
◆ The Watershed News ◆

Volume II, Issue 3

Spring 2000

A Quarterly Publication of the Ossipee Watershed Protection Project Published by the Green Mountain Conservation Group

Aquifer recharge lands will be focus of study

The Green Mountain Conservation Group has begun an 18-month project to map important aquifer recharge lands in the Ossipee Watershed. This is an area that includes New Hampshire's largest stratified drift aquifer, which is a critical future drinking water source. GMCG will be working with Dr. Robert Newton, a Smith College geology professor, who originally mapped the Ossipee quadrangle for the US Geological Survey.

Based on Dr. Newton's research, the project's next step will be to identify the most important recharge lands. The Green Mountain Conservation Group will then offer workshops for landowners on voluntary conservation measures and best management practices to protect these important aquifer recharge areas. GMCG will also offer workshops for municipal officials and residents of the Ossipee Watershed on including the results of the watershed mapping in master planning and land use ordinances.

This project is made possible by a grant from the NH Department of Environmental Services through its Drinking Water Source Protection Program.

Area residents who would like to volunteer for the aquifer recharge mapping project can obtain more information by calling GMCG at 539-7926.

Watershed communities to work on resources inventory

Volunteers from the six-town region are working on producing a Natural Resources Inventory of the Ossipee Watershed. The Green Mountain Conservation Group is partnering with UNH Cooperative Extension to conduct the NRI and to produce an Ossipee Watershed NRI map. The six towns that make up the Ossipee Watershed are Effingham, Freedom, Madison, Ossipee, Sandwich and Tamworth. More than 30 volunteers from these towns turned out at the first meeting in late March to learn about the NRI process. The group will meet again Wednesday, April 26, at the Madison Public Library at 7 p.m. Additional volunteers are welcome to attend.

Information for the NRI already exists in several computerized data bases, including the GRANIT system at the University of New Hampshire, the NH Department of Environmental Services, and the Society for the Protection of NH Forests, so collecting the data will not require volunteers to enter onto landowners' property. The geographic information system (GIS) can best be thought of as individual plastic sheets in a drawer, each sheet representing a natural resource or man-made feature such as rivers and streams, undeveloped shoreland, aquifers, large blocks of forestland, prime agricultural land, critical wildlife habitat, roads, and even areas of pesticide application. There are well over 100 such layers in the computerized system. Anyone with a computer can access this data at <http://nhresnet.sr.unh.edu/granit/overview.html>.

The NRI volunteers will work to prioritize five or six features critical to the six towns in the Watershed.

The Green Mountain Conservation Group has several goals for the NRI project, including working together as a six-town community, relating the prioritized resources to an understanding of the functioning of the watershed, and offering educational programs and workshops for landowners interested in voluntary measures and best management practices to protect those resources.

The Green Mountain Conservation Group will share the NRI maps and information with planning boards in the six towns for use in master planning and land use decision making.

NRIs are used to document existing land conditions, guide conservation planning, review land use proposals, plan for land use management, promote forest stewardship and protect wildlife habitat. Ellen Snyder, wildlife specialist with UNH Cooperative Extension, described the Ossipee Watershed as "a very critical part of the state for maintaining animal habitat connections from northern New Hampshire to the Ossipee Mountains." In 1995, the NH Natural Resources Protection Project inventoried the entire state in order to identify the state's top priority areas for conservation. The Ossipee Lake area was listed in the top six areas of conservation importance in NH.

If you would like to be a part of this project, call GMCG at 539-7926.

The Watershed News

The Watershed News is a quarterly publication of the Green Mountain Conservation Group, a non-profit, 501(c) 3, charitable organization established in 1997 and dedicated to the preservation of the natural resources in the Ossipee Watershed. The towns of Effingham, Freedom, Madison, Ossipee, Sandwich and Tamworth make up the boundaries of the Ossipee Watershed Protection Project. This watershed includes one of the largest and deepest stratified drift aquifers in N.H. It covers 47 square miles and receives drainage from a 330 square mile area. It is a critically important resource for existing and future community water supplies.

The GMCG's purpose is twofold:

1. To provide an organizational structure for a coalition of citizens and local officials interested in identifying sensitive areas within the Watershed in need of protection;
2. To offer public educational events about conservation concerns and possible solutions regarding the preservation of this unique natural resource.

Through education and advocacy we strive to promote an awareness and appreciation of our natural resources and encourage a commitment to protect them.

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Special Places

Team of archaeologists returns to watershed

Editor's Note: *Special Places* is a regular feature of the Watershed News, highlighting an historical or cultural resource within the six towns of the Ossipee Watershed. The Green Mountain Conservation Group has endorsed Citizens for New Hampshire Land and Community Heritage, a broad coalition of more than 100 grassroots organizations whose aim is to build support for the increased public and private commitment to conservation of our natural, cultural and historic lands and resources. For more information on Citizens for N.H. Land and Community Heritage, contact Brian Hart at 230-9729 or e-mail him at bhart@igc.org.

BY DICK BOISVERT

This year, the New Hampshire Conservation and Rescue Archaeology Program (SCRAP) returns to the Ossipee area for the annual summer field school. The field school will concentrate on two different environments, the Pine River State Forest and the interior of the Ossipee Mountains. Our time will be divided between these two important and environmentally different areas.

The Pine River State Forest is a globally rare plant community dominated by scrub oak and pitch pine situated on glacial outwash deposits and encompassing the Pine River esker. We will focus on specific environmental areas within this setting and attempt to identify sites and localities that may have been unique to this area. Our interest is prompted by concerns for possible future development within the Pine River State Forest that could potentially impact these resources.

We will also venture into the Ossipee Mountains and continue our efforts to locate chipped stone tool manufacturing workshops

associated with the hornfels formations that we believe are associated with the Ossipee Ring Dike.

The field school will emphasize survey techniques and the planning associated with reconnaissance level fieldwork. This year the shovel will take precedence over the trowel, as we will pursue an ambitious shovel test pit survey. We are optimistic about our chances.

In the 1992 survey we identified six previously unrecorded sites in the region, including the Hormel Site, occupied by Native Americans from 6000 BC to AD 1600, and a late Paleoindian site, occupied approximately 9500 years ago. For those of you who have wondered, "Just how did they decide to dig there anyway?" this is your chance to find out.

We will be based at Camp Wakuta, the headquarters for the 1992 and 1993 SCRAP field schools. This is a wonderful place, with cabins, dining hall, pond and beach. The field school will continue the format of three sessions, each two weeks long, beginning on June 19, July 3, and July 17. As in previous years, college course credits can be obtained through Plymouth State College.

Included with this newsletter is the field school flier with additional information and registration form. If you would like any additional information contact Dick Boisvert at the New Hampshire Division of Historical Resources; by phone 271-6433, or by e-mail at scrap@nhdhr.state.nh.us, or by mail at SCRAP Field School, NHDHR, PO Box 2043, Concord, NH 03302-2043.

*Dick Boisvert is New Hampshire's
Deputy State Archaeologist.*

NH forests can be sustainable

BY PETER POHL

Every 10 to 15 years the USDA Forest Service conducts a Forest Inventory and Analysis of New Hampshire's forest resources. This analysis is done to help the states develop long-range forest policies. This inventory places special emphasis on the timber resource. Preliminary results of the most recent survey point to some interesting trends.

At the current time, New Hampshire is growing more timber than we are harvesting. We are 84% forested and we continue to be the second most forested state in the nation, after Maine. This study found New Hampshire is harvesting about 80% of the volume that it is growing. Thus, there is a real opportunity to manage our forests on a sustainable basis.

Despite this encouraging report, there are still some concerns. In 1983, when the last study was completed, New Hampshire was cutting nearly all the softwood volume that was growing and only 26% of the hardwood. Concern

was expressed then that our softwood harvest would in the future exceed our growth. Fortunately, this has not happened. However, the future of our softwood forests is still a concern.

For the first time in a long time, New Hampshire's total forested acreage has decreased by over 134,500 acres, averaging an annual loss of nearly 9,600 acres. Much of this loss is due to development. Projected growth rates for the state indicate the conversion of land to other uses will only accelerate. The loss of forest land is a concern because our forest base is an important part of our economy and way of life. We need to maintain a working landscape.

Despite the loss of forest land, the study shows there is 6% more volume of wood today than in the early 1980s. This is due to the fact that our forests are aging. Older forests generate more merchantable volume of forest products.

Since much of New Hampshire's forest land is privately owned, there is a need for these owners to maintain a strong stewardship ethic. This commitment is essential if we are to

maintain a healthy forest products industry and a prosperous tourist economy.

Further analysis of this statewide forest inventory information will provide individual county assessments of this data. Comparisons with the 1983 information will allow planners and organizations concerned with the environment to help establish trends.

One trend I suspect will be corroborated is the continual decrease in the amount of forested acreage. Some of this conversion is for agricultural uses. The majority of it is either commercial or residential uses. The highest percentage of forested acreage may have occurred in the early 1980s with a gradual loss since then. As information becomes available, it will be shared through future articles.

Peter Pohl is a forester with UNH Cooperative Extension, Carroll County.

Local authors chronicle life along the Ossipee River

"Ossipee Riverlands: Effingham, Freedom and the Great Ossipee River," is a photographic essay of life in Effingham Falls between 1859 and 1959 recently published by Carol Foord of Freedom and Sheila Jones of Effingham. Proceeds from the sale of the book will benefit the Freedom and Effingham Historical Societies. The book includes a short history of Effingham and Freedom, which were originally one town, and the village known as Effingham Falls which straddled both sides of the river. In 1831, the area north of the Ossipee River became North Effingham and finally, in 1832, became known as Freedom. The book endeavors to show how the two towns were linked in the past and remain linked today. The book contains five chapters: Effingham, Freedom, Ossipee Lake, Effingham Falls, and the Great Ossipee River. The 234 photographs and illustrations in the book and the

accompanying 53 pages of text bring to life the rich history of Effingham Falls and show how the Ossipee River has served to divide as well as bring together the two communities. As the authors write, "[W]e must be mindful that rivers have enormous energy. They also know no boundaries. They do not even respect the beds in which they lie. They move rocks, gravel, sand, clay and other materials from one town to another. Fed by rains, snow, runoff, over-ground streams, and underground aquifers, rivers are easily polluted by our careless and wasteful ways. The Great Ossipee River belongs to all of us. It is a precious natural resource to be enjoyed now and in the future." For more information on the book, call Sheila Jones at 539-4071.

Conservation Conversations

Editor's Note: This feature, *Conservation Conversations*, is intended to provide a forum for the Conservation Commissions in the six towns of the Ossipee Watershed to share news of their activities and an opportunity to find creative solutions regarding watershed issues. It is the goal of the Green Mountain Conservation Group to encourage the six towns together to create a strong voice as a united watershed community. **Think Locally; Act Watershed.**

We invite the Conservation Commissions in Effingham, Freedom, Madison, Ossipee, Sandwich and Tamworth to submit articles or copies of their minutes by June 20 for inclusion in our next newsletter. Mail to GMCG at P.O. Box 95, South Effingham, 03882.

Ossipee

The Commission has agreed to work with GMCG on creating an informative sign at the public access to Ossipee Lake on the Pine River on Route 25. This sign will inform the public about the importance of the Ossipee aquifer, as well as point out the unique features found along the Ossipee Lake Natural Area,

which was listed by the EPA as one of the top six regions in New Hampshire for priority resource protection. The NH Department of Resources and Economic Development has agreed to install this sign.

Tamworth

Town Meeting voters approved a warrant article to place up to \$5,000 a year in the Conservation Fund. The money comes from the Land Use Change Tax, which is charged against property owners when they remove land from Current Use assessment. The Conservation Fund is used to protect lands of significant environmental importance.

The Commission is pleased that conservation easements on two parcels in town are now held by the Society for the Protection of New Hampshire Forests. The Conservation Commission was a catalyst in promoting the conservation easement on the David Little property, which protects James Pond and provides an important wildlife corridor at the north end of town. The second parcel is the Porter-Rogerson property, which complements the Conservation Commission's efforts to protect waterways, particularly the Mill Brook, along which the town holds several other easements.

Effingham

The Effingham Conservation Commission will host Earthday: Trash and Treasure Hunt on Saturday April 22. Those interested in helping with the annual roadside cleanup should meet at the Fire Station in Center Effingham at 8 a.m. to be given road assignments and to receive garbage bags. Helpers should bring all collected trash to the Effingham Transfer Station and then enjoy a picnic at the Fire Station from 11:30 to 1p.m. compliments of the Commission.

There will also be a special event to encourage more folks to participate — a treasure hunt. Hidden about the town will be "Blue Earthday Bottles." Helpers are requested to turn in these "treasures" and thus be eligible for a cash prize drawing at the picnic.

The new chairman of the commission is Larry Leavitt and the new secretary is Henry Spencer. The Commission's next meeting will be May 2 when Dan Sundquist from the Society for the Protection of NH Forests will speak about mapping Green Mountain.

Madison passes drinking water protection ordinance

Voters in Madison overwhelmingly approved establishment of a Groundwater Protection District to protect, preserve and maintain the town's potential groundwater supplies, wellhead protection areas and related groundwater recharge areas. The March Town Meeting vote was 333-77. The zoning amendment was proposed by a planning board subcommittee, which reviewed other towns' groundwater protection ordinances before drafting one for Madison.

The boundaries of the Groundwater Protection District include within it wellhead protection areas and stratified drift aquifers shown on the town's Drinking Water Resources and Potential Contamination Sources map created by the NH Department of Environmental Services.

The district is an overlay district superimposed on the

town's underlying zoning districts.

Under the new regulations, no more than 20% of a lot or building site in the district may be rendered impervious to groundwater infiltration.

Prohibited uses include: disposal or storage of toxic or hazardous materials, underground storage tanks (with exceptions), dumping of snow from off-site, car washes and automotive repair and service shops, laundry and dry cleaning establishments, outdoor storage of road salt and deicing chemicals, wastewater or septage lagoons, and the spreading of septage or sludge.

Other uses, such as sand and gravel extraction, are conditionally permitted by the planning board. Special exceptions are made for lots of record.

WATERSHED ACTIVISM

“I am only one, but still I am one. I cannot do everything, but still I can do something.”
Edward Everett Hale

Write to DRED about Pine River ATV trails

The Department of Resources and Economic Development has released a report detailing the results of a New Hampshire Natural Heritage Inventory undertaken in the Pine River State Forest last summer. The study has concluded that this forest is of significant value due to many factors including unusual pitch pine and mixed pine forest communities, rare peatlands, and two rare plant populations.

In addition to extensive field surveys, NH Heritage ecologists interviewed foresters who worked in the forest when it was owned by the New England Box Company, and looked into maps dating back to the 1700s.

One interesting find was the differences between the east and west sides of the Pine River. The west side of the river had a railroad on it. Fires tended to occur on this side of the river with the river acting as a firebreak. Thus, the forest community on the two sides of the rivers is quite different.

If you would like to review this study, contact the NH Division of Parks and Recreation at 271-3254.

The Green Mountain Conservation Group continues to be concerned about ATV use in the Pine River State Forest because of its unique habitat. Illegal ATV use has caused substantial erosion damage to both summer and winter trails, and there has been no increased enforcement by state officials to offset this problem.

A final decision on the state's proposal to build 12 miles of ATV trails in the Forest is still pending the

outcome of the Heritage Inventory as well as the Archaeological Inventory being conducted this summer. (See story on page 2.)

If you would like to express your opinions about ATV's in this Forest write to : Commissioner George Bald, DRED, P.O. Box 1856, Concord, NH 03302.

GMCG to join with CLF on state solid waste policy

As reported in our last newsletter, in December, the NH Department of Environmental Services deemed the application by Casella Waste Management, Inc. to locate a 200 ton per day solid waste transfer station in Effingham Falls incomplete due to lack of detailed information on a number of site specific issues, including the hydrological relationship of the site to the aquifers.

At town meeting in March, Effingham voters approved the town's first zoning ordinance by a vote of 229-204. The ordinance is designed to encourage home occupations and cottage industry, but prohibits certain uses, including heavy industry.

In other developments, the GMCG is working with other area organizations concerned about natural resource protection and the state's solid waste disposal policy. GMCG and the other organizations are nearing agreement with the Conservation Law Foundation on entering into a Community Advocacy Agreement to challenge the state's solid waste disposal permitting process.

Our goal is to advance the state's goals of waste stream reduction and increased reuse and recycling of solid waste. If you would like to learn more

about this issue, or if you would like to support our efforts with a financial contribution, contact GMCG at P.O. Box 95, S. Effingham, NH 03882. Anyone interested in learning more about the Conservation Law Foundation can contact its New Hampshire office at 27 North Main Street, Concord, 03301, or call 225-3060.

Land and Heritage bill passes state Senate 24-0

On April 6 the State Senate passed Senate Bill 401 in a 24-0 bipartisan vote. The amended Senate bill provides \$9 million over two years to fund local projects to conserve land and preserve cultural and historical sites and buildings. The funding would be available to towns and local nonprofit organizations on a 60-40% matching basis.

This funding would come from general obligation bonds structured in such a way as to avoid any budgetary impact in the state's upcoming fiscal year. In addition, the Senate amended the bill to provide \$150,000 for the program's administration through a \$5 increase in the conservation license plate fee and an appropriation of unused non-lapsing funds. In ensuing years the conservation license plate is expected to provide sufficient revenue to cover the program's administration.

The bill now moves into the House of Representatives. It is important for supporters to contact state representatives and urge them to support this bill. If you would like to attend the public hearing in Concord on this bill check www.specialplaces.org for the date or

Watershed News

Calendar

WEDNESDAY, APRIL 26 *GMCG will lead a Natural Resources Inventory workshop for area residents to begin to identify resources to include in the watershed wide inventory mapping project. (See story page 1.) Madison Public Library, 7-9 p.m.* For more information call GMCG at 539-7926.

SATURDAY, APRIL 29 *TOM HOWE AND DAVE ANDERSON FROM THE SOCIETY FOR THE PROTECTION OF NH FORESTS will lead a tour of the Society's new forest reservation in Tamworth, the Porter-Rogerson Forest. This recently donated 203-acre forest has extensive frontage along Mill and Blasde Brooks, and is comprised of highly productive white pine. The property protects scenic views, great trails, critical wildlife habitat, and is an important area for drinking water protection. The property was donated by Jean Porter Rogerson whose parents, Charles and Emily Porter, assembled the land over a 35 year timeframe. For more information or to register for this walk call Trish at SPNHF at 224-9945.*

SATURDAY, MAY 13 *FORESTER DAN STEPANAUSKAS will lead a two-hour spring hike in Madison that will focus on wildlife habitat, soils and forestry issues. Meet at the Silver Lake Post Office, Route 113 in Madison, at 9:30 a.m.* Dress appropriately for the weather. For more information, phone 367-8111.

WEDNESDAY, JUNE 21 *DAN SUNDQUIST, SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS, will give a presentation on NH's Changing Landscape, a report that documents New Hampshire's population growth and baseline conditions for the state's most critical natural resources. New Hampshire is the fastest growing state in the northeast. Hear how that growth will affect the state's forested lands, water and other natural resources. Ossipee Public Library, Center Ossipee, 7-9 p.m.* For more information, call GMCG at 539-7926.

SATURDAY AUGUST 12 *OSSIPEE WATERSHED WEEKEND: FORESTRY IN THE WATERSHED, featuring lectures, interpretive walks, guided boat tours, BBQ dinner, musical entertainment, sponsored by GMCG and Camp Calumet. Camp Calumet on Ossipee Lake, Freedom, 10 a.m. to 7:30 p.m.*

SUNDAY AUGUST 13 *OSSIPEE WATERSHED WEEKEND: FORESTRY IN THE WATERSHED, will feature a guided tour of two forested tracts owned by University of New Hampshire in the Ossipee Region which have historically been managed for forestry. Join faculty from the College of Life Sciences and Agriculture and others to learn how forestry practices impact water quality and other watershed issues, and learn more about the University's evaluation of options for the tracts including the potential sale of the land.*

For more information about activities, or to find out how you can help or participate please call GMCG at 539-7926

Your membership will make a difference

The year 2000 has already been a busy one for the Green Mountain Conservation Group. In addition to our **monthly educational events** and **quarterly newsletters**, we are beginning a **watershed-wide Natural Resource Inventory** with UNH Cooperative Extension; working on **mapping the important recharge land** to the aquifer with a grant from the NH Department of Environmental Services with the goal of offering workshops for land owners about the importance of land protection for drinking water; partnering with the NH Department of Resources and Economic Development and Ossipee Conservation Commission to **design an informative sign** for the put-in on the Pine River that leads to Ossipee Lake; **planning Watershed Weekend 2000** which will take place August 12 on Ossipee Lake and will feature Forestry in the Watershed. We also are continuing our activism work on environmental issues throughout the watershed including the Pine River State Forest and the proposed ATV trails, New Hampshire's solid waste policy and the proposed UNH land sale.

We need your help to continue these efforts. Through education and advocacy we strive to promote an awareness and appreciation of our natural resources and encourage a commitment to protect them. **Help protect the Ossipee Watershed by becoming a member of the Green Mountain Conservation Group today. Your donation at the highest level possible is greatly appreciated.** We look forward to seeing you at upcoming events!

Please Join Today!

*Members are invited to attend the annual meeting, vote on policy issues and elect the board of directors and officers.
(Please make checks payable to Green Mountain Conservation Group)
P.O. Box 95 South Effingham, NH 03882*

Raindrop ___\$10 Puddle _____\$15 Vernal Pool ___\$25
(kids membership)

Stream _____\$50 River _____\$75 Pond _____\$100

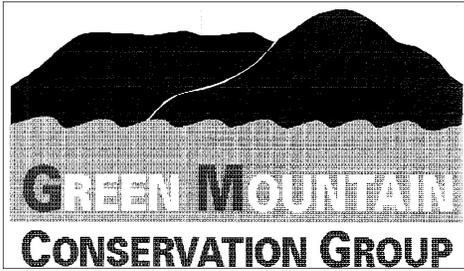
Lake _____\$250 Aquifer _____\$500 Other _____

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The Watershed News

Deadline for the next edition of The Watershed News is
June 20. Mail news items to the above address or phone 603-539-7926.

* A Green dot next to your name indicates you are a member for 2000. Please consider renewing your membership. Thanks.

EVERY PERSON CAN MAKE A DIFFERENCE AND EACH PERSON SHOULD TRY.

Heath Pond Bog Ossipee, NH

Hackmatack, tamarack,
also known as larch...
It's hard to tell just what they are
Until the end of March.

In fall they drop their needles,
By December they're a tease
as skeletal scraggs bequeathing sun
To neighboring black spruce trees.

Larch winter-sleep snug tight with heath
Beneath the dampened snows,
Until the swell of sphagnum moss
Tick-tickles their tamarack toes.

New needles sprout in April;
Have you ever noticed where?
Like miniature wigs on bald-pated twigs,
The larch grows hackmatack hair.

Carol C. Foord
Freedom