right in front of the Waccabuc Country Club beach facility, the perfect viewing stand for an epic battle between man and fish. Weighing in at 15lb 5 oz, this fish swamped the state record by some 5lb 2oz.

Every year, I hear stories of the big ones that got away, but this year, it seems, the big ones stayed on the hook. Mason Bladis, age 11, was fishing in his canoe on Lake Oscaleta this spring when he netted— after a long and tiring contest – a 6lb 11oz brown trout. Quite a trophy for young Mason.

Thanks to the financial support of those who contribute to the TLC fish fund, we were able to stock trout again this year, putting 700 brown in Waccabuc and 150 in Oscaleta. All these fish were about 10 inches in length.

SPECIES	SEASON	SIZE	DAILY LIMIT
Trout (brook, brown rainbow trout)	4/1--10/15	Any size	5
Largemouth / smallmouth bass	6/21--11/30	12 inches	5
Pickeral	5/3--3/15	15 inches	5
Crappie	All year	9 inches	25
Perch / Sunfish	All year	Any size	50
Carp / suckers	All year	Any size	none

Please remember when you contribute to the Three Lakes Council that the first \$50 is automatically earmarked for dues only. You can, however, designate where you would like additional money to go, and the fish fund is one of the options (see dues form in this newsletter). Thanks to all who have supported the fish fund, and *please keep it up!*

Please consult the accompanying chart for current NYS fishing guidelines and keep in mind that you must have a fishing license if you are over the age of 16. These can be obtained from the Town Clerk, Kathy Cory. Additional information on fishing can be found on the NYS DEC website: <http://www.dec.state.ny.us/website/dfwrmr/fish/fishregs/index.html>

Please take a kid fishing this summer. If you are interested in learning how to fish, would like more information about our stocking program or would like to know how to contribute to the fish fund, please feel free to give me a call at 763-3456

Thanks to all who support this fishery either through your financial support or your commitment to "catch and release" best practices.

*Joe Tansey
Chairman, Fishing Committee*

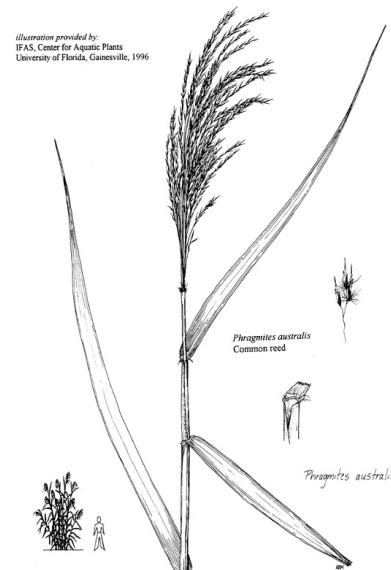


find it on both sides of the canal between Lakes Waccabuc and Oscalata. It can also be found on several private properties. Don't assume that because you have only a stalk or two of the plant that it poses no danger. Each mature plant can produce more than 2 million seeds a year, which can easily be spread by birds, bees and the wind.

Look for phragmites bamboo-like stalks and fluffy flower along Oscaleta Road on both sides of the Waccabuc/Oscalata canal and at the Two Lakes Club beach property on Lake Oscaleta. Don't confuse it with cattails, a native plant that is beneficial to the lakes. Cattails have a solid brown conical top that comes apart in late summer and early fall to release seeds.

Purple loosestrife and phragmites (also called common reed) are on the Nature Conservancy's list of the "dirty dozen" exotic species. Both can swallow a wetlands whole, leaving insects, birds, reptiles and mammals without the diverse ecosystem they need to survive.

Both loosestrife and phragmites can be contained by pulling or digging them out with a shovel or pitchfork. The task is easy if the plants are removed within two years, and if they're growing in small clusters. After that, their strong, thick roots make them more difficult to eradicate.



BAD: Phragmites

Cutting their flowering tops will help control their reproduction, but the best control is to remove them by the roots.

How-To Removal Guide

1. Don't shake the plants as you remove them. If the plant is seeding, bend it over a bag and cut off the flowers before ripping out the stalk.
2. Dispose of the plants in your trashcan. Do not compost!
3. Wash your clothes and garden equipment afterwards.
4. If you can identify loosestrife before it flowers, remove it then, as it is very attractive to bees. Otherwise, you might wait until after the petals fall.
5. Reduce disturbance by replacing the invasives with native species. The Three Lakes Council recently mailed waterfront residents a list of good native plants that will help the lakes thrive. You can also find this list on the web at www.nativeplantcenter.org.

Special thanks go to Gossett's Nursery for discontinuing the sale of purple loosestrife when TLC member Betsy Sinnott pointed out its harmful

impact on the lakes. Look for a mailing later this summer on how to remove these lake chokers for good.

Keith Eddings

LETTER TO THE EDITOR: Don't Spray Hemlocks

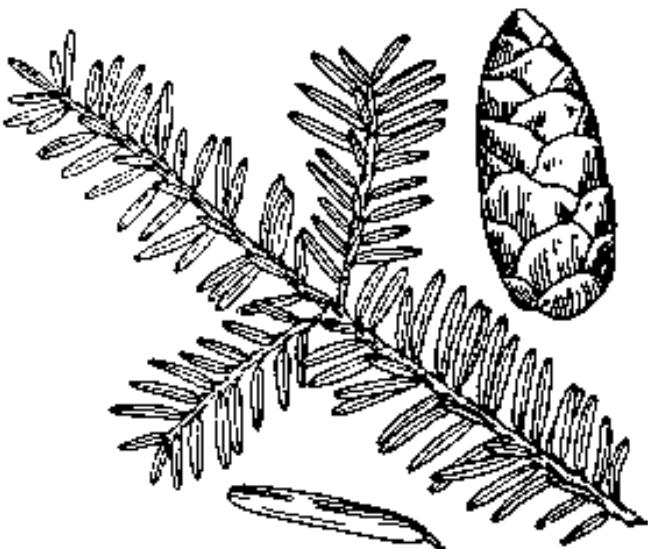
I was distressed to read in last year's newsletter an editorial endorsing chemical treatment of the hemlock trees in our area. A few years ago, I wrote an article for the newsletter outlining the significant disadvantages of such an approach based on my 20-plus years in the tree care business (see "Local Arborist Discourages Treating Hemlocks" in 2000 TLC Newsletter). In short, residents should be aware that insecticides are toxic and some extremely persistent. They are bad for the lakes we swim in and the water in the aquifers from which we drink. These chemicals cause harm to not only the wooly adelgid infesting hemlocks, but other beneficial insects and wildlife. Moreover, once you start treating, you help pests develop an immunity to the chemical, which arguably leaves your trees more at risk.

There is more to keeping hemlocks healthy than trusting the lowest bidder to spray or inject your trees with pesticides. In fact, the best thing you can do (and no landscaper is likely to recommend it, as there's no money in it) is to water your trees. Hemlocks, particularly those growing on rocky slopes that dry out quickly, crave moisture. Place mulch within the drip line of the trees to keep soil moist. (Wood chip mulch is usually given away for free by tree care crews working in the area). Healthy trees will resist infestations.

In addition, homeowners should consider planting different species of trees on their property (e.g., western hemlock, Norway spruce). Ask your local garden center for trees best suited to your site. By planting a diversity of trees, you are more protected in the event an insect or disease targets a particular species.

It is, indeed, unfortunate that we are losing diseased hemlocks, but I think we should focus attention on keeping the remaining ones healthy through preventive care rather than chemical intervention.

*John Gurtler
President, Timberland Tree Care*



Eastern Hemlock

THREE LAKES COUNCIL NEWSLETTER

PUBLISHER:

THREE LAKES COUNCIL

TARA A. OWEN

TARA A. OWEN

TARA A. OWEN

PAUL LEWIS

JACK SINNOTT

BOBBIE TERMAN

KEITH EDDINGS

JOE TANSEY

PAUL SUTERA

JEAN LEWIS

LETTERS TO THE EDITOR MAY BE MAILED TO
P.O. BOX 241, SOUTH SALEM, NY 10590 OR E-
MAILED TO INFO@THREELAKESCOUNCIL.ORG

Earlier this summer, the Three Lakes Council sent this letter to Lake Waccabuc waterfront residents, Aerator Fund contributors, and TLC board members to explain our decision not to run the aerators this year. For those who have not seen the letter, we reprint it below for your information.



WACCABUC–OSCALETA–RIPPOWAM P.O. BOX 241, SOUTH SALEM, NY 10590

June 2005

Dear Neighbor,

The purpose of this letter is to inform you that we will not turn the aerators in Lake Waccabuc on this summer in order to be able to study what would be the most effective plan of action to preserve the quality of the lake. We want to relate to you the reasons why we are taking this action.

Aerator Report

At the April meeting of the Three Lakes Council Board of Directors, Paul Lewis, Chair of the Lake Preservation Committee, presented a report on the aerators.

The aerators were installed by Union Carbide in 1973 and were sized to meet the oxygen demand in the hypolimnion (the bottom layer of the lake) at that time. Old records are scarce, but those found so far indicate that over the intervening three decades, there has been a severe decline in the amount of oxygen in this bottom layer. For example, in 1975, 5-6 ppm oxygen was recorded. In 1985, 4-5 ppm oxygen was recorded. In years 2002, 2003, and 2004, less than 1 ppm oxygen was recorded.

Based upon these measurements, either the aerators are not functioning well or, more likely, the phosphorus loading into the lakes has increased to the point that the aerators are not able to keep up. Although the recent Cedar Eden lakes study states that aeration is still considered an appropriate technique, our current aeration process is clearly not working. We don't have accurate data at this point in time to determine how much oxygen the aerators are adding compared to when they were installed. However, even if they produced as much as they did when Union Carbide installed them, it is insufficient to meet the increased demand today.

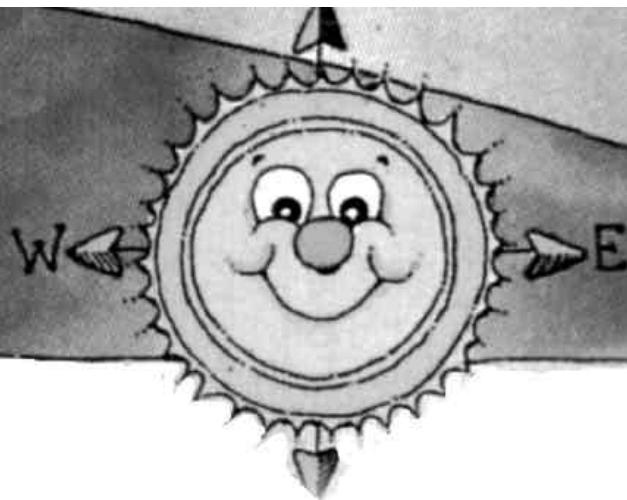
Action

Based on Paul's report and Cedar Eden study, the Three Lakes Board decided it needed to better evaluate the effectiveness of the aerators. We currently spend approximately \$9,000 per year to run the aerators, and to assure that we are spending this money in the most productive way we need to do further studies and evaluate options. It was decided that the money saved by not running the aerators should be used for the testing and analysis needed to determine further actions.

Using the money we've saved not running the aerators, we will continue to closely monitor The Three Lakes and collect data throughout the summer. We will keep you informed of the results of our research, and what we believe will be the best course of action to take for the future benefit of our lakes.

A handwritten signature in black ink, appearing to read "Jack Simmer".

PRESIDENT, THREE LAKES COUNCIL



Three Lakes Council Annual Picnic

Enjoy the beach, your neighbors, the lake, music and dancing! We'll have our grand cookout featuring filet mignon, chicken filets, salads, beer, wine, soda, hamburgers, hot dogs, dessert, etc. Get all the news on our Three Lakes and vote on the new by-laws!

Place: Waccabuc Country Club
lake front facility

Date: Saturday, July 30th

Time: 6:00 PM-to-9:00 PM

Admission: Free for families who have paid their \$50 yearly dues. All guests and non-members welcome at \$25 per person.

Reservations are crucial to the planning process! Please fill in the information below and mail to: Three Lake Council, P.O. Box 241, South Salem, NY 10590

Name of family: _____

Number attending: _____

Will you bring: Salad for 8 ____ OR Dessert for 8 ____?

Your telephone #: _____ e-mail: _____





Treasurer's Report

Thanks to the outstanding generosity of some of your neighbors, we brought in \$15,540 during our December 2004 fundraising drive. Overall, in 2004, we raised just over \$27,000.

The lake management study being conducted by Cedar Eden accounts for the majority of our expenditures. We anticipate spending approximately \$9,000 again this year to develop the Three Lakes Preservation Plan. As you are aware, we made the decision to turn off the aerators in Lake Waccabuc this summer (see letter on aerators in this newsletter), and we intend to use the savings (roughly \$9,000) to fund the Three Lakes Preservation plan. Real estate taxes, insurance and communication expenses account for our remaining expenses, and we have been investigating ways to reduce these in the future.

While we are confident that we will have the funds necessary to continue our data collection work though the next year, we need to increase our membership to build support and momentum for the Three Lakes Preservation Plan and other efforts to safeguard our valuable natural resources. If you have not contributed already, we urge you to fill out the form below and send in your membership dues (along with your annual picnic reservation on the front side of this page).

*Jim Greaves
Treasurer, Three Lakes Council*

Dear TLC, Enclosed you will find my tax-deductible dues of \$50 for membership...
... plus an added donation for: _____ fish stocking, Cedar Eden study

_____ guests for picnic (\$25 each)

Total amount of check (made out to "Three Lakes Council"): _____

Name: _____ E-Mail: _____

Spouse/Partner's Name: _____ Phone: _____

Does your company have a matching gifts program? Name of company: _____

Local Address: _____ Post Office: _____

Preferred Mailing Address (by post or e-mail?) _____

Please remit payment to:

THREE LAKES COUNCIL
P.O. BOX 241
SOUTH SALEM, NY 10590

*The TLC will not sell or
use your phone number
or e-mail for any
purpose other than to
keep you informed of our
lake preservation efforts.*

*The Three Lakes Council is a 501(c)3 organization.
All donations are tax-deductible to the extent allowed by law.*



THREE LAKES BOAT STICKER REGISTRATION

Voluntary compliance with the Three Lakes Boat Sticker Registration Program serves the following important purposes:

1. To protect our lakes against invasive zebra mussels
 2. To identify owners of stray boats so that they can be returned
 3. To keep unauthorized, transient boats off the lakes
1. Don't put any boat into our lakes that has been on another body of fresh water without first steam cleaning the hull or leaving the boat bottom exposed to sunlight for a minimum of 10 days to kill all zebra mussel larvae. Visual inspection doesn't suffice; larvae are microscopic in size. Don't permit friends to launch their boats from your dock unless you can personally guarantee that they are free of zebra mussels.
 2. If you find a stray boat floating in the lakes, record the sticker number and contact Alayne Vlachos by phone (763-3800) or e-mail (twinkle160@aol.com). She will alert the owner.
 3. If you see a boat on the lakes without a sticker, engage the boater in a friendly discussion. First, explain that you notice they don't have a sticker, then inform them that stickers are part of our effort to keep the lakes free of zebra mussels. Finally, ask them to contact Alayne (see above) or their lake association president to get a sticker.
 4. If the boater is not a homeowner or the guest of a homeowner, inform him or her that these are private lakes and only people with deeded access rights can put boats on them. If this approach fails, contact our Town Police at 763-3922 and refer the matter to them.
 5. Please consider using electric motors on your boats. If you must use a gas motor, be aware that Town law limits the maximum horsepower to 25HP on Waccabuc and 10HP on Oscaleta and Rippowam, and lake associations are enforcing these limits. Also, no 25 HP motors can be kept at the Two Lake Club beach.

BOAT REGISTRATION FORM

Please complete this form even if you think we already have this information

If you already have boat stickers, please provide the information requested below, including sticker #s.
If you need boat stickers, complete the form minus the sticker #, and we will mail the stickers to you.

Mail the completed form to: Three Lakes Council, P.O. Box 241, South Salem, NY 10590

NAME: _____
LOCAL ADDRESS: _____
E-MAIL: _____
PHONE: _____

If your boats are not kept at your residence, where are they kept?

(Boat type: row, canoe, kayak, sail, pontoon, motor, etc.)

Boat type/color/brand _____ Sticker #: _____
Boat type/color/brand _____ Sticker #: _____

SOUTH SALEM, NY 10590
P.O. BOX 241
WACCABUC - OSCALETA - RIPPONWAM



Membership dues form enclosed

Three Lakes Council Annual Newsletter

Inside Find:

- News on Organization Overhaul
- Three Lakes Preservation Agenda
- A Tribute to Dr. Peter S. Treyz
- Report on New Septic Technologies
- Homeowner Best Practices
- Fishing Report 2005
- Rooting Out Loosestrife & Phragmites
- Tips on Saving Your Septic
- Why No Aerators
- Annual Picnic Notice
- Boat Sticker Registration & More...