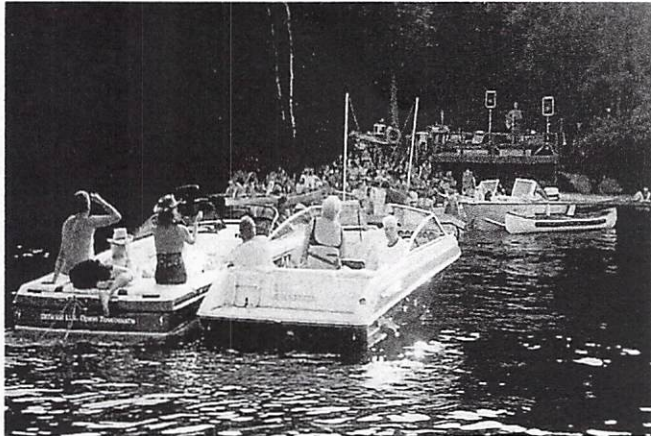


# LAUREL LAKE LEDGER

Laurel Lake Association

17<sup>th</sup> Annual Newsletter

Spring 2004



*Concert at Sunrise Rock 2003*

The winter was brutal, with record braking cold spells and a record breaking snow storm. Ah, New England; your bite is fierce.

Although we have seen more bob-houses on the lake in years past, we have never seen so many people dare to bring their vehicles out there at one time. It looked like a parking lot, as sportsmen used their vehicles to keep warm from the icy blasts.

But Spring has sprung, and soon the summer activities will begin as the snowbirds return and the weekenders come to appreciate the cool beauty of life on the Lake.

Cut and post the following schedule of events near your calendars, as this is the only notice we will be giving you of upcoming events.

## June

**5<sup>th</sup> - 9 AM** Board of Directors will meet at the home of Anne Korjeff.

**5:30 PM Pot Luck Supper** In the dining hall at Fleur de Lis Camp See page 3

## July

**4<sup>th</sup> - 9:30 Pm** Scores of us will be lighting our flares in unison, along the shores, in celebration of Independence Day.

**10<sup>th</sup> - 10AM** The Annual meeting and family picnic will be held at White's Field.

**31<sup>st</sup> - 3-4 PM** the Boat Parade. "N" is the letter this year. See page 4

**5 -7 PM** The concert, free to all, performed by Rich Kumpu next to Sunrise Rock.

## August

**14<sup>th</sup> 11 AM** Canoe Race: Dozens of canoes and kayaks will compete on the lake, with contests and games for all ages. It is as much fun to watch as it is to compete.

## September

**4<sup>th</sup> at 1PM** Bring your sailboats to the South end of the lake to compete with other sunfish "racing" up and down the lake in the annual Dresser-Friedman Regatta.

**11<sup>th</sup> 9 AM** The Board meets again to close out the year and plan events for 2005. The meeting will be held at Camp Fleur de Lis.

**LAUREL LAKE ASSOCIATION  
TREASURER'S Report  
Year ending September 30,2003**

	2003	2002	Change
Balance October 1	6,791.93	5,806.87	985.06
<b>Receipts</b>			
Membership	1,027.00	1,525.00	(498.00)
Interest	12.19	18.32	(6.13)
Flares	443.00	569.00	(126.00)
T Shirts	617.60	380.00	237.60
Canoe Race	0.00	24.00	(24.00)
Advertising	25.00	0.00	25.00
 Total	 2,124.79	 2,516.32	 (391.53)
 <b>Disbursements</b>			
Ledger	272.00	258.30	13.70
Water Testing	334.16	263.00	71.16
Postage/supplies	79.96	17.60	62.36
Annual Meeting	174.88	165.11	9.77
NH Lakes Assoc.	100.00	100.00	0.00
Band Concert	300.00	300.00	0.00
Parade of Boats	135.00	130.00	5.00
Barbershoppers	250.00	250.00	0.00
Flowers/gifts	125.00	47.25	77.75
Maps	34.97	0.00	34.97
Canoe Race	115.00	0.00	115.00
 Total	 1,920.97	 1,531.26	 389.71
 Balance Sept 30	 6,995.75	 6,791.93	 203.82
 Cert. of Deposit	 10,026.30	 9,807.07	 219.23

Donald S Austin, Treasurer

## Season Opening Pot Luck Supper

This year we would like to start a new tradition and promote a sense of community around the lake by having people get together for a "Pot Luck" Supper to kick off the 2004 season at the lake.

The supper will be held on June 5th in the new dining hall at Camp Fleur De Lis from 5:30 to 7:30 and there may even be entertainment provided by steel drums to get you in the summer mood.

So come and enjoy an evening with friends, or meet your neighbors, and start the season off with the spirit of community that is Laurel Lake.

Bring your own drinks, and a dish to share. Coffee, silverware and paper goods will be provided.

Any questions call Perry and Roberta Nadeau at 673-6414.



### HELP WANTED: HELP WANTED: HELP WANTED: HELP WANTED: HELP WANTED:

Due to major changes in our life activities, we are forced to give up the job of publishing the Laurel Lake Ledger effective, this issue. If you can help in any way to keep this newsletter alive, please contact any board member. We will offer any assistance we are able to help get you started.

*Jack and Margery Aukstikalnis*



### THE CHESHIREMEN

Due to conflict of scheduling, we regrettably are unable to invite the Cheshiremen to perform at town hall as planned this year.

## Membership Report

The final membership numbers for the 2003 membership year were:

288 Adult

17 Children

9 Youth

288 Total members in 145 Households

A mailing was done in March to previous members who have not paid their dues for the 2003 year. As a result many members returned their 2003 dues and at the same time paying for 2004. So we have a good start on this year's membership.

The following people have already paid their membership dues for 2004:

Bates, Robyn; Beauregard, Judy; Beauregard, Rod; Bishop, Eileen; Bishop, Joe; Brooks, Barbara; Brooks, Betty; Brooks, David; Butler, Edmund; Couture, Anne; Couture, Ray; DeBlieu, Helen; DeBlieu, Ivan; Ellis, Bobby-Lu; Friedman, Michael; Grasewicz, Paul; Grasewicz, Rose; Knight, Bruce; Knight, Joan; Lurvey, Allan; Lurvey, Phyllis; Lyman, Ashley; Lyman, Jake; Lyman, Linda; Lyman, Peter; McKenney, Karen; McKenney, Will; McLachlan, Maurice; Moses, Joel; Moses, Rebecca; Moses, Ruth; Moses, Samantha; Mowry, Wesley; Mumford, Parker; Mumford, Rachel; Mumford, Robert L.; Mumford, Sarah P.K.; Murray, Leo; Nance, Debby; Nance, Lindsay; Nance, Rachel; Olejarz, Conor; Olejarz, Griffin; Olejarz, Ken; Olejarz, Robin; Patten, George; Patten, Lise; Poulin, Beth; Ray, Donald; Ray, Lois; Rose, Joanne; Rousseau, Art; Saso, Louis F.; Steiner, Frank; Wasserbauer, Damian; Wasserbauer, Dana Price; Wasserbauer, Harrison; Wasserbauer, Perry; White, Dave; White, John; White, Lorraine; WoodWorth, Jennifer

If you are not one of the above named people, please complete and mail the enclosed membership form with your dues right away and mention the association to any friends that you think may be interested. As always thanks for your continued support.



## Parade of Boats and Concert

Each year in the middle of July the Laurel Lake Association sponsors a parade of boats. Each year a different letter is chosen as the theme and entrants decorate their boats based on something that starts with that letter. The parade is held in the afternoon and after the parade a concert is held in the early evening. The concert is put on at the lakeshore and all boats are welcome. The folksinger appearing at the concert is Rich Kumpu.

This year will be the Tenth annual parade and concert. The letter this year is "N" - Nifty Nautical pheNomeNoN

This year's Parade and concert will be On July 31st  
Parade 3:00 to 4:00 pm  
Concert 5:00 to 7:00 pm

Past parade letters have been:

2003 parade "T" - Totally Terrific  
2002 parade "A" - American Aqua Armada  
2001 parade "M" -Magnificent Motorboat Meander  
2000 parade "B" -Beautiful Boat Bash  
1999 parade "L" --- Laurel Lake Launches Legendary Lollapalooza  
1998 parade "W" --- Wonderfully Wacky Watercraft  
1997 parade "S" --- Spectacular Ship Show  
1996 parade "C" --- CCCCelebrate  
1995 parade "P" --- Pontoon and Powerboat Parade, PPParty

For more information contact: Perry Nadeau



### Officers 2003-2004

Craig Heatley	President
Bruce Knight	Vice President
Liz Young/Anne Korjeff	Secretary
Don Austin	Treasurer
Rob Prunier	Past President

### Board of Directors

Jack Dumont	2004 Anne Korjeff	2005
Perry Nadeau	2004 Jack Aukstikalnis	2006
Terry Silverman	2004 Jim Baldwin	2006
Don Treat	2004 Barbara Green	2006
Marguerite Albertini	2005 Cal Perry	2006
Charlie Brackett	2005 George Graf	Honorary
Ray Gehling	2005	

### Committee Chairpersons

Margery Aukstikalnis	Editor Laurel Lake Ledger
Barbara Green	Water Testing Committee
Barbara Dumont	Nominating
Jack & Barbara Dumont	Annual Meeting/Family Picnic
Charlie Brackett	Canoe/Kayak Race
Jay McNamara	Dresser-Freidman Sunfish Regatta
Perry Nadeau	Membership/Parade of Boats/Boat Rules
Don Austin	4 <sup>th</sup> of July Celebration
Jack Aukstikalnis & Jim Baldwin	Barbershop Concert
Elizabeth "Chip" Baker	Swim Club Representative

### THE DEPOT GENERAL STORE



585-3385  
CORNER OF RTE 119  
FITZWILLIAM, NH  
NORM & KRIS BERUBE

Propane Fill Station – NH Lottery  
O.H.R.V. Registrations – Live Bait – Hardware  
Faxes – Deli – Pizza – Groceries & Lots More

Thanks again to Norm and Chris Berube  
for helping with the selling of the Flares  
for the 4<sup>th</sup> of July activities!

For advertisement information call Margery Aukstikalnis, 585-9274 or email [margeryauk@prexar.com](mailto:margeryauk@prexar.com). I will refer you to the new publisher.

## 2003 Laurel Lake Water Test Results

The summer of 2003 was the 15<sup>th</sup> consecutive year that Laurel Lake has participated in the Volunteer Lake Assessment Program (VLAP). Again, VLAP set a new record with a total of 153 lakes throughout the state participating. This was the second year that coordinators and volunteer monitors followed the VLAP Quality Assurance Project Plan, resulting in a more meaningful comparison of our data with those of the other lakes taking part in the program.

The Franklin Pierce satellite laboratory was not able to analyze samples last summer, because of personnel and budget issues at the college. All testing was done at the DES laboratory in Concord.

Starting last year, the annual report format for VLAP was changed, so that on alternating years we will receive either a "Biennial Report" or an "Interim Report". The Biennial Report, which we received for the 2002 sampling season, contained the full version of Observations and Recommendations and a full statistical analysis of the test data. The statistical tests performed on the 2002 data indicated that there had not been a significant change in the annual mean chlorophyll-a, Secchi-disk transparency, and total phosphorous data since VLAP testing began in 1989. However, there had been fluctuation in the data during each summer and from year to year. The Interim Report for the summer of 2003 is abbreviated and does not contain any statistical analysis. Changes in lake trend analyses are detected over longer periods of time, so the program coordinators felt that this reporting method would be adequate to identify lake quality trends.

Weather conditions can affect lake test results, especially transparency and total phosphorous loading. The winter of 2002-2003 was cold and there was an unusual amount of snow in New Hampshire, resulting in a large amount of spring runoff. The weather pattern during the summer of 2003 was quite different from that of the two years before in that it was more variable. The summers of 2001 and 2002 were relatively warm and dry, so lake flushing rates were slowed. In 2003 we had a little bit of everything - a cool and rainy spring and then it became hot and dry. By mid-July surface water temperatures were at their maximum. August brought a mixture of rain, thunderstorms, warm and cool, dry days. This variability makes it difficult to draw any conclusions about the affect that the weather might have had on surface water quality last summer.

Whenever we find a tributary flowing into the lake we collect a sample to test for total phosphorous and other parameters. Last summer we had the opportunity to collect samples in June, July and August. Elevated total phosphorous was detected consistently in the Keene Ave. tributary. In August we also tested for *E. coli*, and found elevated counts in that tributary near its entrance into the lake. We plan to collect additional stream samples in that area this summer.

### Total Phosphorous

Phosphorous is the limiting factor for plant and algal growth, and is the most important parameter measured. **The median summer total phosphorous concentration was 11µg/L in the upper layer of New Hampshire lakes, and 14 µg/L in the lower layer.**

The 2003 Laurel Lake data for the upper layer show that the phosphorous concentration *decreased* from June to July and then *increased* slightly from July to August. At each sampling event the concentration was *less than* the state median.

Phosphorous concentration in the lower layer also *decreased slightly* from June to July, and then *increased* slightly from July to August. The concentration in June and July was *less than* the state median, while the concentration in August was *slightly greater* than the state median. The historical data show that the 2003 mean lower layer phosphorous concentration (for the three months) is *slightly less than* the state median.

Overall, visual inspection of the historical data for both layers shows that the average annual concentration has *fluctuated* since monitoring began in 1989. There is important information elsewhere in the Ledger about how each resident can help to limit phosphorous from entering the lake.

### Water Clarity (Secchi disk)

The clarity of the lake water can be affected by the amount of algae and sediment from erosion, as well as the natural colors of the water. **The average summer transparency of New Hampshire's lakes and ponds is 3.7 meters.**

The data for last summer show that the in-lake transparency *increased gradually* from June to August, most likely because of the large amount of melting snow and rain early in the spring and the decrease in rainfall as the summer progressed. The 2003 average transparency (5.3 meters) was *greater than* the state mean. Visual inspection of the

historical trend line shows that the average annual transparency *has fluctuated* since monitoring began in 1989. We can help maintain clarity by stabilizing the shoreline to prevent erosion.

### **Dissolved Oxygen**

A DES biologist came to Laurel Lake last July to assist with sampling to determine whether oxygen becomes depleted in the lower water layer as the summer progresses. Water holds less oxygen at warmer temperatures. The results showed *low* oxygen levels in the bottom three meters at the deep spot of the lake. As stratified lakes age, biological decomposition of organic matter depletes oxygen in the lower layer. When oxygen is depleted, the phosphorous that is normally bound up in the sediment can be re-released into the water column, providing nutrients for algae and plants.

### **pH**

pH (acidity) is measured on a logarithmic scale of 0 to 14, with an ideal pH for fish between 6.5 and 7.0. Lake pH is important to the survival of fish and other aquatic life. This season, as in the past, the average pH at the deep spot was *slightly acidic*, ranging from 5.8 to 6.5. When organic material near the lake bottom is decomposed, acidic byproducts are produced. The mean pH value in the upper layer of New Hampshire's lakes and ponds, including Laurel Lake, is 6.5. There is not much that can be done to effectively increase the pH of the lake because of the granite bedrock and acid rain.

### **Acid Neutralizing Capacity (ANC)**

The buffering capacity or ANC describes the ability of the water to resist changes in pH by neutralizing acidic input such as acid rain. As in the past, the ANC of the upper layer of the lake is *much less* (2.33 mg/L) than the state mean (6.7 mg/L), so the lake is "*critically sensitive*" to acid precipitation.

### **Conductivity**

Increases in conductivity (the ability to carry an electric current) indicate the influence of human activities on surface water quality. The conductivity in Laurel Lake is *relatively low*, and *less* than the state mean.

### **Chlorophyll-a**

Chlorophyll-a, a pigment in plants, is an indicator of the abundance of algae. The data for the summer of 2003 show that the chlorophyll-a *increased slightly* from June to July, and then *increased* from July to August. The Laurel Lake chlorophyll-a concentration was *less* than the state mean. The chlorophyll-a concentration has fluctuated, but has not continually increased or decreased since monitoring began in 1989. The concentration on each sampling event was *less than* the state mean.

Algae naturally occur in all lakes and ponds and depend on phosphorous as a nutrient. Excessive growth can become a nuisance, so it is important to try to prevent phosphorous loading as much as possible.

The predominant species of phytoplankton (microscopic algae) found in the lake last summer were two golden-brown algae (*Dinobryon* and *Chrysozooecia*) and a diatom (*Tabellaria*). These phytoplankton are typical of NH's less productive lakes.

### **Bacteria (*E. coli*)**

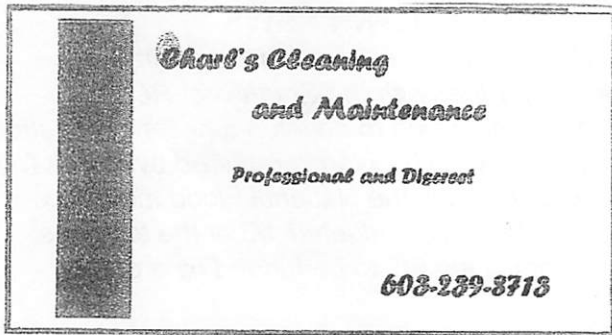
*E. coli* is a normal bacterium found in the large intestines of humans and warm-blooded animals. It is used as an indicator of fecal contamination because it is easily cultured and its presence in the water, in defined amounts means that sewage *may* be present.

Water samples collected at North Beach, South Beach and the Swim Club all yielded *low* concentrations of *E. coli* (<10 per 100 mL). Swimming is considered safe when there are no more than 88 *E. coli* per 100 mL in any one sample.

A sample from the Keene Ave. tributary, collected in August, yielded an elevated *E. coli* count. Although below the state limit for recreational waters that are not designated beaches (<406/100 mL), this area warrants further investigation.

Volunteer lake monitors in 2003 were Bruce Knight, Craig Heatley, Margery Aukstikalnis, Phyllis Lurvey and Barbara Green. Additional help was provided by Caroline and Craig Heatley, Jr.

*Note: The information in this report is a summary of highlights from the 2003 Interim Report for Laurel Lake, Volunteer Lake Assessment Program, New Hampshire Department of Environmental Services.*



## Summer 2003 Weed Survey

Volunteer "Weed Watchers" searched Laurel Lake again for nuisance aquatic plants on September 5. They paddled around the entire perimeter of the lake on the lookout for troublesome plants like milfoil, the particularly invasive weed that has been found around the state and in nearby towns.

Growth of aquatic plants was moderate in the summer of 2003, and similar to the last couple of years. Eight different types of native plants were identified, which were all non-invasive. Again, **no milfoil** was found. Pipewort and Floating heart were, as usual, the most common native species present around much of the shoreline. For those curious about Pipewort, it is the plant that has green spikey leaves in the shallow lake bottom early in the summer. Later it sends up a single tall, leafless stalk with a small white or grayish button on top that sticks out above the water's surface.

Please continue to keep Laurel Lake free from exotic/invasive weeds! Make sure that boats that have been on other lakes and ponds are not transporting plant material to Laurel Lake. Boats should be washed off with warm water, away from the shoreline, before launching them in the lake. Remember that one invasive weed can wreck havoc on the lake. We hope to survey the lake more than once this summer. Anyone who is interested in helping out can contact Barbara Green (585-9059) or Margery Aukstikalnis (585-9274) for more information.

*Weed Watchers: Margery Aukstikalnis, Debby Nance, Anne Korjoff, and Barbara Green*

## Boating Safety Course

With specific regard to the boating safety, I think that the important comment to be made again is that there is a real hard and fast requirement laid on by the state that we all must be aware of. *There is a requirement for us all to take and pass the basic boating course.* That requirement is "aged" such that the kids have to do it now and us old folk have some leeway - no pun intended!!

### Age requirements are ;

1. No one under the age of 16 years may operate a boat with a motor of greater than 5 horse power without an adult on-board.
2. No one under 16 years of age may operate a Personal Water Craft or ski craft in New Hampshire.
3. Boaters born on or after 1 Jan 1983 must have boating certificates (completion of water safety course) by 1 Jan 2002. One year later, that requirement extends to any one born on or after 1 Jan 1977. Each successive Jan 1<sup>st</sup> to boaters born on or after 1 Jan 1973 (2004), 1967 (2005), 1963 (2006), 1957 (2007) and everyone by 2008! Not easy to follow, but there is some logic if you read carefully.

There are some exceptions to folks who have some sort of certificate from other states and/or the USCG.

The course, as you well know, is available from several sources. The easiest is the "Nautical Know How" in Florida.

Their full address is; Nautical Know How, INC  
5102 SE Nassau Terrace  
Stuart FL 34997  
Phone 888.297.2076  
FAX 561.288.6594  
[www.boatsafe.com](http://www.boatsafe.com)

They will very clearly explain that there are several methods to complete the course and the cost associated thereto. This information needs to be shared as there will be some poor soul who has an accident and will be found liable. Insurance companies will be looking for these certificates soon, if not already.

*Submitted by Cal Perry*

LAUREL LAKE  
PROPERTY OWNERS



Phil  
Walling,  
Your  
Fitzwilliam  
REALTOR

As a cottage owner,  
I am a member of the  
Laurel Lake Association  
and serve as the board's Advisor

If you are considering listing your  
Laurel Lake property for sale, please  
call me at my office:  
603-352-2223 Ext. 223

I have buyers who are looking for  
Laurel Lake  
property exclusively and I look  
forward to working with you.  
To date I have coordinated  
the transfer of eight  
Laurel Lake properties.



603-357-2121

Thanks Phil, for inspiring advertising opportunities which will help support the Association's newsletter as well as provide service to local business men and women and information to Laurel Lake residents.



4<sup>th</sup> of July

It was voted at the Board of Directors Meeting to skip the floating band concert on the 4<sup>th</sup> of July in 2004. As of this printing, no alternative program has been planned, Watch the Fitzwilliam Newsletter for changes.

Please offer comments or suggestions to Don Austin, or any board member if you want to have this program reinstated, or if you have alternative suggestions. We welcome your ideas.

The Flare Affair is still alive! Flares can be purchased at Depot General Store or ordered from any board member. Follow the directions supplied with the flares for date and time.

## TOWN NEWS

(Feb. 23, 2004:) "The Board of Selectmen has decided to partner with the Southwest Region Planning Commission to develop a hazard mitigation plan for the town. This plan is required by FEMA for all towns enrolled in the National Flood Insurance Program.. We have budgeted 1/3 of the total cost with the remaining 2/3 to be funded by a grant.

Our first step is to form a committee that will meet every 3 or 4 weeks for a period of approximately six months. The selectmen would like members of the committee to include one individual from the board of selectmen, road agent, police chief, emergency management, planning board, historic district commission, conservation commission and the Laurel Lake Association.

Would you please indicate the member from your association who will serve on this commission at your soonest convenience? We are planning to begin the project shortly after town meeting and would like the committee appointed and all ready to go. Thank you."

Bruce Knight generously offered to represent the Lake Association in this important endeavor. As they are just beginning to study at the time of this letter, no further information is available.

## THE Regatta

Perhaps the prettiest event on the lake except the blooming of the laurel, the Dresser-Friedman Regatta, runs as silently as the Sunfish themselves. But the participants are as eager to sail and to win the race as in any other contest, and the party that follows, passing on the trophy pays tribute to the spirit in which the regatta was established; a friendly, neighborly challenge to spite mother nature, and beat the other "guy" to the end of the lake.

This started as a family affair, and is now open to any small sail craft sportsman who wants to simply dare to race, love to sail, and care to have fun.

This years regatta will be held September 4<sup>th</sup>, starting at the south end of the lake at 1 PM, Rain date is September 5<sup>th</sup>.



# Septic Systems and Lake Quality

## Introduction

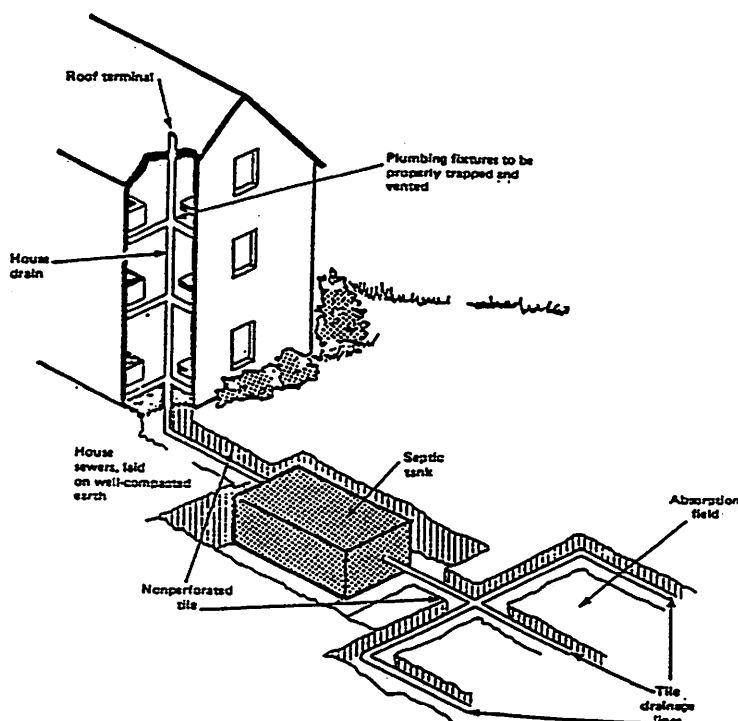
It is no secret that there is no public sewer system in Fitzwilliam. All residents have their own on-site disposal system, most commonly a septic system. Two studies completed on New Hampshire's lakes showed that while septic systems achieved their expected goals of collecting organic material and retaining bacteria, a high percentage of phosphorus introduced into septic systems was released by the leach field to the underlain bedrock where it flowed into the lake as groundwater seepage. The percent of phosphorus that is removed from a septic system is dependent upon the type of system, the soil type, the system age, and the distance to bedrock. However, the greatest reduction of septic system phosphorus is the result of recent legislation that reduced the amount of phosphorus that is allowed in detergents to only trace amounts (this law did not reduce the amount of phosphorus allowed in automatic dishwasher detergents). As a result of this law, it is calculated that a phosphorus reduction of approximately thirty to forty percent from septic systems to the lake is now occurring around unsewered shoreline property.

It is also not a secret that many existing septic systems receive higher volumes of water and waste than the system was originally designed to handle. This is due to the frequent use of dishwashers, garbage disposals, water softeners, washing machines, and other such water-using machines. In addition, a recent trend along the shorelines of lakes and ponds in New Hampshire is for homeowners to convert seasonal cottages to year-round homes.

Therefore, the New Hampshire Department of Environmental Services (DES) recommends that all property owners along lakes, ponds, rivers and streams assess their septic system to determine if it meets current demands. DES encourages owners of systems that do not meet current demands to upgrade or replace the system. This will help protect the quality of surface waters throughout the state.

## How does a Septic System Work?

Septic systems act as the digestive tract for household organic waste by utilizing bacteria to break down organic matter. The most commonly approved systems today consist of a septic tank connected to a leach field, as shown in Figure 1. The septic tank functions to separate the solids, both floating and settling, from the liquid material. (The accumulated sludge in the tank should be pumped out on a regular basis.) The liquid effluent is discharged from the tank through piping material and distributed over the leaching area, where the organic particulates are decomposed by bacteria, and other impurities are removed from the effluent before it percolates into the groundwater.



## **How is water quality related to septic systems?**

Certain nutrients and bacteria build up in organic waste from your home and are dissolved in the water that ends up in the leach field. In septic systems that are not functioning properly, the nutrients and bacteria that do not get filtered out eventually drain into the water table below the ground or drain into nearby streams and lakes. Nutrients, especially phosphorus, are vital to plant and algae growth. High levels of phosphorus, however, act as a fertilizer and create an environment where plant and algal growth is unnaturally accelerated. This deprives aquatic animals of vital dissolved oxygen and will speed up lake aging through the build up of plant and algal matter. Some types of bacteria can pose health threats to people who swim in contaminated surface waters or use water from the lake or nearby dug wells for drinking water purposes.

## **How can I be sure my system is working properly?**

The life-expectancy of many septic systems is in the range of only ten to fifteen years. However, septic systems often fail before their life-expectancy is reached because of their use in unsuitable areas or because of improper design, construction, or maintenance. In order to minimize the amount of phosphorus and bacteria build up, septic system owners must act responsibly when addressing waste disposal. Be sure to contact your state and local agencies to determine whether your existing septic system, meets all the regulations.

If your present system is up to date, follow these simple guidelines to help maintain the natural flow of nutrients:

- Compost your kitchen garbage rather than using a garbage disposal. This keeps many nutrients from directly entering the water system.
- Report any sudden increase in aquatic algae or plant growth in nearby streams, rivers, or lakes to the proper officials. This may be an indication of a phosphorus overload.
- Conserve water whenever possible. The more water in your septic system, the greater the possibility of nutrients leaching out through the system.
- Never flush toxic materials (such as chlorine, paint, oil, or pesticides) down the drain. Not only do you risk the possibility of tainting your own drinking water, but you will also kill natural bacteria in your septic system that break down organic waste.
- Avoid flushing bulky materials down the drain. These will often clog your system and slow the decomposition process.
- Use phosphate-free or low phosphate automatic dishwashing detergents.
- Run laundry or dishwashing cycles after a full load has been collected. This not only conserves water but will cut down on the amount of phosphates that drain into your septic system.

In addition to limiting what enters your septic system, you should have your septic tank pumped out by a licensed septage hauler on a routine schedule. DES recommends that septic system owners living along the lake edge have their septic system pumped and inspected every one to three years. Beyond the lake edge, DES recommends that residents have their system pumped and inspected every three to five years. During pumping, the service person can inspect the system for any problems and determine the loading to the system.

Also, you should be aware of the warning signs of a system in failure. Slower flushing or draining toilets and sinks, obvious septic smells, soft and moist ground over the leachfield, and even pooling water over the leachfield, are all signs that the system may be in failure. You should contact a septage hauler immediately if you observe any of these problems!

If your system is fifteen years or older, chances are that it is outdated, and is in need up being upgraded or replaced. If you plan to build a new septic system, it must be permitted by DES.

## **Under what conditions do septic systems get upgraded?**

The upgrading of old or failing septic systems could occur through various ways, including:

1. Voluntary replacement;
2. Proven failure and subsequent order to replace from the town health officer or the DES Subsurface Bureau;
3. Conversion from season to year-round use or addition of bedrooms; or
4. Engineering study conducted prior to the house sale showing evidence that the septic system was in need of repairs or replacement.

Upgrading an outdated failing septic system to an acceptable conventional system may not always be possible. Problems arise when the required design of the field is impractical or impossible due to lot restrictions and/or soil and groundwater conditions. For example, when soils are poor (i.e., low permeability) or wastewater flows are high the leaching field must be large. It may not be possible to construct large leach fields on small lakefront lots. Therefore, alternative waste disposal systems may need to be considered.

### **Alternative Waste Disposal Systems**

During the past several years, DES has approved many new innovative technologies for the treatment and disposal of wastewater to subsurface systems. All new "innovative/alternative" systems for on-site treatment or disposal of wastewater below the ground need approval from DES.

For further information regarding the maintenance or upgrading of septic systems, please contact:

N.H. Department of Environmental Services  
Subsurface Systems Bureau  
PO Box 95  
Concord, NH 03302-0095  
Telephone: (603) 271-3501



# 14<sup>th</sup> ANNUAL



## LAUREL LAKE ASSOCIATION CANOE & KAYAK RACE Fitzwilliam, New Hampshire

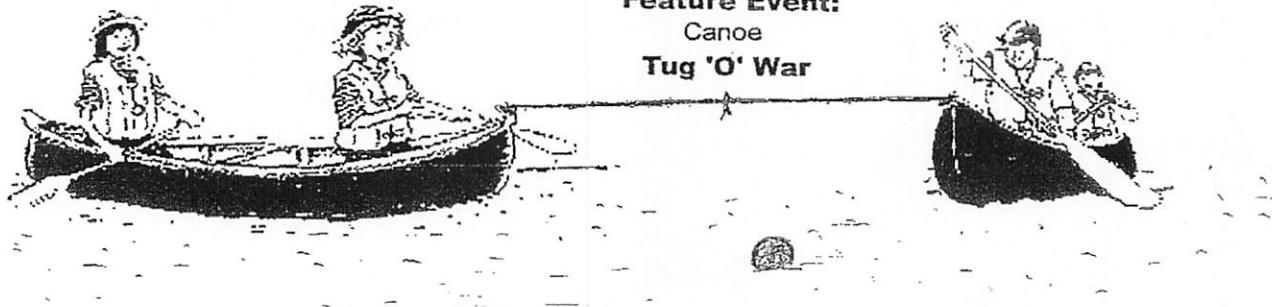
Saturday August 14, 2004

Sandy Beach, Laurel Lake Registration 9:30

🏆 AWARDS: Top three in each class. 🏆



Feature Event:  
Canoe  
Tug 'O' War



Children 16 and under 11:00 am  
Paddle Boat Race? 11:30 am  
1 Mile Race 12:20 pm  
2.5 Mile Race 12:30 pm

FREE!! 3/4 mile  
Largest Childrens Race in New England

For Additional Information Contact:

Bentshaft Paddles and Race Hulls  
Prohibited in 2.5 Mile Race

Charley Brackett (603) 585-7167

RECREATIONAL CLASSES

KAYAK CLASSES

RACING CLASSES

**No ALCOHOLIC BEVERAGES allowed  
before or during RACE !**

# 2004 Laurel Lake Association Membership Form



Membership Dues are \$5.00 for Adult Memberships and \$2.00 for children under 18

Each Household of paid-up members will be mailed a copy of the Laurel Lake Ledger

## Members

Last Name	First Name	Membership Type	Amount
_____	_____	A Y C	_____
_____	_____	A Y C	_____
_____	_____	A Y C	_____
_____	_____	A Y C	_____
_____	_____	A Y C	_____
_____	_____	A Y C	_____
_____	_____	A Y C	_____
_____	_____	A Y C	_____
<input type="checkbox"/>		<b>Total</b>	_____

Laurel Lake Association  
 161 Howeville Rd  
 Fitzwilliam NH 03447

## Permanent Address

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone Number \_\_\_\_\_ E-Mail Address \_\_\_\_\_

## Summer Address

Same as above

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone Number \_\_\_\_\_

All Applications and checks should be mailed to:

Laurel Lake Association  
 Perry Nadeau  
 7 Vine Street  
 Milford, NH 03055

Solicitor    Laurel Lake Ledger    Canoe Race    Other \_\_\_\_\_

**Thank you for your contribution**

Visit us on the world wide web at <http://home.earthlink.net/~pnadeau/LaurelLakeAssn/>

