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Sabbathday Lake
Water Quality Protection Project

(Editors note: This article was written by Ellie Fellers and edited by Mary Gilberston, SEPTEMBER 24, 2003)

NEW GLOUCESTER - The two year Sabbathday Lake water quality protection is drawing to a close, and in September the project's Steering Committee took a moment to look back at a successful two years. The $106,000 project was funded through collaboration between state, federal, town officials, and landowners. This grant sought to implement an array of projects that demonstrated how to conserve the lake with simple conservation practices that anyone can do on their property.

Several years ago Sabbathday Lake was rated by Maine's Department of Environmental Protection as moderately unstable. Initially, citizen volunteers worked with state officials to conduct a watershed survey for the lake identifying areas where storm water runoff directly runs into the lake. An earlier funded program through the Clean Water Act helped launch the four years of work with landowners and towns to improve managing by diverting storm water carrying phosphorus from reaching the lake. Demonstration sites using best management practices to divert water that carries phosphorus were designed to deter degrading the lake further in the future. This project concludes a second tier of funding for projects to protect the future health of Sabbathday Lake.

This grant was administered by Cumberland County Soil and Water Conservation District and headed up by project manager Mary Gilbertson. In addition, Don Kale of Maine's Department of Environmental Protection assisted carrying out the work and educational

(Continued on page 2)

Inside This Issue

Grass Roots Environmental Fund	2
Second Maine Conservation Expo	4
Kennebunk Pond Watershed Survey	5
EPA's New 319 Guidelines	6
Ice Cream and Outreach?	7
Capacity Building Recourses for Watershed Management	10
Stream & Fluvial Morphology Web Sites	10
Calendar & Recourses	12

Pilot Test For Gravel Road Surface Treatment

The Echo Lake Road in Fayette has long been a maintenance problem for the road foreman. The gravel road is two miles long. In many areas the edge of the road is within five feet of the lake, and because of shallow-to-bedrock soils, topography, and existing development, there is no room for a stormwater collection ditch on either side of the road. A large children's summer camp is located at the end of the road, with attendant delivery vehicles, buses, counselors, and parents, and there are enough year round residents that winter plowing is required. Summer traffic is fast moving and raises clouds of dust. In mud season,

(Continued on page 3)

The Volunteers at Buffer Planting Workshop

(Continued from page 1)

program working with landowners in this two year grant cycle.

A variety of activities occurred throughout the watershed to maintain and improve the health of Sabbathday Lake. Workshops were held to help citizens learn conservation techniques to use on their own property. Additionally, many of the construction projects turned into work parties as friends and neighbors gathered to install Best Management Practices (BMPs). Seventeen conservation projects were completed throughout the watershed, and 30 technical assistance visits were provided to residents looking to reduce soil erosion and polluted runoff on their property. Projects ranged from buffer plantings to waterbars and rubber razor blades, to regrading roads and installing turnouts and sediment basins.

"Shoreland property values are protected by having a healthy lake" Gilbertson said.

Sabbathday Lake marks the headwaters of the Royal River that begins at its outlet and travels roughly 25 miles to end in Casco Bay. Sabbathday Lake's 345 acres includes a cold water fishery and affords recreational opportunities to the public.

Permanent metal educational signs will be erected on land aided by the project's goals. Additionally, although this grant will no longer fund the YCC program, the Sabbathday Lake Association is pursuing future means of continuing the program by partnering with the Friends of the Royal River to cover the entire Royal River Watershed.

For more information on this project contact Mary Gilbertson at Cumberland County SWCD mary-gilbertson@me.nacdnet.org or 207-856-2777

Grassroots Environmental Fund

The New England Grassroots Environment Fund (NEGEF) is a small grants program designed to foster local grassroots environmental initiatives in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. It provides small grants of up to $2,500 to fuel local activism that results in broader community involvement in projects that address a wide range of environmental issues and opportunities. Local groups may be tackling an environmental health problem related to poor air quality or water pollution, advocates may be urging citizen participation in watershed management projects or wildlife habitat protection, or neighborhoods may be working on community gardens and open space projects. Whatever the issue, the Fund wants to move these efforts forward with its support. For more information contact NEGEF at P. O. Box 1057, Montpelier, VT 05601, email info@grassrootsfund.org or visit the website at www.grassrootsfund.org

(Note next grant deadline is Jan. 15, 2004 with award in March 2004)

(editors note—submitted by Linn Perkins Syz, New England Grassroots Environment Fund, P. O. Box 1057, Montpelier, VT 05601. (802) 223-4622 (phone), (802) 229-1734 (fax) or syz@grassrootsfund.org)

(Continued from page 1)

snowmelt and stormwater runoff have no place to collect but on the road, and the mud can be up to six inches deep for three weeks to a month. The public works department grades the road several times a year, adding more material as necessary. Complaints about potholes, corduroy surfaces, and dust are frequently expressed by year round residents and summer visitors.

Although the Echo Lake Road is a particular challenge, similar conditions are found on many gravel roads throughout the Androscoggin River watershed. The steering committee of the Roadside Erosion Control Project felt that a pilot test to evaluate road surface stabilization measures could provide insights on cost-effective treatments; the Echo Lake Road was chosen as the test site. The pilot test was funded by our CWA Section 319 grant, assistance from vendors (either contributions of material, or reduced prices), labor provided by the Town of Fayette, and in-kind donations from the summer camp owner and a local businessman.

In June, four different treatments were applied, each to approximately a half-mile section of the road. The entire road was graded prior to application of the treatments, and new gravel was incorporated; preparatory treatment cost $0.23 per foot of roadway. The four surface treatments used were **dried granular asphalt** (Commercial Paving), **liquid asphalt penetration** (Sunrise Materials), **TDS** – lignin sulfonate (R.J. Grondin & Sons), and **liquid calcium chloride** (W.H. Shurtleff Co.).

- The first section, farthest from the lake, is bordered by trees and receives the greatest amount of fast moving traffic. Dried granular asphalt, a recycled product, was incorporated as a binder in the gravel, to add compaction, cohesion, and strength to the road surface. The cost of this material is $0.50 per square foot.
- The second section received liquid asphalt penetration, which some of you may remember as the "old fashioned" way of paving a road. A top coating of sand is applied, and then the road is rolled. Repairs are made with compacted cold mix. The cost for material and installation at this site was $0.14 per square foot.
- The third section was treated with TDS, or lignin sulfonate, which is a liquid by-product of the paper industry and is safe enough to be used as a coagulant in food; it is biodegradable, and not harmful to plants, humans, or animals. It is usually sprayed on forest roads or the travel ways in gravel pits, as a dust suppressant and to minimize soil erosion. The cost for treating the Echo Lake Road was $0.14 per square foot.
- The last section was treated with liquid calcium chloride. This material is well known and appreciated for dust suppression at construction sites, and for snow and ice management on roads during the winter. The cost for treating a half-mile section of Echo Lake Road was $0.14 per square foot.

After two months of use – at the end of August – our observations on the various treatments were as such:

- The first section, to which granular asphalt had been applied, was full of potholes, with the finer particles washed away, and with a lot of loose material on the shoulders. In shady areas, however, the material appeared to have a compacted crust. The section was re-graded.
- The second section – liquid penetration – was dust free and somewhat smooth. Some potholes, caused by the loss of liquid asphalt during the initial application process, were repaired with cold mix and compacted.
- The third section, treated with TDS, was dusty, and had potholes and washboards. Monitoring during the summer months indicated that this section of the road was most exposed to sun, wind, and rain.
- The fourth and last segment, treated with liquid calcium chloride, was stable. This section is also fairly well shaded.

Our observations of the four road sections in October provided the following information:

- The first section (granular asphalt) continued to exhibit ruts, despite re-grading and application of liquid calcium chloride in late summer; dust was still raised behind vehicles.
- The second section (liquid penetration) was holding up well, and the repaired potholes are smooth. The road

(Continued on page 4)

(Continued from page 3)

foreman is most pleased with this section, and anticipates no road work there in the spring.

- The third section (TDS) was again dusty and had potholes, despite a second application of TDS in the late summer. The vendor felt that the material in the road base was not adequate for supporting the amount and speed of traffic on the road.
- A second application of calcium chloride was added to the fourth section in late summer. The road surface is holding firm. It is expected that in the next field season, only one application of CaCl will be needed, as some of the product for 2003 applications will still be contained within the soil.

In conclusion, at our pilot site in Fayette, we found the application of calcium chloride to be a reliable practice as a dust suppressant, and noted a firm road surface as well. TDS may work for certain site conditions, but it did not reduce dust and road damage on our test site. As longer-term road protection, the old practice of liquid tar penetration showed its value as a road protection measure; most likely, on our test site, it will hold throughout the winter, and for several years to come. The use of recycled asphalt shingles is a great concept, but, as currently produced, the material is probably most valuable as a binder and filler under the pavement.

Additional information about the project can be obtained from Randy Tibbetts, Town of Fayette road foreman; Phoebe Hardesty, Androscoggin Valley Soil & Water Conservation District; or Rosetta Thompson, Franklin County Soil & Water Conservation District.

Our sincere thanks go to Mike Needham, Commercial Paving; Peter Ward, R.J. Grondin & Sons; Frank Webber, Sunrise Materials; and Jim Welch, W.H. Shurtleff, for their assistance on this project. We particularly appreciate the willingness of officers and citizens of the Town of Fayette to host and support this work: Randy Tibbetts and his crew, for leadership and site preparation; Jim Collins, town manager, for oversight; Dick Curtis of Camp Vaga, for donation of a roller; George Tibbetts for his contribution of gravel; and residents of the Echo Lake Rd. for sharing their opinions.

The VLMP has moved to new offices on Lake Auburn at the Woodbury Brackett Environmental Center.

The new phone/fax number is 783-7733.
The new address for mail and deliveries is 24 Maple Hill Road, Auburn, ME 04210.

Note: 2003 Lake Data should still go to PO Box 445, Turner, ME 04282.

Second Maine Conservation Expo

Franklin County Soil & Water Conservation District, FCSWCD, will be coordinating and hosting the second Maine Conservation Expo on April 21, 2004 at the University of Maine, Farmington campus, from 8:00 a.m. to 5:00 p.m. FCSWCD is working in cooperation with MDEP, MDOT, and others to sponsor a full day of seminars, workshops, and vendor displays.

The Conservation Expo is designed for contractors, loggers, municipal officials, CEO's, road crews, lake association members, road association members, and for the general public. We hope to have over 30 sessions running at staggered times throughout the day.

Some of the workshops and seminars we hope to offer include: Pond Construction; Pond Maintenance; Gravel Roads Maintenance & Front Runner Training; Drainage, Drainage, Drainage by MDOT; The Use of Bark Mulch For Erosion Control; Designing and Planting Buffers; Forming a Conservation Corps; Forming a Road Association; Getting DEP Permits, Including Stream & Wetland Permits; Securing FEMA and Other Municipal Funding; Proper Use of Pesticides; Lake Assist; Culverts; Stormwater Phase II Law Update; Sustainable Forestry; Compost or Mulch; Mulch Buffers; Paving and Paving Alternatives; Logger (CLP) Re-Certification, and more!

Vendor registrations are due by February 29th. Registrations for Expo workshops and programs are due by March 25th. To register for any of the sessions, contact FCSWCD at (207) 778-4279. Vendors and others wishing to set up a display are encouraged to write or call for more information. Write to FCSWCD, 107 Park St., Farmington, ME 04938, or call (207) 778-4279 and ask for Rosetta.

Kennebunk Pond Watershed Survey Completed

(Editors note: This article is from a York County SWCD press release.)

Kennebunk Pond Association volunteers and York County Soil & Water Conservation District (SWCD) recently completed a watershed survey of Kennebunk Pond. The primary purpose of the watershed survey was to identify and prioritize existing sources of polluted runoff, particularly soil erosion sites in the Kennebunk Pond Watershed. Equally important was to raise public awareness of the connection between land use and water quality and inspire people to become active stewards of the watershed. This information will be used as a component of a long-term lake protection strategy and to make general recommendations to landowners for fixing erosion problems.

On May 18, 2002, volunteers were trained and later broke into teams and surveyed five sectors on Kennebunk Pond. The teams identified a total of 67 sites where polluted runoff occurs. A total of eight land use types were associated with the identified sites; Beach Access, Boat Access, Driveways, Seasonal and Year Round Residential, Private and State/ Town Roads and construction sites. Sites were also ranked according to three criteria:

Technical level to install describes the degree of technical expertise needed to address a problem.

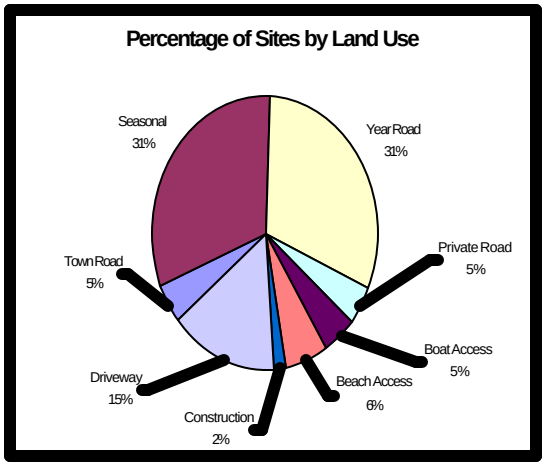
- Low-tech level requires little or no specific technical assistance
- Medium-tech level needs to be visited by a technical expert who can make recommendations.
- High-tech level requires an engineered design.

Impact was assigned by considering factors such as the size of disturbed area, slope, soil type, amount of soil that's eroding, proximity to water or buffer, and size of buffer.

- Low-impact eroding sites are those with limited transport offsite
- Medium-impact sites where sediment is transported off-site, but the erosion does not reach a high magnitude.

Key Findings:

- Most of the problems were found on residential properties and driveways.
- About 12% of the problems may be causing a significant impact to the pond.
- Most of the problems can be fixed with little expense or technical expertise. Plants, mulch and other simple solutions can go a long way towards protecting the pond.
- There is a manageable number of problems.



(Continued on page 6)

2004 Maine Water Conference Call for Papers

The 2004 Maine Water Conference will be held on Wednesday, April 21 from 8am-4pm.

The deadline for abstracts for oral presentations is Monday, December 1, 2003.

Session information and abstract guidelines are available at http://www.umaine.edu/waterresearch/mwc/index.htm. Please contact hallsworth@maine.edu if you have any questions or require additional information.

EPA's New 319 Guidelines

On October 23, 2003, EPA's new guidelines for States' implementation of nonpoint source programs and the award of Section 319 grants were published in the Federal Register (68 FR 60653 - 60674, Oct. 23, 2003). The guidelines replace the May 1996 NPS program and grants guidance as well as the "supplemental" guidance and guidelines that have been periodically published since that time.

The new guidelines continue the emphasis of recent years of focusing $100 million annually on the restoration of waters that have been listed as impaired under Section 303(d) of the Clean Water Act. With this portion of the total funding, States will develop and implement watershed-based plans that identify the causes and sources that will need to be controlled to achieve needed load reductions to meet water quality standards; identify needed management measures; estimate the amount of technical and financial assistance needed; the associate costs; available funding sources and authorities; and include an information/education component to enhance public participation in designing and implementing the needed management measures.

While remediating impaired waters is critically important, preventing future impairments and addressing the broad range of watershed stressors are equally essential to achieve the goals of the Clean Water Act. Therefore, the new guidelines emphasize that watershed plans should be developed and implemented in a holistic manner. The guidelines discuss the importance of designing watershed plans to protect and restore waters with respect to all significant stressors, and not just those that have led directly to the 303(d) - listed impairment.

Finally, another critical aspect of using Section 319 dollars to maximum effect is the need to coordinate Section 319 programs and projects closely with other funding sources and authorities. The new guidelines focus particularly upon the need to coordinate Section 319 programs and projects with those administered through USDA's Farm Bill programs. Each of these programs has strengths that fill gaps in the other's programs. The guidelines discuss how Section 319 provides excellent authorities and funding for program/ project monitoring, watershed planning, project coordination, and how these strengths may be combined with USDA program's implementation funding mechanisms to produce watershed projects that have both a watershed-based, problem-solving focus and adequate funding to implement them effectively.

The 22-page Federal Register version is available on line in pdf format from the following web address:

http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2003_register&docid=fr23oc03-39.pdf

(Continued from page 5)

- High-Large sites where there is significant erosion that flows directly into a stream, lake or ditch

Cost

- Low-cost sites were estimated to cost less than $500 to fix.
- Medium-$500 to $2,500 to fix
- High-$2,500 to fix

With a few exceptions, virtually all of the sites identified in the survey are significant to one degree or another. The cumulative effect of many "low" and "medium" impact sites can exceed that of any one "high" impact site.

Volunteers are the key to the success of a survey. KPA is a very active lake association who informed residents of the upcoming survey, conducted the survey, assisted with report format and content and are now planning next steps. KPA is committed to improving the water quality of Kennebunk Pond.

The survey was funded in part by Maine Dept. of Environmental Protection through a US Environmental Protection Agency Nonpoint Source Grant under Section 319 of the federal Clean Water Act.

For more information on this report or how to conduct a watershed survey, contact Debbie St Pierre at York County Soil & Water Conservation District at 207-324-7015 or via email at debbie-st-pierre@me.nacdnet.org.

NAAEE's *The Environmental Education Collection : a Review of Resources for Educators*.

This series of three publications evaluates curriculum and activities (WET, Wild, PLT etc) for fairness, depth, skill building, action, soundness, and usability. Info includes a short description, cost, and contact info.

You can also get copies from EPA, National Service Center for Env Publications, Cincinnati, Oh 45242
Doc #s
171b98001
171b97003
171b98005

Ice Cream & Outreach?

How the Friends of Cobbosee Watershed Utilize an Ice Cream Boat to Raise Awareness

With children dancing to Calypso music blasting from its portside speakers, the OTTER pulls closer to the dock on a steamy July afternoon on Lake Cobbosseecontee. The OTTER, a 20 foot pontoon boat, is in essence a floating Ice Cream Shoppe. With two on-board freezers stocked with a full compliment of Hershey's Ice Cream, the OTTER has become a welcome site to boaters and residents alike during the warm summer days of Maine.

But the OTTER is much more than an ice cream vessel. Although crew members can recite the ice cream selection from memory, they also provide information and guidance to landowners and lake users alike on what they can do to help combat two or the major enemies facing our lakes and streams: non-point source pollution and invasive plants.

The Friends of the Cobbossee Watershed was established in 2001 by a group of concerned citizens who lived, worked, and recreated on several of the 28 water bodies that comprise the 217-square mile Cobbossee Watershed, located in central Maine. Believing that significant exposure was necessary to enlist widespread involvement, the Board of Directors decided on a unique approach to raise awareness – the selling of Ice Cream! The OTTER was born.

With major sponsorship and support provided by Clark Marine of Manchester, ME, the OTTER was launched during the summer of 2002 and became an immediate hit. Hundreds of residents and boaters were provided information on water issues, and the boat quickly raised the visibility of the *Friends* and their mission. Several newspapers ran major news stories on the OTTER, and Bill Green of Channel 6 was so intrigued that he produced a segment on his program, "The Green Outdoors".

The summer of 2003 brought about even greater results – thousands of customers received information on the issues, which resulted in nearly **400** new members joining the *Friends* membership ranks. In addition to doubling the number of lakes served from four in 2002 to eight in 2003, visibility of both the OTTER and the *Friends* was increased by several factors:

- Adding music, banners and advertising to the OTTER made it more distinguishable from other pontoon boats on the lakes.
- Adding freezer capacity and utilizing dry ice increased our operating hours.
- Enlisting OTTER hosts – lake residents that offered docking and electricity (for

(Continued on page 8)

EPA Environmental Education Grants

2004 Environmental Education Grants became available on November 12. People can access the guidance and forms at www.epa.gov/enviroed, click on grants, solicitation notice 2004 EE grants. The deadline is Tuesday, January 6, 2004. Application must be post marked 1/6/04 or before to be eligible. EPA New England Region 1 hopes to have $200,000 in regional funding.

(Continued from page 7)

freezers) for the OTTER during non-operating hours.

- Securing a known Ice Cream provider (Hershey's) that also provided equipment and marketing support.

Bob Moore, Executive Director for the Friends says, "The OTTER has done more for our organization than ever imagined. Approaching environmental stewardship in a non-threatening manner like selling ice cream has enabled us to engage the public in ways that we believe would have taken years using traditional approaches."

"There definitely have been some 'lessons learned' the hard way," added Moore. "From initially trying a generator to supplementing the freezers with dry ice; to timing our schedule on various lakes to coincide with lake association annual meetings and other events, we continue to look for maximum results. In 2004, we plan to add two additional lakes to our schedule, and also initiate a morning educational program aboard the OTTER for elementary age kids, somewhat along the lines of what the Maine Lakes Conservancy Institute offers."

For more information contact Robert Moore, Executive Director, ***Friends of the Cobbossee Watershed*** www.watershedfriends.com or PO Box 5003, Augusta, ME 04332-5003. (207) 621-4100 (tel), (207) 622-6228 (fax).

2004 National EPA Community Involvement Conference

The website for the 2004 National EPA Community Involvement Website is
now available at: http://www.epancic.org/2004

The conference is scheduled for June 15-18, 2004, in Denver, Colorado. Currently, the conference's Planning Committee is soliciting presentation proposals for this conference.

Session Topics
As a presenter, we are looking to you to share your thoughts about meeting community needs within your specific area of expertise. This includes a wide variety of issues and topics related to programs and activities planned and implemented by EPA and its federal, state, local and tribal partners. For example, consider, but do not limit yourself, to a presentation that focuses on:

Encouraging and integrating public input into environmental decisions. Involving the public as stakeholders and partners in environmental issues and decisions. Public education and outreach efforts and initiatives. Outreach and public participation programs that reach across cultural and ethnic groups or that address environmental justice or tribal issues.

Collaboration between regulatory agencies for inter- and intra-agency efforts or for multi-media initiatives. Building networks for outreach and public participation.
Establishing and maintaining public-private partnerships for outreach, education and community involvement.
Community involvement or public outreach/education tools, technologies, approaches or activities. Evaluating the effectiveness of community involvement or public outreach/education projects and changing the projects in response to evaluation results.

Hot issues or current trends in environmental community involvement, public education/outreach and information access.

This year we are accepting proposals electronically via the conference website. If you would like to submit a proposal on-line, please fill out

The on-line proposal submission form
http://www.epancic.org/2004/submissions.cfm) on the conference website.

Natural History Institute In Maine

(Editors note: The following is excerpted from an email announcement.)

Dear Natural Historians,

Some of you may be relatively familiar with the Delta Institute of Natural History, and for others the information will be completely new. The following provides an overview of the Institute.

PURPOSE
The purpose of the Delta Institute of Natural History is to provide courses, trips, and presentations covering a variety of natural history topics that are:

- conducted by instructors who respect their students and are accessible to them,
- based on the latest research and up-to-date taxonomy, and
- affordable in both time and money.

SETTING
The Delta Institute is located in the town of Bowdoin, Maine, on 29 acres that include hardwood, softwood, and mixed stands, as well as forested and graminoid wetlands. In addition to naturally occurring plants, there are gardens whose focus will increasingly be on native plants.

BUILDINGS
The Delta Institute is housed in two buildings. The education building contains a 23' by 35' lecture/lab space equipped with five boom-arm dissecting scopes and a digital projector. At one end of the room, a 4' by 8' white board enables instructors to illustrate their points, and a corkboard provides space for more illustrative material. At the opposite end is a reference library for use by students and instructors. A bookstore is available to program participants and is open to others by appointment. The Institute maintains an herbarium of vascular plants from New England and maritime Canada, and gardens and natural areas provide living material for study. The second building is a 7-room house that can accommodate 6 people overnight and serves as the center for meals and informal gatherings.

PROGRAMS
The Institute will offer one-day courses, weekend courses, multiple-weekend and multiple-day courses (for example, a course occupying 3 not necessarily consecutive Fridays), field trips, slide programs, and workshops. Also, programs can be specially designed to meet a group's needs. Programs for 2004 are being developed and will be posted to http://www.vfthomas.com/deltahome.htm as they are confirmed.

SCIENTIFIC COLLECTIONS
Although the Institute will eventually house a variety of natural history collections--many boxes of shells, rocks, minerals, and fossils are currently in storage--the initial focus, because of already scheduled courses, is on vascular plants of northeastern North America. Several private collections that have been promised plus the results of many collecting trips this past summer form the core of the growing herbarium..

LIBRARY
The current collection contains printed, digital, and video material about plants (bryophytes and tracheophytes), fungi and lichens, and animals (nothing yet on kingdoms Protoctista or Monera), plus geology, astronomy, ecology, and to quote a passage from The King and I, "etc., etc., etc.". Although material from this library will not circulate, individuals who wish to visit the library are encouraged to do so.

GARDENS
A variety of gardens contains an assortment of mostly non-native plants, some or many of which will be kept because of their teaching value. There are four projects to be completed by then end of 2004. First is to finish removing plants that are more or less invasive into the natural areas of the Institute's property and replace them with native species. Second is to add native plants to the perimeter of the open space behind the house. Third is to develop a new native-plant garden along the front of the Institute's education building. Fourth is to continue expanding a small pool in the open area behind the house. This will become a teaching area for wetland and aquatic plants and a habitat for amphibians. Two spotted salamanders were observed nearby a few weeks ago.

VOLUNTEERS
Individuals or small groups of volunteers are welcome to help with the scientific collections, library, and gardens. This winter the focus will be the scientific collections and library. Work in the gardens will have to wait until spring, but some design work can be accomplished this winter.

VISITORS
Visitors are always welcome, but please e-mail or call beforehand to be sure that someone will be here to show you around.

For more information contact Thomas F. Vining, Delta Institute of Natural History, V. F. Thomas Co., 219 Dead River Road, Bowdoin, ME 04287. 207-266-5748 = 207-BOOKS-4-U. http://www.vfthomas.com

Alliance Grants Call for Applications

Producer-led, public/private partnerships working toward *Better Soil*, *Cleaner Water, Greater Profits* and a *Brighter Future* can receive a grant up to $2,500 from CTIC.
The grant application is attached in pdf format. The application is also available for download from the CTIC web site; just click on the link below. Please forward this e-mail to your colleagues, friends, customers or other audiences that might be interested in these grants.

Deadline is Jan. 7, 2004.

http://www.ctic.purdue.edu/CTIC/GrantApplication.pdf

Capacity Building Recourses For Watershed Management

Capacity Building Resources <http://www.epa.gov/owow/nps/capacity/index.htm>
This website, put together by the Nonpoint Source Capacity Building and Funding Work Group, provides watershed groups and local governments links to technical tools for scientific support, engineering support, information technology, assistance with legal issues, project management, outreach, and planning support. It also provides links to legal resources for activities such as permitting, enforcement, contracting, fund raising, and resource management.

Building Capacity for NPS Management <bldgcapaccasestdfinal.pdf> (PDF, 2.8MB, *Best viewed with Adobe Acrobat Reader version 5 or above.*)
The case studies included in this document highlight watershed groups, local governments, and organizations engaged in innovative approaches for building capacity, such as group building and organization (establishing partnerships and soliciting volunteers), organizing capital resources and fiscal management (obtaining private grants and federal funding), and using technical and specialized resources (using experts, developing innovative projects, procuring office space and equipment, etc.).

Stream and Fluvial Morphology Web sites of interest

(Editors note: Thanks to Todd Janeski at SPO for sharing this list of resources.)

North Carolina Stream Restoration Institute
http://www.bae.ncsu.edu/programs/extension/wqg/sri/stream_rest_guidebook/guidebook.html (stream restoration guidebook)
http://www.bae.ncsu.edu/programs/extension/wqg/sri/ (homepage)

New Hampshire DES
http://www.des.state.nh.us/wmb/was/qapp/index.html ("Generic Quality Assurance Project Plan for Stream Morphology Data Collection")

EPA Rapid Watershed Assessment: http://www.epa.gov/owow/monitoring/rbp/

WMCOG RSAT (Rapid Stream Assessment) http://www.stormwatercenter.net/monitoring%20and%20assessment/rsat/smrc%20rsat.pdf

Stream Visual Assessment Protocol, USDA: http://www.wcc.nrcs.usda.gov/water/quality/frame/wqam/

USDA Stream Corridor Restoration Handbook: http://www.usda.gov/stream_restoration/newgra.html

Montgomery County MD: http://www.montgomerycountymd.gov/mc/services/dep/CSPS/watersheds/csps/html/chap1.htm#Chapter%201.%20Overview%20and%20Findings

Ontario Ministry of Environment Rapid Geomorphic Assessment (RGA) http://www.ene.gov.on.ca/envision/gp/4329e_c.pdf

Maryland Stream Handbook: http://dnrweb.dnr.state.md.us/download/bays/md_streams_wrd.pdf

SC Ocean and Coastal Resource Mgmt Stream Restoration Guidance:
http://www.scdhec.net/ocrm/HTML/corridor.html

And from John Field:
Commercial program called RiverMorph.
http://www.rivermorph.com/.

Briefs from Waterlines

From Waterlines an electronic newsletter by the Senator George J. Mitchell Center for Environmental and Watershed Research at the University of Maine

Measuring the Effects of Shoreline Development on Maine Lakes. Mitchell Center graduate student Kirsten Ness spent most of her summer in the field, collecting lake data for a study that will begin to define reference conditions to measure the effects of shoreline development on small lakes throughout Maine. . . http://www.umaine.edu/waterresearch/outreach/waterlines_v9_n2.htm#shoreline

PEARL: The Evolution Continues. In 1996, Mitchell Center staff and colleagues at the Maine Department of Environmental Protection (DEP) had a novel idea: to link the vast amount of information on Maine's lakes into an on-line searchable database. At the time, information on Maine's 6,000 lakes resided in PC and paper files in several state agencies, in unconnected PC files of a dozen researchers around the state, and in hard copy reports and publications. . . http://www.umaine.edu/waterresearch/outreach/waterlines_v9_n2.htm#pearl

Laws of Maine

Continuing with its endeavor to provide useful information to the State and the world at large, the Office of the Revisor of Statutes is pleased to announce that the Laws of Maine as enacted by the First Regular Session of the 121st Legislature are now available on-line.

Included with the public and private and special laws, resolves, joint study orders and Revisor's Report is a subject matter index and an index by title and section of the Maine Revised Statutes affected by the First Regular Session of the 121st Legislature.

The on-line version of the Laws of Maine may be found at the following site: <<http://janus.state.me.us/legis/ros/lom/lomdirectory.htm>>.

Load reduction training

NEIWPCC will be hosting a Load Reduction Estimation Training in Lowell, MA (exact location to be determined) on Tuesday, January 27, 2003. FMI contact: Rebecca M. Weidman, Environmental Analyst, NEIWPCC, Boott Mills South, 100 Foot of John Street, Lowell, Massachusetts 01852. Tel: (978) 323-7929 ext. 229, Fax: (978) 323-7919 or rweidman@neiwpcc.org

Maine's NPS Training Center also plans to offer a Load Reduction Training opportunity in March 2004. Watch the Training Center Web site for more information http://www.state.me.us/dep/blwq/training/nps.htm

StormCon '04

StormCon '04 will take place July 26-29 in Palm Desert, California, at the Desert Springs Marriott, www.desertspringsresort.com.

If you are involved in managing or funding a stormwater program or stormwater utility, researching or testing best management practices, developing regulations or helping your community comply with them, consider sharing your experience and expertise at *StormCon*. We are seeking presentations in the following conference tracks:

- Stormwater Best Management Practices
- Monitoring Water Quality
- Meeting the Regulatory Challenge
- Managing the Stormwater Program

Abstracts are due by Friday, December 12, 2003, and final papers for those that are accepted will be due April 1, 2004. To submit your abstract and for more information on the conference and workshop registration, please visit us on-line at www.StormCon.com, http://www.forester.net/sc_call.html.

Calendar of Events

February 2004. Forestry 101. Black Bear Inn, Orono. Issues of land use for CEOs. FMI State Planning Office 287-8050.

February 16-20, 2004. International Erosion Control Association 35th Annual Conference & Expo. Philadelphia, Penn. FMI www.ieca.org.

March 2004. Load Reduction Training. Hosted by DEP's NPS Training Center. FMI contact Bill Laflamme at 287-7726.

April 7, 2004. Maine Stream Summit. U. Maine at Belfast. Watch Maine DEP Stream Team web site for the latest information http://www.state.me.us/dep/blwq/docstream/team/streamteam.htm

April 21, 2004. Maine Water Conference. Augusta Maine. FMI www.umaine.edu/waterresearch/mwc/index.htm

April 21, 2004. Second Maine Conservation Expo. U. of Maine Farmington Campus. FMI call Rosetta at 778-4279.

May 2004. Shoreland Zoning Workshops for CEOs. FMI State Planning Office 287-8050.

May 21, 2004. Tentative date for Southern Maine Children's Water Conference.

July 26-29, 2004. StromCon '04. Palm Desert, Californian. FMI www.forester.net

Resources Available

"Where Rivers Are Born: The Scientific Imperative for Defending Small. Streams and Wetlands" (http://www.amrivers.org/docs/WhereRiversAreBorn.pdf)

The Scientific Imperative for Defending Small Streams and Wetlands. Sept. 2003. This is a 24-page overview on Headwater Streams and Wetlands, written by 11 ecologists (who used more than 235 scientific publications) and produced by American Rivers and the Sierra Club (with grants from the Sierra Club Foundation, Turner Foundation, and American Rivers). It can be found at: http://www.amrivers.org/docs/WhereRiversAreBorn.pdf

This newsletter is prepared especially of those involved in nonpoint source pollution issues. It is funded through an EPA 319 Clean Water Act Grant. If you have any announcements, comments or items for the Nonpoint Source Times, or if you would like to be added to the mailing list, please call or write:

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Clean water starts with you!

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