

Shoreline Soundings

McGrath Pond - Salmon Lake Association

At long last, an MPSLA newsletter! Due to the busy schedules of board members, this is the first newsletter in nearly a year. WE NEED A VOLUNTEER TO TAKE OVER THE ALL-IMPORTANT JOB OF EDITING THE NEWSLETTER TWICE A YEAR. If you could do that, you would be providing a tremendous service to our Association. Please contact Barbara Allen if you're interested (465-2334 or bjallen@colby.edu).

NEW BOARD MEMBER AND WEBMASTER

Ron Purnell of Oakland joined the board of directors during the winter. He lives on McGrath Pond Road with wife Nona and son Benton. Despite his demanding job as administrator of Maine Eye Care, Ron is finding time to establish our new web site: www.salmonlake.org. Also, he and Benton will be part of the water-quality monitoring team for McGrath Pond this summer.

VERY IMPORTANT PEOPLE

Here are some VIPs we'd like to recognize for their commitments of time and energy to our lakes:

Nanci Loomis, 2004 Courtesy Boat Inspection (CBI) Coordinator. If you can volunteer a few hours each week at the Salmon Lake boat launch to help keep milfoil out of our lakes, contact Nanci at 872-0884 (home) or 465-4312 (camp). Special thanks to **Jim Sullivan**, our 2003 CBI Coordinator, with **Jim Howard**, **Nanci Loomis**, **Cynthia Massey**, **Ken Sparkes**, and **Jim Sullivan** our CBI volunteers.

Dick Enright and **Chuck Lakin**, 2004 water quality monitors for Salmon Lake. **April Gray** and **Chuck Lakin**, 2003 monitors.

Christine Souza, **Ron Purnell**, **Benton Purnell**, 2004 water-quality monitors for McGrath Pond. **John Brier**

and **Dave Couture**, 2003 monitors.

Doug McCafferty, buoy man, maintains the channel markers in the narrows.

Arthur Clark and **Richard Pellerin**, eyesore eradication specialists. They removed the diving board and slide from the abandoned float in lower McGrath Pond, making it less of an "attractive nuisance."

Melissa Halsted of KSWCD for providing wise counsel at board meetings and laying out the newsletter.

Don Mairs, nominating committee chair, is looking for three new board members. He'll accept nominations, including self-nominations, at 465-7924 or mairs@dialmaine.com

Very Important Dates

June 12: Courtesy Boat Inspection Training, BRCA Office, Belgrade Lakes (8:30 am - 10:00 am, 495-3600)

June 12: Private Road Association Workshop, North Belgrade Community Center (9:00 am - 12:30 pm, 495-6039)

June 19: Maine Lakes Conference, USM Gorham 8:00 am - 3:15 pm, 877-253-2511 The foremost meeting for lake advocates and associations, sponsored by Maine Congress of Lake Association (COLA) and Maine Volunteer Lake Monitoring Program (VLMP)

July 14: Milfoil Ramp Survey, Salmon Lake Boat Launch, Route 8 8:30 am - 12:00 noon. We need paddlers and spotters. Please call Mark Gray at 465-2548 to volunteer.

August 5: MPSLA Annual Meeting, Double D's, Route 8, N. Belgrade. 5:30 pm, buffet (\$8.00 pp), cash bar; 6:30 pm meeting. RSVP to MaryDenise Ferguson, 465-4485 or cccferg@adelphia.net.

Sept/Oct: Lakes Stewardship Course for the Belgrades, see page 3 for more information

McGRATH POND SALMON LAKE ASSOCIATION NEWS

2003 WATER QUALITY REPORT, SALMON LAKE AND McGRATH POND

By: Roy Bouchard / DEP/DEA Lakes Assessment Section

Salmon Lake was at near-bloom conditions in late August. Over the period since 1998, there were several years with minimum clarities near two meters in Salmon Lake, indicating high algae growth. A number of these events were later in the season (late September), but overall water quality is not particularly good despite a brief improvement in the early 1990's. More recent conditions are reminiscent of those of the mid-1980's, not terrible but certainly borderline. I suspect that a lot of this is due to weather factors which determine if the lake has a good or bad year. The influence of annual weather patterns on water quality has not been adequately explored in this lake or others.

Total Phosphorus (P) remains high, varying between 13 (2003) and 17 (1999) parts per billion in the upper water column. This is certainly enough to spur bloom or near-bloom conditions in a lake like Salmon. P is not necessarily a lot higher than in past years and varies by 2-6 ppb year to year. Deep-water P numbers vary a lot (from 20 to over 120 ppb) and indicate that the sediments release a lot of phosphorus. The strength of the summer thermal stratification (which restricts circulation in the lake) both promotes this condition and helps to keep the P from causing more problems in the lake. Other lakes with larger "deep holes" or ones that are somewhat shallower in relation to their size have real problems with this internal P source.

Oxygen loss is a good indicator of the lake's general condition as well. Salmon Lake continued to have very high dissolved oxygen (DO) loss, with August conditions usually showing water below 25 feet having almost no oxygen. This means that about 40-50% of the lake sediment is exposed to less than 1-2 ppm oxygen water, and this is the condition that promotes sediment release of phosphorus. It is this "internal recycling" that adds to the P load from development in the watershed and causes high algae growth.

McGrath Pond is a very different system. It is shallower and rarely stratifies for any length of time. As a result, oxygen conditions remain good most of the time, and there is little evidence of internal recycling of phosphorus. The surface water is usually at 10-12 ppb phosphorus, and there is little difference between the top and bottom waters. Because of this, the lake is right around the State's average clarity, and sometimes the Secchi disk hits bottom before going out of sight. If anything, this lake has gotten a little clearer since the early 1980's. Again, this may reflect weather differences, with drier than normal years helping some lakes that do not recycle a lot of phosphorus. However, analysis of lakes statewide suggests that the probability of algae bloom events starts to go up significantly if a lake regularly exceeds 12 ppb. This means that McGrath's good water quality could be quite easily disturbed if poorly planned development and road building increase in the watershed.

Contact: Roy Bouchard: (207) 287-7798 or 287-3901, {fax -7191}

Address: Maine Dept. Environmental Protection State House Station 17, Augusta ME 04333

E-mail: roy.bouchard@Maine.gov

DEP Website <http://www.state.me.us/dep/index.shtml> **Land and Water Quality, Lakes Page**

Other Lakes information on PEARL at <http://pearl.spatial.maine.edu/>

REGIONAL LAKE ASSOCIATION MEETING – MARCH, 2004

By: Barbara Allen

Roy Bouchard, BRCA President, and Maggie Shannon, BLA President and Maine COLA Executive Director, hosted a well-attended and productive meeting for representatives of all the lake associations in the Belgrade Region (including seven from MP-SLA!). Highlights were:

A presentation on the **Inland Harbor Master (IHM)** law by Colonel Tim Peabody of the Maine Warden Service (MWS). The law enables towns to appoint an Inland Harbor Master (basically a constable) to enforce boating laws to the level citizens desire, which may be greater than that which can be provided by the MWS. There are currently six in the state and the record of their activity has been good. There was general agreement that an IHM for the Belgrades would be a tremendous asset to safety and preservation efforts on our lakes.

A presentation on **Conservation Easements** by Jack Sutton, Chair of the Belgrade Long-Range Planning Committee, and Denny Phillips, Chair of the BRCA's Kennebec Highlands Committee. Conservation easements provide an effective means for protecting open space and preserving the natural environment. Ceding development rights to a land trust can help the landowner by reducing property taxes, because land that cannot be built upon is less valuable. This in turn may enable the owner to retain and deed the land to children without fear it will have to be sold or subdivided to pay for property taxes in the future. A forum on conservation easements will be scheduled to take place over the summer.

A discussion of common issues, which included interest in combined informational meetings and newsletters, building membership, the rising cost of liability insurance, boating safety, fiscal responsibility for the milfoil challenge, and camp road maintenance.

Announcement of a **Belgrade Watershed Lake Stewardship Course** offered by the University of Maine Cooperative Extension next September and October in our area. The seven-week course is free, meets one evening weekly for 2-3 hours, and is the best bet for developing the capabilities of lake associations to understand and meet the challenges facing our lakes.

For information on any of these topics, please contact Barbara Allen at 465-2334 or bjallen@colby.edu.

BRCA COURTESY BOAT INSPECTION PROGRAM UPDATE

By: Maureen Maslak, CBI Coordinator

The enormous success we had in stemming the spread of invasive plants and in educating the boaters using our lakes and streams was due to the unstinting efforts of the Courtesy Boat Inspectors (CBIs), both paid and volunteer, on the six BRCA-member lakes in the Belgrades (East Pond, Great Pond, Long Pond, Messalonskee Lake, North Pond, and Salmon/McGrath Pond).

Each CBI, individually, spent many hours at the boat ramp meeting, greeting, and teaching boaters about the spread of variable leaf milfoil and hydrilla. They were responsible for preventing the spread of these invasives – and all of our CBIs, collectively, made it possible for us to report that we have had **no new infestations in the Belgrades!** Equally as important, we can report that almost every boater entering our lakes last summer encountered a CBI and was taught what role each and every boater plays in keeping our lakes clear of invasive plants.

Only ONE incident of finding invasive plants on a boat in the Belgrades was reported, and that happened during our first official weekend, on Memorial Day. The invasive plant was removed and disposed of and the owner then chose not to launch the boat into the lake until after he took it to be washed.

Each of our CBIs reported that, as the season went on, cleaner boats and more informed boaters were encountered at the ramps. In many cases, boaters thanked the inspectors for being on the ramps and doing such a good job of educating the public about the invasive plant problem.

More good news is that no invasive plants were found during the Invasive Plant Patrol dives and surveys on our six lakes.

We can all be proud of what we accomplished during the summer of 2003, but we must keep in mind that this is an ongoing battle that must continue as far into the future as we can see. Our next CBI training is scheduled for Saturday, June 12 at 8:30 am in the BRCA office, 172 Main St., Belgrade Lakes (across from Day's Store). If you wish to be trained as a CBI this summer, please call (207)495-3600 and reserve a spot. We'll post dates and times of additional sessions on the BLA web site (Belgradelakesassociation.com).

2003 FISHING REPORT

By: Doug McCafferty

Overall, the fishing in both Salmon and McGrath was good during the 2003 season. Anyone who was around the lakes just after ice-out last spring might have noticed a large number of dead white perch floating on the water. The kill was due to the below average snow cover and low temperatures during the winter. White perch seek the shallows of the coves and can freeze into the ice or suffocate. The lakes support a good-sized white perch population, and we saw no significant decline in the number of fish reeled in last season.

The brown trout fisheries are maintained by the Maine Department of Inland Fisheries and Wildlife's (IF&W's) stocking program. Six hundred 10-12 inch brown trout were released into Salmon Lake on October 9, 2003. The best time to bring in a good brown trout is between ice-out and early June, before they seek deeper water. They thrive in cool water conditions and normally seek the coolest water available.

As for bass fishing, IF&W reports that Maine provides some of the finest small- and large-mouth bass fishing on the east coast, with the Belgrade region being the best of the best! It



looks like our secret is out. McGrath and Salmon have a very healthy bass fishery, with good fishing throughout the year. The best bass fishing is from ice-out to post-spawning (mid-June), fishing close to shore. As water temperatures warm throughout the summer, good fishing continues off-shore in depths of 10-20 feet. Four bass clubs have registered for tournaments on Salmon/McGrath for the 2004 season; those dates are July 11 and 24, September 4 and 19.

2004 looks to be another good season. Take a child fishing! Get out there and wet a line...

The navigational aids (channel markers) that mark the narrows between Salmon and McGrath were back in place in early May. They will be removed on or about October 15. If anyone finds a marker that has broken away from its mooring, please contact Doug McCafferty at 465-3983.

You might want to check out a link at Maine Today.com that tracks articles about invasive aquatics: <http://outdoors.mainetoday.com/fishing/milfoit.shtml>.

(Doug McCafferty is an MP-SLA board member, Registered Maine Guide, and owner of Whisperwood Lodge & Cottages on Salmon Lake. Whisperwood promotes fish conservation and asks their guests to catch and release.)

TREASURER'S REPORT SPRING 2004

Current assets are as follows:

Savings	\$1,576.90
CD Savings	\$ 5.00
Certificate of Deposit	\$ 3,403.30
Checking	\$ 264.44
Petty Cash	\$ 20.00
Frances Fox Sandmel Education Fund	\$ 950.00
Total Assets	\$6,239.64

Respectfully Submitted,

John C. Loomis
Treasurer

2004 ANNUAL MEETING Thursday, August 5

Double D's Firehouse Tavern

Route 8 in North Belgrade

5:30 PM Hot and Cold Sandwich Buffet (\$8.00 pp)

Cash Bar (sodas and beer)

6:30 PM Program TBA

We need a head count for the buffet.

Please contact MaryDenise Ferguson at
465-4485 or cccferg@adelphia.net by August 1.

MILFOIL & OTHER INVASIVE AQUATIC PLANTS ARE FOREVER

So We Need Your Help To Maintain Our Health!

McGrath Pond and Salmon Lake received a clean bill of health for aquatic invasives last year when scuba divers were brought in to survey plant species around the public boat landing on Salmon Lake. ***We Need Your Help To Maintain Our Lakes' Health!***

Most of the surrounding New England states, including Vermont and New Hampshire, are currently spending millions of tax dollars per year to control the spread of milfoil and other invasive aquatic plants. These plants have infested their lakes and streams, decreasing property values and causing irreparable damage to the natural habitat. All of the research and work that has been dedicated to the eradication of invasive aquatics indicates that ***the most effective and inexpensive approach to the problem is PREVENTION.***

That is why the McGrath Pond-Salmon Lake Association needs your help in raising \$1500 to pay for our Courtesy Boat Inspection Program this year. That is what it costs to hire a single inspector to work from 6:00 a.m. to 9:00 a.m. from Memorial Day to Labor Day to help prevent milfoil and other invasive aquatic plants from infesting our beautiful lakes. Messalonskee Lake and the Belgrade Stream are already infested. Pleasant Pond in Gardiner and Cobbossee Stream in Winthrop are already infested. We must do everything we can to prevent McGrath Pond and Salmon Lake from becoming infested!

You can help in several important ways:

- 1.) Add a contribution to your annual membership form (enclosed) for the Courtesy Boat Inspection Program. Raising \$1500 will help us hire the Courtesy Boat Inspectors that we need to help keep our lakes healthy! All contributions are welcome and appreciated.
- 2.) Contingent on raising the necessary funds, we will hire Courtesy Boat Inspectors to work at the public boat launch on Salmon Lake. Anyone who is interested should call Maureen Maslak of the Belgrade Lakes Association at 495-3600 and leave contact information. We would like to hire Courtesy Boat Inspectors to work from 6:00 a.m. to 9:00 a.m. every day from Memorial Day to Labor Day. Starting salary is \$7.00 per hour. People hired must be at least 16 years old. Training and a free T-shirt will be provided.

Let's keep milfoil out of our lakes. Thanks so much for helping!

ASSISTANCE FOR ROAD ASSOCIATIONS

PRIVATE ROAD ASSOCIATION WORKSHOP

Saturday, June 12, 2004, 9:00 am - 12:30 pm

North Belgrade Community Center, Route 8, N. Belgrade

This half-day session will focus on several issues common to road associations. Topics will include: road maintenance, legal issues including the private way law, and organizational development. A lawyer will be on hand to answer specific legal questions and open discussion will be encouraged. It is our goal through this workshop to help your road association deal with the issues that keep your road from being maintained properly. Lack of road maintenance has been identified as a major threat to Maine's surface water quality. As a result this workshop is funded through the Clean Water Act, Section 319 administered by the Maine Department of Environmental Protection.

Directions:

From the South: ~2.5 miles north of the junction of Routes 8 & 11 (on the left, just a little north of sawmill)

From the North: ~3.9 miles south of the junction of Routes 137 & 8 (if you get to sawmill you passed it)

Registration: This workshop is free, snacks will be provided. Please call Mike Little @ 495-6039 or Nate Sylvester @ 622-7847 x3 for more information or just show up.



KENNEBEC COUNTY SOIL AND WATER CONSERVATION DISTRICT PROJECT

We are entering the last few months of Phase 2 of the Salmon-McGrath NPS (Non-Point Source) Pollution Reduction Project we have been working on since 2000. During the final summer we will be wrapping up the final projects and offering workshops targeted at road associations.

For each workshop, we look for a road association that is willing to host us for a morning. During the workshop, we walk the road with the attendees (mostly people who live on the road) and talk about potential repairs and maintenance issues. We also will look at any shoreline or buffer issues on the road and any other potential NPS problem on the road.

We are currently looking for locations to hold several workshops this summer. If you are interested in having us work with you on your road issues this summer, please contact Nate Sylvester by e-mail nate@kcsxcd.org or by phone at 207/622-7847 x 3.

HOW WELL DO LAWNS FILTER RUNOFF? DIG DEEP FOR THE ANSWER

By: John Barten, Water Quality Mgr. Hennepin Parks. Written for Focus 10,000-Minnesota's Lakeside Magazine

With the coming of summer, local, regional and statewide publications have been printing numerous articles extolling the virtues of lush green lawns as filters for runoff water, and encouraging the use of fertilizers and herbicides to grow these lawns. As concerned lake users, we need to be aware of the limitations of lawns as runoff filters, and make an informed assessment of what is really needed to maintain an adequate lawn.

Research done at Penn State University as well as other places shows that properly established and managed turf on good soils can filter runoff water. While this may be true, it is also true that most lawns are not established on good soils.

During the home construction process, most lots are repeatedly driven over with earthmovers, bulldozers, and trucks loaded with concrete and other building materials. After the building is completed, the compacted ground is leveled, covered with one to two inches of black dirt, and then seeded or sodded. In many suburban lots, the ground is so hard that a sharp metal soil probe cannot be pushed more than two or three inches into the lawn. Unfortunately, neither grass roots nor rainfall can easily penetrate the compacted ground. **As a result of the compaction, the typical residential lawn cannot filter runoff like the test plots at research facilities.**



Compounding the compaction problem is the fact that turf grasses have a very shallow rooting depth (two to four inches). Effective infiltration of rainfall is limited to the top few inches of the turf, severely limiting the ability of turf to filter runoff. Conversely, native grasses, trees and shrubs have a rooting depth of two to three feet, resulting in a much higher rainfall infiltration capacity, and more effective filtering of runoff. In addition, the taller vegetation in natural buffer areas and landscape beds slows down raindrops and runoff water, allowing more time for infiltration. Therefore, **properly established and managed natural buffer areas and landscape beds have the capacity to infiltrate runoff much more effectively than turf areas.**

Another important point is that poor turf does not necessarily mean more pollutant runoff. A study of lawn runoff quality by Hennepin Parks showed that medium fertility lawns had a significantly higher suspended solids concentration than high fertility lawns, but medium fertility lawns had a much lower phosphorus concentration in runoff water. This suggests that **lush lawns are more of a water quality problem than poorer turf lawns.**

The reason that the lush lawns had such a high phosphorus concentration in runoff water is that they had phosphorus fertilizer applied to them. **Most lawns in Minnesota (approximately 80 percent) have soils that are saturated with phosphorus, and do not need any more added to**

them. Therefore, the only fertilizer that will not create a water quality problem is a phosphorus-free product. It does not make any difference what kind of phosphorous is applied; if your lawn has enough, whatever is added will just be washed off with rainfall runoff water. Adding phosphorus fertilizer to a lawn is like pouring coffee into a full cup. It is going to spill over. The good news is that we do not have to choose between poor lawns and clean lakes. Studies on golf courses clearly show that turf does not necessarily have to degrade water quality. The phosphorus concentration in golf course runoff water was one-half of the concentration in medium fertility lawn runoff, and one-fifth that from very high fertility lawns. The difference is that golf course operators do not apply phosphorus unless a soil test indicates a need for it. Many golf courses have very high quality turf, and good runoff water quality. In order to maintain high quality turf, golf course managers need to aerate the soil regularly to reduced compaction, overseed bare or thin turf areas, maintain adequate organic matter in the soil, and established turf on till subsoil to encourage a deeper rooting depth. By implementing these practices, and raising the mower cut height to three inches or higher, the impact of lawns on water quality can be significantly reduced.

However, the most important thing you can do for our lakes is to **insist on a true phosphorus free fertilizer product.** Remember, as golf courses have shown, you can have good turf and protect water quality by using a phosphorus free fertilizer.

**McGrath Pond – Salmon
Lake Association**

John Loomis, Treasurer
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