



# Maine Stream Team Program NEWS



Networking, Education, and Stewardship

Volume 5 Issue 2

Spring 2005

## Highlights: Maine Stream Summit 2005

The third annual Maine Stream Summit (MESS '05) on April 8th was a great opportunity for individuals from a broad range of education, stewardship, and government backgrounds to share ideas. Here are some highlights from the presentations shared at the summit.



- ◆ Dr. Aram Calhoun, our keynote speaker for the Stream Summit presented some of her work on vernal pool amphibians. She works closely with volunteers and towns on amphibian monitoring and vernal pool protection. In her memorable talk we learned about the amphibian life cycle, including "Big Night," when many amphibians come out to breed in vernal pools on a certain spring evening. Most importantly we learned about the need for conservation of these sensitive organisms and their habitats.
- ◆ A Stream Team club at Central High School shared water quality data they have been gathering on Kenduskeag Stream and impressed us with their understanding of watershed ecology.
- ◆ Wendy Garland, of the Maine DEP, represented the Royal River Youth Conservation Corps (YCC). She discussed the YCC's work, sharing first-year experiences from the organization. Among their many accomplishments, the YCC planted almost 150 trees and dug over 100 feet of stormwater diversion ditches last year.
- ◆ Anna Bourakovsky, from the Marine Environmental Research Institute (MERI), spoke about

their pilot water quality monitoring season in the Blue Hill Watershed. One of the big successes in this project was their collaboration with both middle and high school students.

- ◆ Jeff Stern spoke about the Bear River stream and watershed survey, sharing his experiences and some images of erosion and channel cutting.
- ◆ Dr. Jane Disney, of the Mt. Desert Island Water Quality Coalition, discussed lessons learned in developing local environmental stewardship. The take home lesson here was to find energetic partners and get the community to take ownership of their local water resources!
- ◆ Melissa Laser, of the Maine Atlantic Salmon Commission, shared a history of dams on the Sheepscot River, including interesting historical and present-day photographs of these structures and their surroundings.
- ◆ Diane Bartholomew and Nonny Ferriday, of the Bagaduce Watershed Association, wrapped up the session with a talk on a state-of-the-art eelgrass restoration project underway in the Bagaduce River Estuary.

### INSIDE THIS ISSUE



Maine Stream Summit Highlights	1
Changes in the Land (Stetson Brook)	2
Critter Corner: Spotted Salamanders	3
Calendar	4
Announcements	5
Grant Opportunities	7
Contact Us	8

# Changes in the Land

by John L. Painter

*For over a year now the Stetson Brook Stream Team (team # 53) has been developing an understanding of this tributary of the Androscoggin River and the people who have lived along side of it.*

Clearly visible snaking through the lower right quarter of this USGS satellite photo, Stetson Brook (the dark twisting line) has a feeder wetland visible at the center of the photo almost directly across from Lemieux street and Rejane Avenue. Unfortunately there is storm water run off from up hill. In response, the Stetson Brook team hopes to initiate a storm drain marking program for the neighborhood, emphasizing the effects chemicals, detergents and other wastes can have on the water quality of the brook.

Also visible from near the top right down to the bend in the brook closest to the wetland is an ATV trail well worn into the ground. The run-off from the trail, as well as stream bank erosion, has caused damage in

what should be good brook trout habitat: there are no trout there. Further downstream and upstream (roughly 100 feet) from the crossing there are both brown and brook trout.

The Stetson Brook team will, with a small grant from Evergreen State College (in Olympia, WA), purchase water monitoring equipment (a hand held dissolved oxygen and temperature meter and water test kits) for the purpose of evaluating water quality above, below and at the crossing point to help inform community members of the impact of equipment use on the brook.

Our team hopes in time to include more people from the neighborhood and local schools to join us in monitoring and improving Stetson Brook as a unique and accessible resource for our community.

If you are interested in participating in either of these two initiatives please contact John Painter at 777-7482 or [paintervecsey@adelphia.net](mailto:paintervecsey@adelphia.net). Also, check out the Stetson Brook stream team website at: [www.geocities.com/stetsonbrookteam/index.html](http://www.geocities.com/stetsonbrookteam/index.html)



## Are you interested in stream surveying?

There are approximately 33,000 miles of streams and rivers in Maine, and basic habitat information is lacking for many of these miles. The Maine Stream Team Program (MSTP) will be **offering trainings** in rapid stream habitat and geomorphology surveys. These surveys are designed to collect information at the reconnaissance/scouting-level and focus on broad indicators of stream corridor health rather than measurement-intensive data. These surveys collect data which can be used by a variety of interested citizens and decision-making entities, and are being promoted by the Maine Department of Inland Fish and Wildlife. Further details on this training can be found on the MSTP Calendar, page 4.



## Critter Corner: Spotted Salamanders

Have you ever seen a salamander in your backyard? The spotted salamander would seem to be an obvious neighbor: its 4 to 7 inch long dark brown/black body is decorated with two irregular rows of vivid yellow spots.

Still, the spotted salamander, in the family of mole salamanders, often goes unnoticed due to its reclusive tendencies. For about 95% of the year, spotted salamanders hide under logs, leaves, and rocks, or in burrows and tunnels made by other animals. Only at night do they emerge to feast on insects, spiders, snails, worms, and centipedes.

Spotted salamanders prefer to live in woods near slow moving streams or, more often, vernal pools. Vernal pools are a type of wetland that is isolated and sometimes seasonal. Many of them dry up at some point during the year, so they cannot support a permanent population of fish.

This lack of fish may make vernal pools less attractive to people, but these pools are critical in the life cycle of many amphibians, including spotted salamanders. Salamander eggs and larvae would make a tasty treat for a fish, so spotted salamanders rely on these predator-free zones for mating and laying of eggs.

Each spring, following the quiet slumbers of winter hibernation, warming temperatures and higher humidity cue the spotted salamanders to emerge. Some moist night between mid-March and the end of April, these amphibians migrate “en masse” to their local vernal pool. Once there, the congress of adult salamanders will participate in a



mating dance so vigorous that the water around them may appear to boil. The males will then deposit small packets of sperm called spermatophores over shallow areas of the bottom. The females will pick the sperm up from these spermatophores, resulting in internal fertilization.

A few days later, female salamanders will lay several gelatinous masses of eggs, with 50 to 250 eggs in each mass. They anchor these golf ball-sized masses onto vegetation in shallow water, where they swell to the size of softballs before the larvae emerge.

Spotted salamander larvae are about one half-inch long and dull yellow-green in color. They look something like tadpoles with long, feathery gills protruding from each side of their heads. As their vernal pool homes begin to dry up, the larvae continue developing until they fully metamorphose into land-dwelling salamanders. They leave the vernal pools and find their home up to a half mile away.

Since their life-cycle includes both an aquatic and a terrestrial phase, spotted salamanders are highly vulnerable to changes in the environment. They are particularly sensitive to development; destruction of vernal pools will interfere with breeding, and destruction of surrounding uplands (within a half-mile radius) will interrupt the rest of their life cycle.

Within the northeastern United States, several states have named the spotted salamander a Species of Special Concern. The fate of this unique species is intrinsically linked to the protection of vernal pools and their forested surroundings.

### References:

Hunter, M., Calhoun, A., and McCollough, M., ed., Maine Amphibians and Reptiles, University of Maine Press, 1999, p. 44-48.

Kenney, L., and Burne, M., A Field Guide to the Animals of Vernal Pools, Massachusetts Division of Fisheries & Wildlife Natural Heritage & Endangered Species Program and Vernal Pool Association, May 2000, p. 3, 32-33.

## Welcome New Stream Teams!

# 64—Martin Stream/Plymouth Pond Team

#65—Josias River Cleanup Team

#66—Unity College Roots and Shoots Stream Team



# Calendar Items

*Do you have calendar items for us? Please contact us by [August 1, 2005](#).*

## **Maine Land Conservation Conference**

May 6-7, 2005; Brunswick area. Visit this website for more information < [www.mltn.org](http://www.mltn.org) >, as it becomes available. Sponsored by the Maine Coast Heritage Trust and the Maine Land Trust Network.

## **National River Cleanup Week**

May 14 - 22, 2005. For more information and resources, visit < [www.nationalrivercleanup.com](http://www.nationalrivercleanup.com) >. (Note: Please be aware that some rivers and streams may have high flows at this time. Please use caution. Working only on the banks of the river/stream is advised.)

## **Southern Maine Children's Water Festival (10th Annual)**

May 20, 2005; University of Southern Maine, Gorham Campus. This event brings water resource professionals together with 5th and 6th grade students and engages them in activities and exhibits on water. For more information visit < [www.state.me.us/dep/blwq/docteachers/cwf/index.htm](http://www.state.me.us/dep/blwq/docteachers/cwf/index.htm) >.

## **National River Rally**

May 20-24, 2005; Keystone, Colorado. For more info, visit < [www.rivernet.org](http://www.rivernet.org) >.

## **Rapid Stream Habitat/Geomorphology Survey Training Workshops**

May 21 (Otisfield, ME) and June 4 (Rangeley, ME), 2005; approx. 9:00 AM - 1:00 PM. (For more information, read the stream survey description on page 2 of this newsletter.) To register, contact the Maine Stream Team Program (see contact information on pg. 8).

## **Androscoggin River Watershed Council Annual Conference**

June 10, 2005; Bethel, ME. Topics will include acid deposition, mercury & wildlife, water quality, invasive species, recreation, forestry, and changing-landownership issues. An optional guided, late afternoon paddle on the Androscoggin River will be available too. Visit < [www.androscogginriver.org](http://www.androscogginriver.org) > for more info.

## **Androscoggin River Source to the Sea Canoe Trek (10<sup>th</sup> Annual)**

July 5 - 24, 2005. For more info visit < [www.avcnet.org/arwc/trek.html](http://www.avcnet.org/arwc/trek.html) >. Also, a benefit concert for the Androscoggin R. Watershed Council, featuring the Denny Breau Trio, Broface, and Jewell Clark, will take place on July 10 in Bethel.

## **River and Lake Restoration: Changing Landscapes (Conference)**

July 12-14, 2005; Portland, ME. For more information, visit < [www.iwr.msu.edu/ucowr/](http://www.iwr.msu.edu/ucowr/) >.

## **World Rivers Day**

September 25, 2005. For more information visit < [www.riversday.bcit.ca/update.htm](http://www.riversday.bcit.ca/update.htm) >.

## **World Water Monitoring Day**

October 18, 2005. On-line site registration and kit purchases will begin in July and the monitoring period will be from September 18 through October 18. For more information, visit <[www.worldwatermonitoringday.org](http://www.worldwatermonitoringday.org)>.





# Announcements



## **Riparian Zone (Streamside/Shoreland), Buffer, and Stream-Friendly Landscaping Information (New Maine Stream Team Program Webpage)**

Find links to a number of resources related to the ecology and management of these very important areas. The site includes links to resources providing information about stream/river-friendly landscaping techniques. The web address is: < [www.state.me.us/dep/blwq/docstream/team/riparian.htm](http://www.state.me.us/dep/blwq/docstream/team/riparian.htm) >.

## **Erosion and Sediment Control Law Update**

This law, passed in 1996, requires that soil erosion control practices be used wherever soil is being disturbed. Additionally, chronically eroding sites located in areas draining to watersheds of state-designated "Most at Risk" water bodies must be stabilized by July 1, 2005. For more information visit:

- < [www.state.me.us/dep/iob/index.shtml](http://www.state.me.us/dep/iob/index.shtml) > (check out "Keep the Soil" article)
- < [www.maine.gov/dep/blwq/docstand/stormwater/esc/esclawbrochure.pdf](http://www.maine.gov/dep/blwq/docstand/stormwater/esc/esclawbrochure.pdf) > (brochure)
- < [www.state.me.us/dep/blwq/docstand/escbmps/index.htm](http://www.state.me.us/dep/blwq/docstand/escbmps/index.htm) > (best management practices).

## **Sheepscot River Data Website Now Available**

Visit < [www.krisweb.com/kris/sheepscot/krisdb/html/krisweb/index.htm](http://www.krisweb.com/kris/sheepscot/krisdb/html/krisweb/index.htm) > for more info.

## **Meduxnekeag River Targeted Watershed Initiative Grant - Project Update**

A number of organizations recently collaborated to initiate a "Winter Cover Project" in the watershed. It was designed to keep productive agricultural soil on potato fields (especially during spring runoff) and out of tributaries and branches of the Meduxnekeag River. For more information check out the Spring 2005 edition of the *Non-Point Source Times* at < [www.state.me.us/dep/blwq/doceducation/newsletter.htm](http://www.state.me.us/dep/blwq/doceducation/newsletter.htm) >.

## **Atlantic Salmon River Watersheds - Project Updates**

Check out the updates available at the Project SHARE (Salmon Habitat And River Enhancement) website. Items include Dennys and Narraguagus River watershed management plans, water quality monitoring plans, restoration projects, best management practice manuals, etc. Visit the site at

< <http://salmonhabitat.org/projects.htm> >. Also, check out the many updates of the Downeast Salmon Federation's 2005 Intervale newsletter at < <http://mainesalmonrivers.org/> >.

## **Nonpoint Source Management Program -- Annual Report 2004**

Maine DEP, and its grant recipients, deliver services to control nonpoint source water pollution to help protect or improve our lakes, streams, rivers and coastal waters. This report summarizes accomplishments of DEP's Nonpoint Source Program activities in 2004 funded, in part, under the Federal Clean Water Act Section 319 program in partnership with the U.S. Environmental Protection Agency. To view the report, visit:

< [www.state.me.us/dep/blwq/docgrant/319\\_files/reports/index.htm](http://www.state.me.us/dep/blwq/docgrant/319_files/reports/index.htm) >.

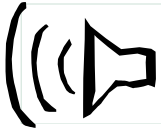
## **Online Courses for Teachers Summer 2005 - NTEN: National Teachers Enhancement Network**

Offerings include: Streamside Science: Hands-on Approaches to Water Quality Education; Biology of Riparian Zones and Wetlands; Hydrology of Streams and Lakes. Visit < [www.scienceteacher.org/courses.htm](http://www.scienceteacher.org/courses.htm) > for more info.

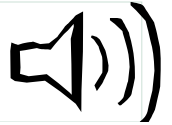
## **Presumpscot River Water Quality Monitoring Volunteers Needed**

Check out < [www.prw-maine.org](http://www.prw-maine.org) > for more info.





## **Announcements** (continued)



### **New Website for the Spruce Creek Association (Stream Team # 63)**

Be sure to visit < [www.sprucecreekassociation.org/](http://www.sprucecreekassociation.org/) >.

### **Think Blue Maine Stormwater Website Launched**

Check it out at < [www.thinkblumaine.org/](http://www.thinkblumaine.org/) >.



### **Maine Virtual Herbarium - Maine Center for Invasive Aquatic Plants (MCIAP)**

A collection of information (photos, line drawings, scanned images, keys, ecological information, etc.) about Maine's native and invasive aquatic plants. Also check out the MCIAP's schedule for Invasive Plant Patroller workshops. Visit them at < [www.mainevolunteerlakemonitors.org/mciap/](http://www.mainevolunteerlakemonitors.org/mciap/) >.

### **Low Impact Development\*\* Funds Available from the Casco Bay Estuary Project**

The Casco Bay Estuary Project is pleased to announce a Request for Proposals for its Low Impact Development Fund. Up to \$66,000 is available for grants to support construction of low impact development (LID) demonstration sites within the Casco Bay watershed. Individual project awards will range from \$5,000 - \$24,000. Applications must be received by 4:00 pm on June 30, 2005. Visit < [www.cascobay.usm.maine.edu/storm.html](http://www.cascobay.usm.maine.edu/storm.html) > for more info.

*\*\*What is Low Impact Development?* Visit < [www.lid-stormwater.net/intro/sitemap.htm](http://www.lid-stormwater.net/intro/sitemap.htm) > or < [www.epa.gov/owow/nps/lid/](http://www.epa.gov/owow/nps/lid/) > for more info.

### **Stream/River-Side Lands Preserved Along the Ducktrap River**

Approximately 5,500 acres of the Ducktrap River watershed have been preserved through a combination of state, municipal, and private land trust funding. This river and its surrounding woods provide pristine habitat for spawning and juvenile salmon and make the river one of only eight US rivers that support wild Atlantic Salmon. The preserved acreage represents 83% of the riparian habitat on the mainstem of the river and over 40% of the riparian habitat along major tributaries. For more information, visit < [www.coastalmountains.org/html/duckt\\_coalition.htm](http://www.coastalmountains.org/html/duckt_coalition.htm) > or < [www.state.me.us/spo/lmf/projects/](http://www.state.me.us/spo/lmf/projects/) >.

### **Reports on Some of Maine's Urban Streams Available Online**

Visit < [www.state.me.us/dep/blwq/docmonitoring/stream/index.htm](http://www.state.me.us/dep/blwq/docmonitoring/stream/index.htm) > for more info.

### **Maine Chapter of the Izaak Walton League of America**

Check out their newly designed website at < <http://iwlmaine.org> >.

### **Nationwide Water Quality Data Available from the U. S. Geological Survey's National Water-Quality Assessment Program**


Visit < <http://water.usgs.gov/nawqa/> > for more info.

### **Land Conservation Webcast: Funding Options for Local Governments**

June 9, 2:00 to 3:30 pm. Hosted by the International City/County Management Association. Free registration for first 100 sites to register. Go to < <http://lgean.org/html/training> > for more information or to register.



## \$\$ Grant Opportunities \$\$

Funder	Region	Deadline(s)	Phone	Web Site/Email (EM)
Amelia Peabody Charitable Fund	New England (preference MA)	June 1	(617) 451-6178	
Kodak American Greenways Grants	National	June 1'		<www.conservationfund.org/?article=2372>
Planet Dog	New England	June 1	(207) 772-6751	<www.planetdog.com/pdp.asp>
Captain Planet-Environmental Education	National	June 30 Sept. 30		<www.captainplanetfdn.org>
Timberland	National (Priority where employees live/ work)	June September		<www.timberland.com/timberlandserve/timberlandserve_index.jsp>
Horizon Foundation	Select counties- ME, MA, NJ	July	(978) 356-8317	<www.horizonfoundation.org>
Catalyst Fund	Maine	August 15		<www.megrants.org/catalyst.html>
Fish America Foundation NOAA	Coastal States	July Revolving	(703) 519-9691	<www.fishamerica.org>, EM: fishamerica@asafishing.org
Jane's Trust	ME, NH, MA, VT, FL	August 15	(617) 227-7940 x775	<www.hembar.com/JanesTrust>
Rivers, Trails and Conservation Assist. Program	Maine	August 1	(207) 725-4934	<www.nps.gov/rtca> EM: burnham_martin@nps.gov
Unity Foundation	National	August 15 On-going	(207) 948-6489	<www.unityfoundation.net>
Ittleson Foundation	National	September 1- letter of interest	(212) 794-0351	<www.ittlesonfoundation.org>
Orchard Foundation	New England/NY	September 1	(207) 799-0686	<www.orchardfoundation.org>
Town Creek Foundation	National	September 15'		<www.towncreekfdn.org>
Kennebunk Savings Bank	Southern Maine	On-going	Contact branch office	<www.kennebunksavings.com/community.html>
Environmental Support Center	National	Monthly	(203) 331-9700	<www.envsc.org>

The Grantsmanship Center offers a 5 day training program throughout the U.S on researching grants, writing grant proposals and negotiating with funding sources. Go to [www.tgci.com](http://www.tgci.com) for more information.

### **RECEIVE THIS NEWSLETTER BY E-MAIL!**

We are moving toward sending the newsletter through email. This will help us to save on printing and delivery costs and paper. We will not sell your e-mail address to other entities. If you have email, please send us your address. For those who do not have email, we will continue to send you the newsletter through the mail.



Maine Stream Team Program  
c/o Maine DEP  
312 Canco Road  
Portland, Maine 04103

## How Do I Join the MSTP?

It's easy! First, choose a stream or stream segment. Next, obtain a "stream team registration form" by contacting us, or simply fill out the online registration form. After registering, you will receive some helpful information and begin to receive our periodic newsletter to help you stay up-to-date.

Membership to the program is free to any interested citizen, family, or organization. Once you have a "Team" and a stream, you're set! You can determine your stream's values and problems, and you can plan projects based on your assessments. You establish the course of events in protecting your stream. The Maine Stream Team Program will help you with ideas, advice, and informational materials.

### Contact The Maine Stream Team Program (MSTP):

**Mail:** Maine Stream Team Program, c/o Maine DEP, 312 Canco Road, Portland, ME 04103



**E-mail:** [mstp@maine.gov](mailto:mstp@maine.gov)

**Internet:** <http://www.maine.gov/dep/blwq/docstream/team/streamteam.htm>

**Phone:** (888)769-1036 (toll free – ask for the Maine Stream Team Program); (207)822-6317 [Jeff Varrichione, Portland, coordinator]; (207)822-6331 [Erin Crowley, Portland, Americorps volunteer]; (207) 287-7729 [Mary-Ellen Dennis, Augusta]; (207)941-4566 [Mark Whiting, Bangor]

