

the Water Column



A Publication of Maine Volunteer Lake Monitoring Program

Vol. 10, No. 1

Provided free of charge to our monitors and affiliates

Summer 2005

Join Us!
VLMP
Annual Meeting
July 30, 2005

Central Maine Community College, Auburn
8:30 AM - 1:00 PM

Inside

New Coordinators • Page 6

Invasive Plant Patrol Workshops • Page 13

Life Long Volunteers • Page 14

Nash's Lake, Calais, ME, by Carolyn L. Vose,

What's Inside

Annual Meeting	2
Lakeside Notes	4
PEARL Review Request	5
New Coordinators	6
Friend or Foe?	8
Quality Counts!	11
IPP Workshops	13
Life Long Lake Monitors	14



VLMP Staff

Scott Williams	<i>Executive Director</i>
Roberta Hill	<i>Program Director</i> <i>Maine Center for</i> <i>Invasive Aquatic Plants</i>
Laurie Callahan	<i>Special Projects Coordinator</i> <i>Invasive Aquatic Plants</i>
Ryan Burton	<i>Special Projects Coordinator</i> <i>Water Quality</i>
Jim Roby-Brantley	<i>Program Coordinator</i>
Linda Bacon	<i>QA/QC Advisor (Maine DEP)</i>

Board of Directors

Mary Jane Dillingham	(Auburn)	<i>President</i>
Bill Monagle	(Winthrop)	<i>Vice President</i>
Peter Fischer	(Bristol)	<i>Treasurer</i>
Mary Nelson	(Lovell)	<i>Secretary</i>
Dick Bredeau	(Boothbay)	
Poppy Connor-Crouch	(Poland)	
Tom Hannula	(Newport)	
Phoebe Hardesty	(Lewiston)	
Ken Holt	(North Turner)	
Gerry Nelson	(Lovell)	
Peter Vaux	(Orono)	

To Contact Us:

24 Maple Hill Road
Auburn, Maine 04210
207-783-7733
vlmp@mainevlmp.org
www.MaineVolunteerLakeMonitors.org

Editorial Staff

Scott Williams
Roberta Hill
Richard Jennings
Jim Roby-Brantley, Layout

Funding for this newsletter is made possible by grants from the US Environmental Protection Agency and the Maine Department of Environmental Protection, through Section 319 of the Clean Water Act.

Printed on Recycled Paper by:
Curry Printing & Graphics - Auburn, Maine

Please join the VLMP staff and volunteer monitors from throughout Maine at the

VLMP Annual Meeting

July 30, 2005

8:30am - 1:00pm

Central Maine Community College, Auburn

Here is our chance to come together and share our love of lakes and monitoring experiences. We look forward to seeing you all there!

8:30 Registration & Silent Auction Viewing

8:50 Welcome

9:00 Fishless Lakes

Emily Schilling, PhD candidate, University of Maine

9:30 The Use of Benthic Mats to Control Invasive Milfoils

Jim Chandler, Community Lake Association Executive Board,
Auburn Land Lab Director

10:00 Water Quality Monitoring Updates

Gleotrichia

Roy Bouchard, Maine DEP

Metaphyton

Scott Williams, VLMP

10:30 Break - Silent Auction Viewing

10:45 The State of Maine Lakes

Linda Bacon, Maine DEP, VLMP QA/QC Advisor

11:15 Deflecting and Detecting the Invasion:

The role of volunteers in the battle against invasive aquatic plants
Roberta Hill, MCIAP

11:35 Award Ceremony

12:05 Silent Auction Winners & Prize Drawings

12:20 Lunch

1:00 Board of Directors Meeting

1:15 QC Re-certification Workshops on Lake Auburn

1:30 PEARL Group Interview at Brackett Environmental Center

VLMP Annual Meeting

Pre-Registration is Requested

Please call, email or return the form on the back of this newsletter.



Win a Beautiful New Kayak!

One lucky certified Water Quality Monitor or certified Plant Patroller will win this two person inflatable kayak with viewing panels. All you have to do to win is be there!

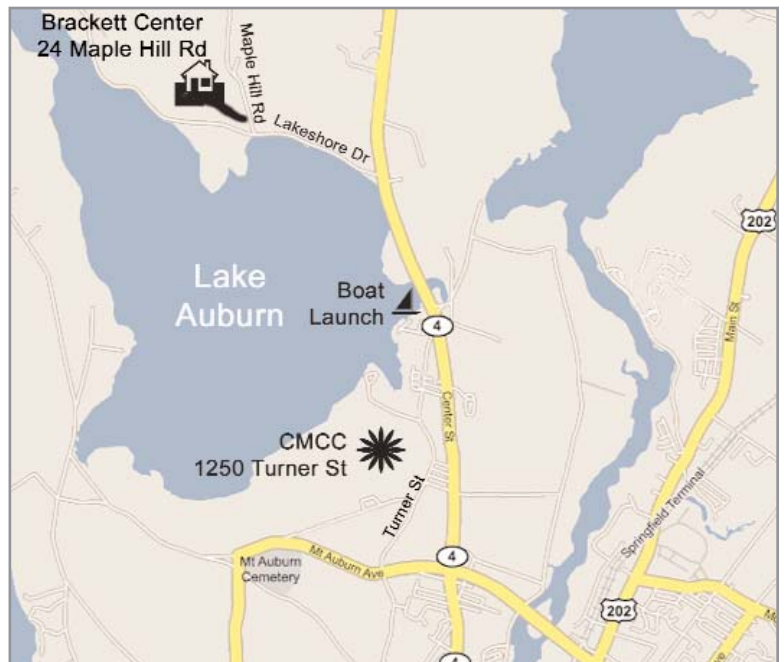
Special thanks to Clear Blue Hawaii for providing the boat at cost.

Meet with other volunteers and staff from VLMP and DEP

Free registration for all certified plant patrollers and volunteer monitors

Fabulous morning refreshments and lunch from Nezinscot Farm

Directions to the VLMP Annual Meeting at Central Maine Community College



From Maine Turnpike Exit 75 (formerly Exit 12), Auburn:

From the exit turn left on to Route 4 following signs toward Auburn (and directional signs for Central Maine Community College). Go north for about 6 miles which takes you to Center Street. Continue on Center Street through town, past fast food restaurants, etc. Just under the overpass and before the Auburn Mall, turn left at the signal on to Mt. Auburn Avenue. At the next traffic light bear right on to Turner Street and CMCC is 1.3 miles on your left.

From Maine Turnpike Exit 80 (formerly Exit 13), Lewiston:

Go toward Lewiston on Lisbon Street 1.2 miles to the 4th light and turn right on to East Avenue. Go about 1.4 miles and turn left at the 6th light on to Russell Street. Continue on Russell Street to the overpass. Take the overpass into Auburn and continue to the first traffic light (do not exit before the end). At the traffic light bear right on to Turner Street and CMCC is 1.3 miles on your left.

Where to park on campus:

The visitors parking lot is located next to the main entrance in Jalbert Hall. As you face the entrance the parking lot is on your left.

Lakeside Notes

By Scott Williams



Scott Williams
Executive Director

Spring Showers Bring May Flowers, but.....

Everyone is talking about the weather - again! The spring of 2005 may be one of the wettest on record in Maine. First came the runoff from the substantial winter snow pack, followed by several major rain events. There was a brief period in April when the precipitation let up, and it looked like "mud season" would be shortened. Soon after that, however, the rain began in earnest, and for nearly three weeks it has persisted throughout much of the state.

In recent days, many volunteer lake monitors have reported "unusually poor" early season Secchi disk readings for their lakes. This comes as no great surprise. Moderate precipitation and runoff from lake watersheds can wash out unstable road surfaces and ditches, erode stream channels and shoreline areas, and pick up phosphorus and other pollutants from lawns, driveways, rooftops and other sources, as it rushes toward the lake.

In addition, lakes and ponds are generally somewhat less clear during the period just after "ice-out," when the lake has "turned over," or mixed. This

process brings sediment and debris from the bottom to the surface and it takes time for all the suspended matter to sink down through the water column. Moderate winds, rain and runoff can extend this period for several weeks. One last, but not the least influential factor to consider, is that most lakes and ponds, regardless of water quality, experience *natural* diatom (algal) blooms in the spring (and fall) when the water is cold and silica, which gives structure to tiny, intricate diatoms is abundant. Diatom blooms can reduce water clarity measurably. The combined effects of these factors could certainly depress Secchi disk readings in the short term and perhaps well into the summer for some lakes.

What many of us are seeing (or not) with early spring transparency readings is part of the natural variability that makes lake ecosystems so interesting - and challenging - to comprehend. Diatom blooms subside as the water warms, and the debris that was swept up during the spring turnover eventually settles back to the bottom. But the

phosphorus that has been brought into our lakes this spring may have a longer lasting effect, as water temperatures climb through the summer, and blue-green algae begin to dominate.

Volunteer lake monitors are encouraged to take many Secchi disk readings through the spring, summer and early fall because one or two readings taken during the season could paint a very misleading picture of water quality. Our best chance of being able to "see through" all of the factors that cause so much annual and seasonal variation in lakes is to take readings regularly over a substantial number of years. If your lake is looking murky now, thank you for having documented that observation. Please continue to take readings throughout the summer, and keep up the great work!

More information about this topic and, others, will be presented at the VLMP Annual Meeting on Saturday July 30. Please join us at Central Maine Community College in Auburn.

Help Review the PEARL Website

Is the topic of Maine lake ecology interesting to you?

Have you heard of the PEARL website?

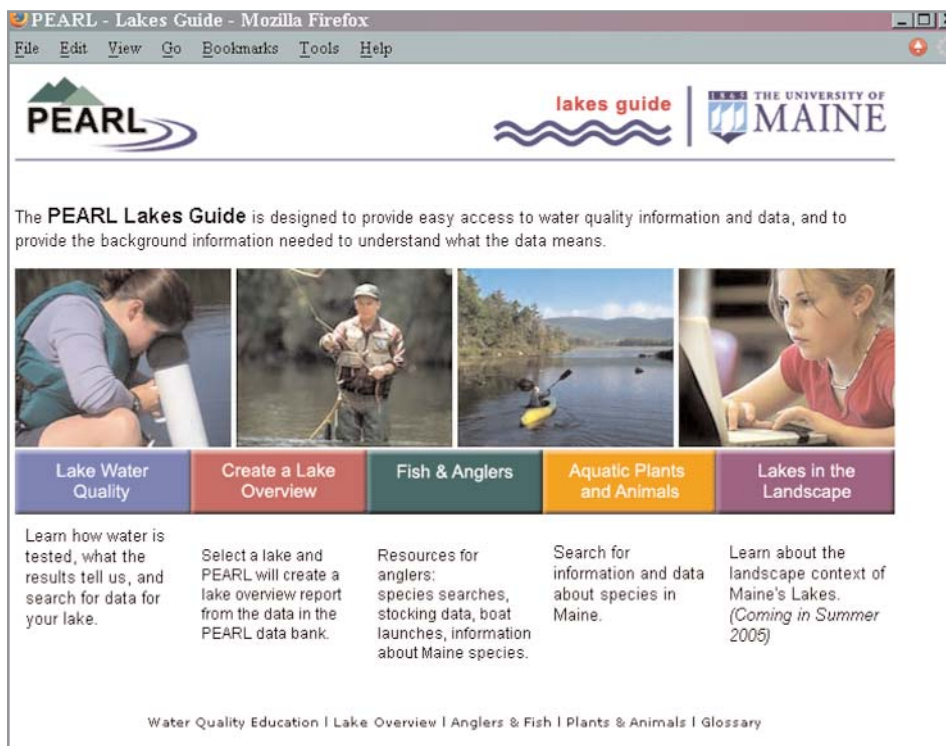
Have you checked it out lately?

Are you interested in providing input to help improve this resource?

On Saturday July 30th, directly following the VLMP Annual Meeting, a group interview will be conducted about the PEARL website at the Brackett Environmental Center in Auburn. Sara Colburn McCabe, a graduate assistant at the George J. Mitchell Center for Environmental and Watershed Research has been working on the website as part of her graduate thesis project at the University of Maine, and is looking for volunteers to participate in the meeting. In the process, participants

will learn about the PEARL website, www.pearl.maine.edu which contains environmental data and information for the state of Maine (it probably contains information on your lake!!), and have a chance to provide input on how this resource may be improved. Comments gathered from this group interview will be used to identify the specific needs and concerns of lake monitors concerning what data are most useful on the site, how environmental data and information can be presented in the most meaningful

way, and what background information is needed to aid in the interpretation of data. The meeting will take a little over an hour and promises to be informative and interesting. If you are interested in volunteering to be a part of this valuable research for the University of Maine, please contact Sara McCabe at 581-3270 or email her at sara.mccabe@umit.maine.edu. Also, feel free to check out the site on your own and send any comments to her.





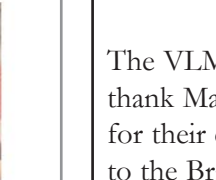


PEARL - Lakes Guide - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

PEARL lakes guide THE UNIVERSITY OF MAINE

The PEARL Lakes Guide is designed to provide easy access to water quality information and data, and to provide the background information needed to understand what the data means.

 Lake Water Quality	 Create a Lake Overview	 Fish & Anglers	 Aquatic Plants and Animals	 Lakes in the Landscape
Learn how water is tested, what the results tell us, and search for data for your lake.	Select a lake and PEARL will create a lake overview report from the data in the PEARL data bank.	Resources for anglers: species searches, stocking data, boat launches, information about Maine species.	Search for information and data about species in Maine.	Learn about the landscape context of Maine's Lakes. (Coming in Summer 2005)

Water Quality Education | Lake Overview | Anglers & Fish | Plants & Animals | Glossary

Thank You

The VLMP staff would like to thank Mary and Brock Gilbertson for their donation of a microwave to the Brackett Environmental Center.

See the support section of our website for other equipment needs and volunteer opportunities on our wish list.

Volunteer Coordinators

Early in the development of the VLMP, volunteers started taking on much more than data collection. Helping to maximize resources to achieve our lake monitoring mission, volunteers have also become involved in the management of the program. We have an all volunteer Board of Directors, volunteers who organize and enter the data, and volunteers who help coordinate volunteers in regions throughout Maine.

Data Coordinators (DC) are volunteers who enter every Secchi reading, Dissolved Oxygen profile and other data from your data forms into our database. DC's are part of the quality control chain that triple checks each data form.

Regional Coordinators (RC) help coordinate Invasive Plant Patrol and Water Quality workshops, respond to requests from volunteers, and keep the VLMP mailing list up-to-date. At the end of each season RC's contact individual volunteers, ensuring that all data forms are returned and properly completed.

Several new volunteer Coordinators have joined the VLMP this year. We will introduce them in this and future issues of the *Water Column*.

Regional Coordinator for Franklin & Somerset Counties: Elizabeth Payne

I am delighted to serve as the Volunteer Regional Coordinator for Somerset and Franklin Counties and pleased to be part of VLMP, which plays a critical role in safeguarding Maine's lakes. Five generations of my family have summered on Wesserunnett Lake in Madison, a lake that has both a diverse ecology and a rich cultural history.

My great grandparents rode the trolley from Skowhegan to Wesserunnett. From their cottage they walked to Lakewood to see good theatre at one of the oldest summer stock playhouses in the country. My great uncle worked at the busy Lakewood marina. My grandfather is rumored to have played tennis with Humphrey Bogart on the Lakewood tennis courts.

Having spent at least part of every summer on Wesserunnett, I too have enjoyed the theatre and tennis, but my best memories are of being on the water. When I was a little girl, my family stayed on the edge of one of the lake's marshes in a log cabin built by my great-great uncle. My sister and I would paddle a rowboat around in the murky channel that had been carved with the help of another of my ancestors out of the cattails. We caught in buckets green frogs and painted turtles and red-bellied bloodsuckers, and when we were really fast, lightning quick pickerels. We picked yellow pond lilies and cut cattails for bouquets. These childish activities were for me the beginnings of a lake ethic—a belief in my obligation to help conserve the lake.

Over the years the lake accommodated my changing desires. When I was a teenager and too cool to catch frogs, it was large enough to gratify my need for fun, friends, and speed. When I was a young mother, the shore was a gentle place for my babies to splash and play. Now the marshes pull me again, especially in early morning, as



Elizabeth Payne

Regional Coordinator for Franklin and Somerset Counties and
Wesserunnett Lake Water Quality Monitor

the rich habitat draws huge numbers of red-winged blackbirds, grackles, warblers, swallows, ducks, and other wildlife. In the slant light of early morning, from my canoe, I witness nature's drama: the tenderness of a loon toting its baby on its back, the spectacle of an osprey plunging for fish, the patience of a great blue heron frozen on the shore waiting for breakfast, the audacity of a bald eagle stealing the osprey's catch.

To see cleanly to the bottom of the lake is to know as Thoreau did that "heaven is under our feet as well as over our heads." Unfortunately because we love our lakes so much it's a tenuous heaven down below. Wesserunsett, like many lakes in Maine, suffers from over-development. Its water quality is threatened by erosion and runoff from poorly maintained camp roads and inadequate shore buffers. The watershed is under additional strain from the beginnings of second-tier development. There is always the specter of inadvertent introduction of invasive plants.

Water analysis in recent years indicates that water quality may be declining. My lake ethic continues to develop though much credit for it goes to my father Will Reid, who has spent many years voluntarily monitoring Wesserunsett's wildlife, plants, and water quality. He has taught me to appreciate the complex relationship that exists among the animals and plants in the lake, and how their health is linked to the water itself and its delicate chemical balance.

I hope to instill in my two daughters the lake ethic my father has handed to me. Since the lake has given me so much enjoyment, I'm glad to be able to give a little back by participating in VLMP's crucial efforts to monitor and conserve Maine's lakes taking Secchi disk readings, measuring dissolved oxygen and total phosphorus, and participating in native plant inventories.

Data Coordinator for Franklin & Somerset Counties: Lew Wetzel



Lew Wetzel

Data Coordinator for Franklin and Somerset Counties and Pleasant Lake Water Quality Monitor

In my earlier years, a thought that was always in the back of my mind was to reach the age of 75 and see the entry of the 21st century. Looking back on my career after retirement at age 75, I realize that my choice of work has always been hobby driven. As a young boy, electrical circuits held a high interest for me so it was not surprising that I chose Electrical Engineering for my college studies. My first job out of college was on the construction of a power plant for Pennsylvania Power & Light. During those four years I found amateur radio and photography for hobbies.

When construction of the plant was finished, an ad for an electronic engineer at Picatinny Arsenal attracted my attention. I applied and found myself working on the development of the shape charge missile. It was a top priority defense project during the Korean War and was a very intense and interesting year, in which I was able to take the project from an idea to production of an armor piercing round of artillery ammunition. I found government work very restricting and took this opportunity to enter the world of broadcasting.

For 19 years, I worked in design, consulting and engineering management of radio and TV stations. As Director of

Engineering for Triangle's Broadcast Division of 16 AM, FM and TV stations, I was responsible for the technical operation of these stations and also took the initiative to do some research that resulted in getting the aural power of all television stations lowered to eliminate interference in the color picture. I also did the research, with Harold Kassens of the FCC, that introduced circular polarized transmitting antennas for FM and Television making it possible to receive FM radio broadcasts in automobiles.

When the Triangle group of stations was sold in 1971, I took the opportunity to go into engineering sales and moved to Casco, Maine in August, 1971. The product line of the Maine company included the RF antennas, filters and transmission line for FM and TV installations. After two years, there were production problems over which I had no control, so I accepted a sales position in high intensity tower lighting. This eventually led to airport lighting sales. I was licensed as a pilot in 1946 and have multi engine, instrument and float ratings, so calling on airports was more like fun than work.

Since retiring five years ago, I have served on several Casco town committees and have been involved with the Pleasant Lake and Parker Pond Association. This organization is about 40 years old but has just become very active since the invasive variable leaf milfoil problem entered the Southern Maine area. Last year I volunteered to be the monitor for Pleasant Lake and have volunteered to be a lake water quality monitor data coordinator.

My hobbies continue to be amateur radio, computers, photography, astronomy, music and water activities including boating, swimming, fishing and diving.

Maine Center for Invasive Aquatic Plants *presents*



A Learning Kit

Learn How to Rule Out Maine's Eleven Most Unwanted Invasive Aquatic Plants

Preventing the spread of invasive aquatic plants through education and boat inspections is essential to protecting Maine's water resources. But 100% effectiveness is unlikely no matter how comprehensive the prevention effort. At some point, an invader is bound to slip through the cracks. It is very important for people who enjoy Maine's lakes, ponds and rivers to learn how to recognize a suspicious plant when they see it, and know exactly what steps to take when they do. The Maine Center for Invasive Aquatic Plants (MCIAP) announces a unique new educational tool that teaches exactly that! It will be available for a select number of schools, lake associations, civic clubs and other pilot groups in fall of 2005.

The *Friend or Foe? Learning Kit* has been designed to provide a quick, easy, hands-on method for teaching people

with no previous plant identification experience how to quickly determine if a plant in question is a "friendly native" or a "suspected invader." The *Kit* contains a collection of several true-to-form plastic plants (some representing invasive species, others, harmless natives), a set of 25 *Quick Keys to Ruling*



MCIAP's new learning kit teaches students to identify if a plant is a *Friend or Foe*.

Out Maine's Eleven Most Unwanted Invasive Aquatic Plants, a self-guided practice sheet (that may be reproduced for students, or simply used by the instructor to guide the activity), and a host of other resource materials, including an instructor's guide with background information and additional, hands-on invasive species lesson plans. At the conclusion of the exercise, it is recommended that participants keep their *Key*. (The handy, waterproof, pocket-folded keys may be reordered at low cost from MCIAP.)

A limited number of kits will be ready for testing by schools and other pilot groups in the fall of 2005. If you are interested in participating in the pilot program, please contact the Maine Center for Invasive Aquatic Plants at mciap@mainevlmp.org or 207-783-7733. Feedback from all pilot groups will help to refine the "final product." For those who do not make it into the 2005 pilot program, please stay tuned . . . MCIAP plans to shift the *Friend or Foe? Learning Kits* into full-scale production next year!



Mimy Ikirezi, VLMP intern, uses the *Friend or Foe* kit to teach students at the Children's Water Festival how to identify friendly aquatic plants from the 11 invaders.

VLMP Intern Letter



Mimy Ikirezi from Bates College is interning with the VLMP in the spring and fall of this year.

Greetings to everyone. It's absolutely marvelous and an honor to have a chance to share with you a little of my background information in the VLMP Newsletter. My name is Mireille Ikirezi usually known as Mimy, and I've been interning at VLMP for this past month of May. My warm gratitude goes to the VLMP team, for they provided me an opportunity to partake in many projects which help to protect our beautiful Maine Lakes.

I come from Rwanda, a small landlocked tropical country situated in Central-East of Africa. It's a warm striking nation full of mountains, rivers and lakes, and actually there the country is called "Land of Thousand Hills". I was born and raised in Rwanda, and in the summer of 2001 I landed on the US territory for studying

reasons. I went directly to a boarding school, Kent School in the mountains of Connecticut, and in two years I was already graduating. My journey didn't stop in the Appalachian trail of Kent. After graduating, I came to Lewiston, Maine at Bates College to continue my studies. Now, I'm a rising junior majoring in Environmental Sciences and concentrating in Environmental Global Politics. I'm also minoring in Economics. My experience so far at Bates has been rewarding and challenging, especially academically. But, knowledge I acquired in classrooms was not enough for me for I couldn't get the real sense of how and what process people utilize to protect our environment. And that's why I came to VLMP as an intern so that I could both learn and enhance my comprehension of the fieldwork on the topic of the environmental protection.

My internship has been worthwhile. I have been helping all along the VLMP coworkers to prepare for the workshops, but most importantly I was able to study more deeply about what they do to protect the Maine Lakes. When I got at the VLMP, my first activity was to research on invasive plants. This task was very exciting for me since I didn't even know that invasive plants were harmful to nature, especially to

lakes and ponds. Soon I knew a lot about these foes, such as Eurasian milfoil, fanwort, Brazilian elodea, and so on. Moreover, I learned a lot about invasive plants when I prepared for and participated in an annual event called "Children's Water Festival". I had to teach many young students from the third grade until the sixth grade about how to recognize if a plant is a Friend or Foe. The *Water Festival* experience was not only quite exuberant, but also it was an event where I found passion to teach others about how to protect our nature. Further, I learned more about how to measure water quality using Secchi disks and view scopes in both Sabattus lake and Andrews Pond. Briefly, my internship was so pleasing for this past month I spent at the VLMP.

Again, I'm so thankful to the nicest VLMP team and Bates College for everything they have done for me. And I believe that my next life journey will be to take my rewarding experience from VLMP to my native country Rwanda, where I'll be an active agent in protecting our beautiful lakes and rivers.

Best regards,
Mimy Ikirezi

Build Your Own Bucket Scope!

On Friday August 5 from 2 to 4 pm MCIAP will have a bucket scope building workshop at the Brackett Environmental Center. We will provide the materials and refreshments.

Richard Jennings of Lovejoy Pond in Fayette will lead the instruction and share his tips and technique. At the completion of the workshop you will have your own bucket

scope — useful for aquatic plant and metaphyton surveys. You will also have the skills to conduct a bucket building workshop for volunteers in your community.

Pre-registration is required by August 1 and limited to 15 participants. A fee of \$10 is requested to help cover the cost of materials. To register and for questions contact the VLMP at 783-7733 or vlmp@mainevlmp.org.

New Water Quality Monitors

We are on track this year to certify a record number of new water quality volunteer monitors.

New Monitor Water Quality Workshop

July 8 2005, Auburn

Join the VLMP's team of water quality monitoring volunteers. This workshop covers the importance of water quality monitoring and a summary of factors affecting lake water quality. Monitors will be trained to take Secchi disk readings and certified to report their data to the VLMP.

Preference will be given to volunteers on priority lakes.

Pre-registration is required. For more information or to register contact Jim Roby-Brantley, Program Coordinator at 783-7733 or vlmp@mainevlmp.org.



Satellites and Secchi Disks

Your transparency data collected during the Landsat 7 overpass dates could help calibrate the satellite image analysis.

Only days that are relatively cloud-free will yield useful satellite data for the project. The primary target dates are in bold. For more information see **Quality Counts!** in the Winter 2005 *Water Column*.

2005 Landsat 7 Overpass Dates

June 30
July 16
August 1
August 17

September 2
September 19
October 4
October 20

Quality Counts!

By Linda Bacon



Linda Bacon
Biologist, Maine DEP and
VLMP Technical Advisor

Good News! Have you been 'Certified' to collect Sub-Surface Grabs yet? This will be the third year for the mail-in Total Phosphorus program. One hundred-ten samples were submitted last year! Unfortunately occasional glass breakage will cause a sample to be lost; luckily few other issues have come up. Please email me with any concerns you have about the program and I will try to work them out with the lab (linda.c.bacon@maine.gov). To obtain a mail-in set-up, contact Tiffany Wilson at the Sawyer Environmental Chemistry Research Lab (SECRL) at 581-3288. Sub-surface grab training is included at all certification workshops this year and will be conducted at the Annual VLMP Meeting, July 30th.

More News! Budget cuts at the state level are going to change the way that the Department of Environmental Protection conducts its 'baseline' sampling program. 'Baseline' sampling

refers to August visits that DEP or VLMP biologists make to lakes in the program once every 5 years. During these visits dissolved oxygen / temperature profiles, water samples for chemical analysis and sometimes plankton samples are collected. Recent budget shortfalls have reduced the number of DEP staff available to baseline lakes this August as well as the operating budget. Baseline sampling visits are likely to be reduced by 25-33%. So instead of visiting 100 lakes, we are likely to visit between 66 - 75 lakes.

So is this bad news? Perhaps not - if you are willing to help! Many of you have been trained to collect sub-surface grabs. If you wish to assist with the baseline program, please let us know. We will ask you to collect a sample in August. Instead of one bottle, we will need two to be mailed to the SECRL lab on one of three Mondays in August (15th, 22nd, or 29th). The glass bottle would be used

for the total phosphorus analysis and the second sample would be used to determine color, conductivity, alkalinity, pH and perhaps a few other parameters. DEP would cover the cost of analysis. I'm not sure if or how we could cover the mailing costs but I'll be looking into it. Many of lakes targeted for 2005 are relatively shallow - 30 feet or less in depth, others are secondary stations or are difficult to get to.

If your lake is on this list, you are (or planning to be) certified to collect sub surface grabs, and are willing to assist with this endeavor, please contact the VLMP office at 783-7733.

Lake	Midas	Station	Lake	Midas	Station
AZISCOHOS L	3290	1	LOVEWELL P	3254	1
BASIN P	5654	1	MATTAKEUNK L	2242	1
BOG L	1258	1	MCGRATH P	5348	1
BOYD P	5364	1	MEDDYBEMPS L	177	2
BRETTUN'S P	3608	1	MEGUNTICOOK L	4852	1
BRYANT P	3464	2	NEHUMKEAG P	5378	1
CARLTON P	5310	1	NORTH L	1063	1
COLLINS P	3728	1	NORTH L	1063	2
DODGE P	3528	1	PARADISE (MUDDY) P	5708	1
DUTTON P	4872	1	PARKER P	5186	1
ELL (L) P	119	1	PARKER P (MIRROR L)	5216	1
GARLAND P	4128	1	PATTEN P (LOWER)	4344	1
GREAT EAST L	3922	1	PUSHAW P (LITTLE)	2156	1
HADLOCK P (LOWER)	4610	1	QUIMBY P	3526	1
HORNE (PEQUAWKET) P	3408	1	SAND P	5204	1
INDIAN L	1362	1	SOMES P	4614	1
INDIAN P	4090	1	SPENCER P	404	1
JAYBIRD P	3178	1	SPRINGY P (LOWER)	4540	1
KENNEBAGO L (BIG)	2374	2	STEVENS P	4886	1
LAWRY P	4834	1	WASHBURN P	3476	1
LEWY L	1284	1	WASSOOKEAG L	227	1
LOCKE P	5202	1	WILSON P	3682	1
LONG L & THE BASIN	1286	1	WILSON P (UPPER)	410	1

2005 Upcoming Events

Woodbury Brackett Environmental Center

Summer Lecture Series

The Brackett Environmental Center is located at the corner of Maple Hill Road and Lake Shore Drive in Auburn. For directions call 783-7733 or see our website www.MaineVolunteerLakeMonitors.org/contact.

July 14: Edible Wild Plants 6 PM

Steve Drane PhD, Master Gardner

From dandelion salad and knotweed pie to herbs and ginseng. Master Gardner Steve Drane will take you on a tour of the Brackett Environmental Center to identify edible plants and their uses. Refreshments and sample plant delights provided.

August 11: Crayfish in Maine

Matthew Scott, Aquatic Biologist, Emeritus

Did you know that Maine has eight species of native Crayfish as well as four invaders?

Not much is known about the Maine crayfish, their distribution, abundance and taxonomy. Matt Scott, retired Fisheries Biologist, is raising public awareness of the often overlooked critters. Matt will discuss Crayfish anatomy, taxonomy, distribution, importance in the food chain and ecological relationships to other aquatic life.

August 18: Plants of the Amazon Rain Forest

Keith Williams, PhD Environmental Science

Monster water lilies six feet in diameter, strong and buoyant enough to support a small child; floating islands and free-floating grasses . . . The Amazon River is teeming with aquatic plants, and in high water (periodic floods raise the water surface 30 feet!) one can also peek into the tree canopy and see some of the most beautiful aerial flowers on earth. Some Amazon water plants are familiar - pickerelweed, pipewort, etc., but many are strictly equatorial plants that would never be seen in Maine waters. Others, those that have shown adaptability to colder water temperatures, have found their way north to more temperate climates where they have become serious invaders. Join us when Keith Williams, Highland lake monitor and avid explorer of all things aquatic, will share slides, video and stories of his July 2005 adventure on the Amazon River. See man-eating piranhas, and a man eating piranhas! Crocodiles, freshwater dolphins, water snakes, and more!

August 31: MCIAP Invasive Plant Patrol Workshop 3-8:30 PM

The basic Invasive Plant Patrol (IPP) workshops are for anyone interested in learning more about the threat of invasive aquatic plants in Maine. The workshop covers an overview of invasive aquatic plants in Maine and plant identification with hands on exercises.

Registration is required ~ 783-7733

September 8: Invasive Terrestrial Plants 5:30 PM

Mark Fuller, Landscape Professional and Roberta Hill, MCIAP

Growing and spreading across large distances with astonishing speed, invasive plants threaten agricultural crops and sensitive natural habitats here in Maine.

Please join us as we get to know these plants, the damage they can do, and set off on a hunt for some local invaders.

COLA Annual Meeting

June 25, 2005 8:00am - 3:30pm

UMaine Farmington

Top 10 Reasons to Attend

- New Research: Katherine Webster on food webs and water quality
- Brownie Carson on the future of environmentalism
- State's leading environmentalists on the challenges of resource protection today
- Networking: learn from and exchange with like-minded folk
- Informative small group sessions. Take home techniques and tools that make a difference
- Needs Assessment: latest information from the Mitchell Center
- Loons and Mercury
- Outreach that works!
- Breakfast and Lunch
- Great raffle prizes

For more information contact the Maine Congress of Lake Associations at 877-254-2511 or www.mainecola.org.

2005 Invasive Plant Patrol Workshops

To register contact MCIAP at vlmp@mainevlmp.org or 207-783-7733

BASIC IPP WORKSHOPS

DATE	TIME	LOCATION	TOWN
June 29	9AM - 2:30PM	Portage Municipal Bldg.	Portage
July 6	4:00 - 9:30PM	Deering Hall, UMaine Campus	Orono
July 12	9AM - 2:30PM	Rangeley Lakes Regional School	Rangeley
July 16	9AM - 2:30PM	Belgrade Community Center For All Seasons	Belgrade
Aug 7	9AM - 2:30PM	City Hall	Ellsworth
Aug 10	3:00 - 8:30PM	YMCA Camp of Maine	East Winthrop
Aug 17	9AM - 2:30PM	Lincolnville Community Ctr.	Lincolnville
Aug 24	3:30 - 9:00PM	Waterboro Central Fire Station	Waterboro
Aug 31	3:00 - 8:30PM	Brackett Environmental Building	Auburn

ADVANCED IPP WORKSHOPS

WORKSHOP	DATE	TIME	LOCATION
Advanced Plant ID I	FR July 22	1:00 - 5:00PM	Brackett Environmental Ctr., Auburn
Survey Field Methods	SA Aug 13	7AM - Noon	Lower Patton Pond, Ellsworth
Advanced Plant ID II	SA Aug 20	1:00 - 5:00PM	Brackett Environmental Ctr., Auburn
Survey Field Methods	SA Aug 27	7AM - Noon	Little Ossipee Lake, Waterboro

BASIC PLANT PATROL WORKSHOPS: The primary purpose of the basic Invasive Plant Patrol (IPP) workshops is to supply those who wish to join Maine's "early detection" effort with information and guidance needed to get started. However, all IPP training sessions are open to the public and *FREE* to anyone interested in learning more about the threat of invasive aquatic plants in Maine. The basic workshop is presented in four parts:

- ☞ Overview of invasive species issues in Maine and beyond
- ☞ Plant identification fundamentals
- ☞ Plant identification hands-on exercise with live plants
- ☞ Conducting a screening survey, tools and techniques

All workshop participants receive an *Invasive Plant Patroller's Handbook* and a *Maine Field Guide to Invasive Aquatic Plants*. (All workshop materials are also free for participants.)

ADVANCED PLANT IDENTIFICATION: (Advanced Aquatic Plant Identification I and II) Two distinct workshops will be offered, each focusing on a different aspect of aquatic plant life and the identification of different plant groups.

SURVEY FIELD METHODS: This workshop is for those who have already attended the basic IPP training and would like some guided field experience before setting off to conduct an invasive plant screening survey. We meet at a designated launch site and spend the morning on the water conducting a screening survey. Shallow draft boats (e.g. canoes) are required. Extra boats may be available.



The Invasive Plant Patrol workshops are supported by the Maine Department of Environmental Protection and boater participation in the Maine Lake and River Protection Sticker Program.

Volunteer Recognition

Life Long Lake Monitors

Join us as we celebrate the commitment and outstanding dedication of our volunteers at the Annual Meeting.

Other awards to be announced at the meeting include:
Water Quality Volunteer of the Year
Invasive Plant Patroller of the Year
Invasive Plant Patrol Action Award
Lifetime Achievement Award

33 years

Tom Hannula
Sebasticook Lake, Newport

32 years

Joe Emerson
Upper Narrows Pond, Winthrop

31 years

Robert Susbury
Howard Pond, Hanover

30 years

David Hodsdon
Clary Lake, Jefferson

29 years

Ralph Johnston
Highland Lake, Falmouth

Charles Turner
Panther Pond, Raymond

28 years

John Dudley
Pocamoonshine Lake, Alexander

Charles McClead
Phillips Lake, Dedham

Richard Offinger
Cathance Lake, No 14 Plt

Frank Perkins
Wiley Pond, Boothbay
Square Pond, Acton

27 years

Thomas Dionis
Balch & Stump Ponds, Newfield

Kenneth Holt
Bear Pond, Hartford

Dr Larry Mobraaten
Spruce Mountain Lake, Beddington

25 years

John Wasileski
Kennebunk Pond, Lyman

Stan Wood
Swan Lake, Swanville

20 years

Pat Bell
Manhanock Pond, Parkman

Dr Barry Kutzen
Middle Range Pond, Poland

15 years

Dr Donald Ahern
Lower Patten Pond, Surry

Robert Eger
Warren Pond, South Berwick

Josephine Ewing
Sewall Pond, Arrowsic

Max Gillette
Unity Pond, Unity

Robert Gobeil
Loon (Spear) Pond, Sabattus

William Holman
Torsey Pond, Mount Vernon

Joanne Luppi
Spednik Lake, Vanceboro

Jennifer Mathews
Lower Narrows Pond, Winthrop

Bruce Micucci
Little Sebago Lake, Windham

Cheryl Soucy
Cobbosseecontee Lake, Winthrop

Volunteer Recognition

10 years

Don Berry
Quantabacook Lake, Searsmont

Joe Flanagan
Branch Lake, Ellsworth

Alan Hamilton
Twitchell Pond, Greenwood

Barbara Paiton
Webb Lake, Weld

Wally Penrod
Lovejoy Pond, Fayette

Alden Peterson
Buker Pond, Litchfield

5 years

Kim Allen
Umsaskis Lake, T11 R13 Wels
Long Lake, T11 R13 Wels

Martin Arnold
Parker Pond, Fayette

Tom Bannen
Highland Lake, Falmouth

Ted Brigham
Onawa Lake, Elliottsville

Kevin Brown
Churchill Lake, T09 R12 Wels
Big Eagle Lake, Eagle Lake Twp

Bill & Nicole Buchanan
West Pond, Parsonsfield

Bill Clark
Biscay Pond, Damariscotta

Gert Downs
Webb Lake, Weld

Richard Dubois
Allen Pond, Greene

David Edwards
Upper Cold Stream Pond, Lincoln

Dennis Ellis
Molasses Pond, Eastbrook

Fred Flammia
Cox Pond, South Berwick

Paul Geisler
Crawford Pond, Union

Bill Hanger
Long (Mcwain) Pond, Waterford

Colin Holme
Back (5 Kezars) Pond, Stoneham
Bay Of Naples, Naples

Paul Holweger
Swan Lake, Swanville

Ellen Hopkins
Locke Pond, Chesterville

Barbara Kinney
David Pond, Fayette

Ralph Knowles
Damariscotta Lake, Jefferson

Larry Mayer
Clark Cove Pond, South Bristol

Dorothy & David Mcallister
Grace Pond, Upper Enchanted Twp
Ellis Pond, Chase Stream Twp

Mac McCullough
Duckpuddle Pond, Nobleboro

Jean & Dick Moody
Brackett Lake, Weston

Beth Anne Pochopien
Androscoggin Lake, Leeds

Paul Porter
Nickerson Lake, New Limerick

Waldo Preble
Crescent Lake, Raymond

Dave Preston
Alford Lake, Hope

Andy Reeve
Toddy Pond, Swanville

Leon Rioux
Sabattus Pond, Greene

Stuart Rose
Mousam Lake, Acton

Bud Stewart
Skiff Lake, Canterbury

Gary Sweetser
Allagash Lake, T08 R14 Wels

Scott Thies
Moose Pond, Hartland

C.L Townsend Jr.
Middle Range Pond, Poland

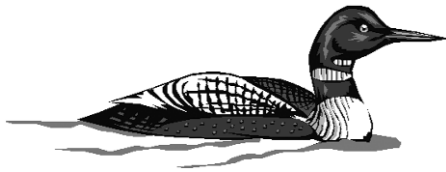
Scott & Zizi Vlaun
Moose Pond, Otisfield

Susan Walker
Webb Lake, Weld

Nate Whalen
Sebago Lake, Sebago

John Wilcox
Highland Lake, Falmouth

Mike Zienkiewicz
Adams Pond, Bridgton



Gavia immer

Gavia immer - what a name!
You with so many claims to fame.
How well you fly, and dive, and fish,
tho' better take-off you might wish.

From summer pond to winter bay
you never seem to go astray.
In Fall you check the ice, and go.
The time to return in Spring you know.

Your call at night, of awesome plight,
is heard by us with great delight.
You cannot come back here too soon,
you wonder bird - you Common Loon.

Llummox Lines

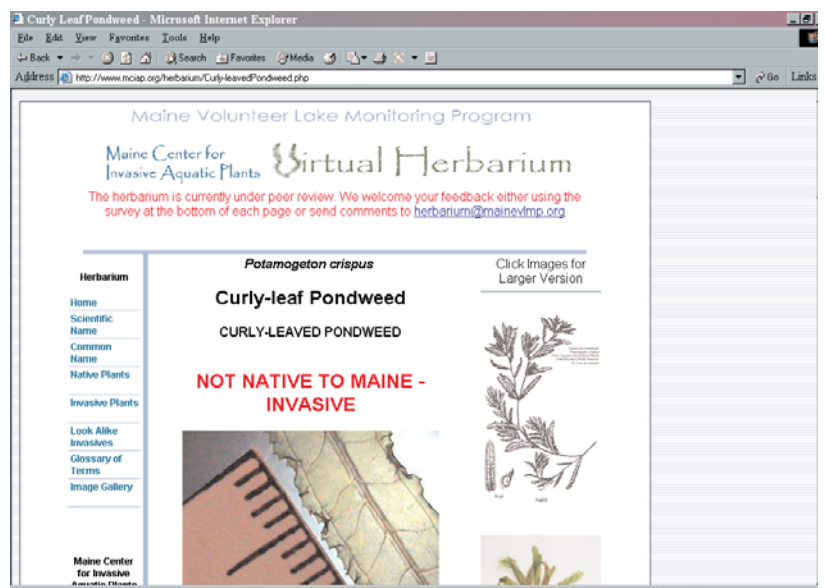
Poems
Articles
Photos
Stories

Send us your submissions at
vlmp@mainevlmp.org or
VLMP, 24 Maple Hill Rd
Auburn, ME 04210.

Maine Center for Invasive Aquatic Plants Virtual Herbarium

WHAT DO YOU DO and where do you go for help when you find a suspicious plant growing in your favorite lake or pond? Maine Center for Invasive Aquatic Plants' new on-line resource, the Virtual Herbarium, is a great place to start . . .

The Maine Center for Invasive Aquatic Plants' *Virtual Herbarium*, launched in March of 2005, serves as an online resource for Maine's Invasive Plant Patrollers, teachers, students and the general public. The website features a collection of photos, line drawings and scanned images for each of the eleven invasive aquatic plants on Maine's "watch list" and many of the aquatic plants, native to Maine, that could easily be confused with these invaders. The photos include field shots, close-ups of individual specimens, and micrographs of key identification structures such as fruits and bracts. Easy cross-reference links allow for quick comparisons of the invaders and their native "look alikes." A detailed narrative is presented for each of the featured plants, including information regarding habitat, species characteristics, plant origin and range, annual cycle, value in the aquatic community (for native species) and potential impacts (for invasive species). Botanical terms are hyperlinked to an illustrated glossary. Many ideas for expanding and improving the website are already in development! Your contributions to the Herbarium are welcome. If you have images that you would like to share on-line please contact Jim Roby-Brantley at vlmp@mainevlmp.org.



www.mciap.org/herbarium

Raingardens

In Our Back Yard

By Jeff Varricchione, Biologist with the Maine DEP Division of Watershed Management.

In Our Back Yard is a weekly column of the Maine Department of Environmental Protection.

Have you wanted to create a new, attractive, colorful garden on your property? Are you looking for one more reason to get motivated? Well, it turns out that certain types of gardens can actually improve the environmental-friendliness of your property.

Let me start with some background first. Structures like rooftops, driveways, roads, and parking lots alter the "water cycle" on our home and business properties. These hard surfaces reduce the amount of rain or snow melt that soaks into the ground. Instead, that water is immediately converted to stormwater runoff. That creates two problems. The runoff can pick up pollutants (eroded soil, lawn fertilizer, oils and gas from leaky vehicles, pet waste, etc.) as it flows downhill to our favorite river or lake. Second, the quantity increases. The volume of runoff is much larger and it flows more quickly than on a vegetated surface, and this can cause more erosion and damage aquatic habitats.

So, back to how certain types of gardens can help minimize the problems just described. "Raingardens" are a landscaping technique that many homeowners can use. These gardens are designed and located to capture runoff from roofs, driveways, and other hard structures. They help this excess water soak into the ground rather than flow into ditches, stormdrains and eventually into a local stream, pond or estuary. These gardens can be very attractive and blend into your yard landscape.

Raingardens are often located in depressions (existing or created) on your property, so that stormwater will be collected and slowly soak into the ground. Of course if water is going to temporarily pond, plant selection becomes critical. Using plants, shrubs, and trees that can tolerate soil conditions which occasionally are very wet, or salty (due to winter salting), can help ensure raingarden success.

To build your raingarden, consult a local nursery or landscaper, or visit the Internet or library for more information.

To get started, check out these useful websites: www.raingardens.org and clean-water.uwex.edu/pubs/raingarden/

Whenever possible, plant native species. Natives are hardy and you don't risk bringing in more invasive species to Maine. For more information, see "Gardening to Conserve Maine's Landscape: Plants to Use and Plants to Avoid", which is available on the web at www.umext.maine.edu/publications/homegarden.htm. Or contact your county office of the University of Maine Cooperative Extension for help.

Raingardens are a new tool in our efforts to keep Maine's waters clean and part of a new way of thinking about stormwater issues. It is all part of a movement called "low-impact development" or "LID." Alternatively, it could be called "low-impact landscaping." Other tools include:

- ◆ planting or maintaining vegetative areas next to waterways to act as a sponge for stormwater runoff and provide shade to keep waters cool,
- ◆ rain barrels to collect roof runoff,
- ◆ bioretention systems in parking lots (essentially engineered raingardens),
- ◆ green (vegetated) roofs, and
- ◆ pervious parking lot materials, etc.

More information on LID can be found at on the web at www.epa.gov/owow/nps/lid/lidlit.html.

Happy rain-gardening!



Maine Volunteer
Lake Monitoring Program
24 Maple Hill Road
Auburn, Maine 04210



CLIP AND MAIL TO VLMP

VLMP ANNUAL MEETING REGISTRATION

**Cost: Free to certified monitors, certified plant patrollers, coordinators, and directors.
All others \$18.00**

Name(s): _____

Number Attending: _____

Cost per Attendee: _____

Total Enclosed: _____

To register, please call or email:
207-783-7733

vlmp@mainevlmp.org

or mail to:

VLMP

**24 Maple Hill Rd
Auburn, ME 04210**