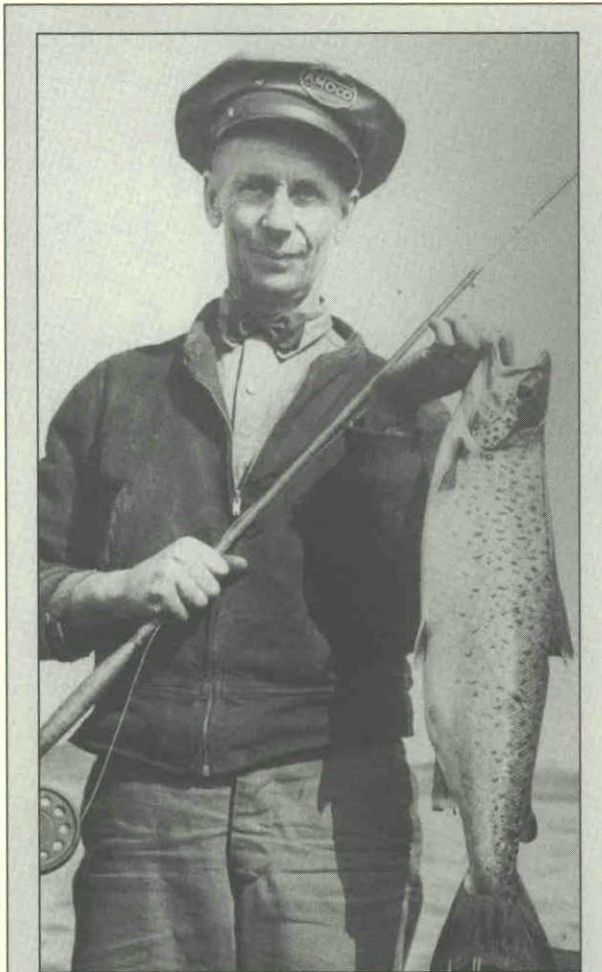


# River Action

Summer/Fall 1995

Published  
by the  
Vermont  
Natural  
Resources  
Council  
and  
River Watch  
Network



**Back when the Clyde was prime for salmon,** this gent caught a beauty — and someday soon the big fish could be on their way back. "People once traveled from all over New England to fish the river's fabled fall and spring runs," writes Kevin Coffey in the article "Reclaiming the Clyde" on page 4. Thanks largely to efforts by the Northeast Kingdom Chapter of Trout Unlimited, federal and state regulators have called for the permanent removal of the dam that ended the once-legendary run. This issue carries articles on the efforts by volunteer groups to monitor, advocate for, and improve the Clyde and 12 other Vermont rivers.

## INTRODUCTION: SPEAKING FOR THE STREAMS

**T**his is the first issue of *River Action*, a new newsletter that reports on the efforts all over Vermont by citizen groups working to protect rivers and streams. This newsletter has been put together as a step in forming the Vermont River Action Network (VRAN), a statewide effort being organized by the Vermont Natural Resources Council and the River Watch Network.

As this issue shows, volunteer river-protection groups in Vermont are diverse, but they share a common concern. Growing pressures to tap into our natural resources have made it more vital than ever for citizens and communities throughout Vermont to support the protection and restoration of Vermont's waters.

### WHAT IS THE RIVER ACTION NETWORK?

The Vermont River Action Network is a joint initiative of VNRC and River Watch, set up to develop lines of communication among groups and individuals interested in river quality. The Network is being funded by a generous grant from the Jessie B. Cox Charitable Trust and the Ward M. and Marian C. Canaday Educational and Charitable Trust.

Rivers all over the state are threatened by sewage discharges, industrial wastes, damaging land-use practices, urban and agricultural runoff, hydroelectric projects, water

*continued on page 2*

October  
1995



withdrawal and general neglect. The Vermont River Action Network has been formed to help involve community members, students, and others in the protection, enhancement, and preservation of Vermont rivers and watersheds.

By connecting Vermont's river-protection efforts to one another, the network will both foster protection and serve as an educational tool, giving groups that are just starting up the opportunity to learn from seasoned organizations.

While an impressive array of groups have contributed to this newsletter, the list of contributors by no means represents the only groups working to improve and protect Vermont's rivers. A statewide VRAN conference in Montpelier on October 27 will bring together all interested river groups in Vermont to further enhance direct contact and communication across the network.

## THE ROLES OF RIVER WATCH NETWORK AND VNRC

River Watch Network is a Montpelier-based, nationally focused river monitoring and protection organization that brings together citizens — including conservationists, business owners, farmers, anglers, town officials, and others — who have diverse interests in their local rivers. River Watch Network helps them organize, raise funds, and carry out scientifically credible water-quality monitoring. As citizens begin to learn about the sources of problems in their river, River Watch helps them connect with agencies and individuals that can help them carry out improvement and protection projects.

VRAN faces policy challenges as well, and the Vermont Natural Resources Council is committed to providing comprehensive strategies for specific watershed protection and for effective

statewide policy. VNRC will help groups use the information they collect to improve water quality. VNRC is committed to aiding every group's efforts by offering its familiarity with Vermont's laws and regulations for river protection.

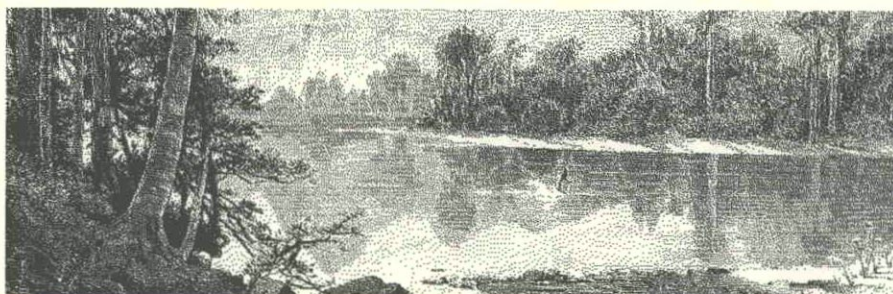
## GAINING WIDESPREAD INVOLVEMENT

The Vermont River Action Network aims to encourage grass-roots efforts, not only within communities but also among towns and planning regions through which the same rivers flow. VRAN invites

any group that seeks to protect or restore water quality to become part of the Vermont River Action Network.

Most of the articles in *River Action* have been written by volunteers who are members or officers of the group being profiled. In those cases, we have credited the authors. Other articles were prepared by VNRC and River Watch, with help from members of the citizen groups.

For more information about the Vermont River Action Network, please call Christopher Kilian at VNRC, (802) 223-2328, or Steve Dickens at River Watch Network, (802) 223-3840.



# WILL CONGRESS GUT THE CLEAN WATER ACT?

*A Bid to Do That Brings a Call for Citizen Action*

Since its passage in 1972, the federal Water Pollution Control Act, known today as the Clean Water Act, has been the foundation for effective protection of Vermont's water quality. By creating regulatory standards for water quality protection, fostering watershed planning, and protecting high-quality waters, the CWA has greatly improved the health of Vermont's water resources.

The Act regulates point-source discharges of pollution from industry and municipalities, along with runoff from agricultural activities and development. It also regulates the draining and filling of wetlands, which recharge ground water, provide wildlife habitat, and filter pollutants.

Still, water pollution continues to take a toll in Vermont. The state's wetlands have already been reduced by 35 percent. And the Vermont Agency of Natural Resources has emphasized that polluted runoff and alteration of stream flow continue to adversely impact thousands of miles of

*The bill passed by the House of Representatives would effectively eliminate the current protective standards.*

Vermont's rivers.

Reauthorization of the Clean Water Act is currently pending in Congress — but the bill passed by the House of Representatives would effectively eliminate the current protective standards, and would severely limit the CWA's effectiveness. The Senate will be considering CWA proposals before the end of this year.

If the CWA is weakened, Vermont's water resources would be placed at much greater risk. However, concerned citizens are not without leverage. In this state, the Vermont Natural Resources Council is coordinating the fight to strengthen the CWA. Organizations in the Vermont River Action Network that are interested in mobilizing to oppose the proposed CWA changes, and to seek changes that would strengthen the act, should stay in contact with VNRC.

To find out more about how to get involved, contact Chris Kilian at VNRC, 223-2328.

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9 Bailey Avenue  
Montpelier, VT 05602  
(802) 223-2328

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153 State Street  
Montpelier, VT 05602  
(802) 223-3840

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# MISSISQUOI RIVER KEEPERS

## *A Working Partnership Among the Abenaki & Others*

The Missisquoi River Keepers Project seeks to restore, preserve, and protect the natural and cultural heritage of the Missisquoi River through a partnership among the Abenaki Nation and other interested community members throughout the watershed.

The project has three goals:

- Enhance and encourage community awareness and involvement in Abenaki cultural and historical ties to the river;
- Monitor the condition of the river; and
- Work on river improvement and protection projects.

During the fall of 1994, River Keepers began aspects of river monitoring. River Watch Network helped to conduct a visual survey of land-use patterns and erosion

problems along the lower sections of the Missisquoi. The River Keepers received a \$7,500 grant from the U.S. EPA's Environmental Justice Grants Program to purchase monitoring equipment, and began a monitoring program.

In late fall, with the help of attorneys from Alternatives for Communities and the Environment (ACE), the River Keepers successfully petitioned the Vermont Division of Water Quality to deny a permit to the Champlain Oil Company, which sought to build a service station, underground gasoline storage tanks, and a restaurant on a Class Two wetland next to a 50-foot buffer zone. The proposed facility was of particular concern because drainage from the wetland would have flowed past the underground tanks, jeopardizing not only

the wetland but the nearby Missisquoi as well.

In March 1995 the group brainstormed and prioritized a list of river improvement projects. Members decided to focus on implementing at least one of the three highest-priority projects. Their goal is to work with local landowners to demonstrate how such projects can succeed, and to generate increased community interest in the project we choose. The group may also do some monitoring to assess the effectiveness of the projects.

The River Keepers plan to work cooperatively with the newly formed Missisquoi River Basin Association, a watershed-wide umbrella group that includes the Missisquoi River Keepers Project, the Lake Champlain Walleye Association, the Quebec-based Protection Missisquoi, and many citizens of the towns along the upper reaches of the river.

*The Missisquoi River Keepers welcome the interest of anyone who wants to help. Please contact Dave Gilman at Abenaki Tribal Headquarters, 868-7146.*

# MOUNT MANSFIELD RIVER WATCH

## *Making Cooperative Water Protection Work*

Begun six years ago, the Mount Mansfield River Watch (MMRW) has been successful in a host of strategic efforts aimed at protecting and enhancing the drainages in the Mount Mansfield region.

The group first attempted to stop septic-system development that would have degraded a piece of wetland flanked by part of the Mill Brook watershed. This pilot effort succeeded when direct lobbying of the planning commission resulted in the postponement of the development project until it was finally abandoned.

Under the leadership of Bill Butler, the MMRW primarily concentrates its efforts on the Mill Brook and the Browns River, tributaries respectively of the Winooski and Lamoille rivers. Energies are often focused on stream bank and riparian habitat restoration, but impressive political battles have also been waged. Last year the group succeeded in attaining a more protective wetland designation for a

swatch of land that would have been used to suit the purposes of developers.

The MMRW promotes cooperative efforts among all parties involved, and works directly with farmers through a concept that Butler calls an "exchange of gifts." The farmer grants access to, and some control of, the river on his land so that, in effect, the river is given back to the community.

## **SOLUTIONS START WITH TALKING TOGETHER**

Much of MMRW's experience in building cooperative solutions has come through its efforts to protect the Browns River in Jericho. Several years ago many local residents were outraged at neighboring dairy farmers after newspaper coverage blamed contamination of a popular swimming hole on cows and erosion from the two farms.

Finding that no one had actually talked to the farmers about the problem, the

river group arranged for a visit by a Soil Conservation Service representative, who found the farmers just as concerned as anyone about the problem — but unable to afford solutions.

The river group organized a meeting of all those concerned, then promised to research the problem and find a solution that would cost the farmers little or nothing. That effort led MMRW to the "streamco" willow, a low- and fast-growing European tree that is highly effective at controlling streambank access and erosion.

Each spring for the past five years, the river group has organized volunteer plantings of willow cuttings at a number of locations along the Brown. The group has found it most effective to recruit middle-school students, whose teachers make the plantings part of a learning project.

## **FARMERS WELCOME PROTECTION EFFORTS**

Recently the MMRW has also been given a grant by the U.S. Forest Service to build fencing along stream banks, creating buffer zones next to the river and preventing the type of harm that would result from unconfined planting and grazing. Again, farmers have welcomed the strategy. Equally welcome has been the



development of a nursery, in conjunction with the Richmond Land Trust, where native plants can be nurtured until they are planted along the stream bank.

This past winter the group focused its energies on elementary school classroom

work, helping students learn the basic principles and the intricacies of watershed health. Such efforts help build a more coherent picture for the youngsters who will help with hands-on habitat restructuring in the upcoming season.

The MMRW has drawn from its experience in cooperative water protection to produce a booklet for the state, called *Community Action Notebook*.

To learn more about the MMRW's efforts, call Bill Butler at 899-2088.

# RECLAIMING THE CLYDE

## *Dam's Removal Will Be a Landmark for U.S. Conservation Movement*

by Kevin Coffey

With a length of 34 miles and a watershed of 142 square miles, the Clyde River has its source in Island Pond and flows into Lake Memphremagog. But locals know the true source of the Clyde to be the Pherrins River, a cold-water flow that rises north of the Clyde and adds another five miles to its length. This cold source merges with the warmer Island Pond outflow to keep temperatures cool enough for good salmonid habitat.

While not a large river, the Clyde looms large as a resource. It flows through some of the wildest land in the state — one can see moose and osprey while fishing for native brook trout along the Buck Flats section. Fur bearers are common along the river, and it is a magnet for migrating waterfowl in spring and fall.

Much of the Clyde is buffered by wide strips of cedar and spruce/fir along much of the upper half, and these protect it against agricultural runoff from the many surrounding dairy farms. All along the Clyde there is significant input of large woody debris, or LWD — logs and root wads in the river channel. LWD is essential in helping to create habitat for fish and wildlife, moderating floodwaters, carving pools, and storing sediments that can smother salmonid eggs. The upper stretch's semi-pristine nature is one reason that state river coordinator Mike Kline and Trout Unlimited Board member Karen Coffey have been working to get Outstanding Resource Water status for the Clyde.

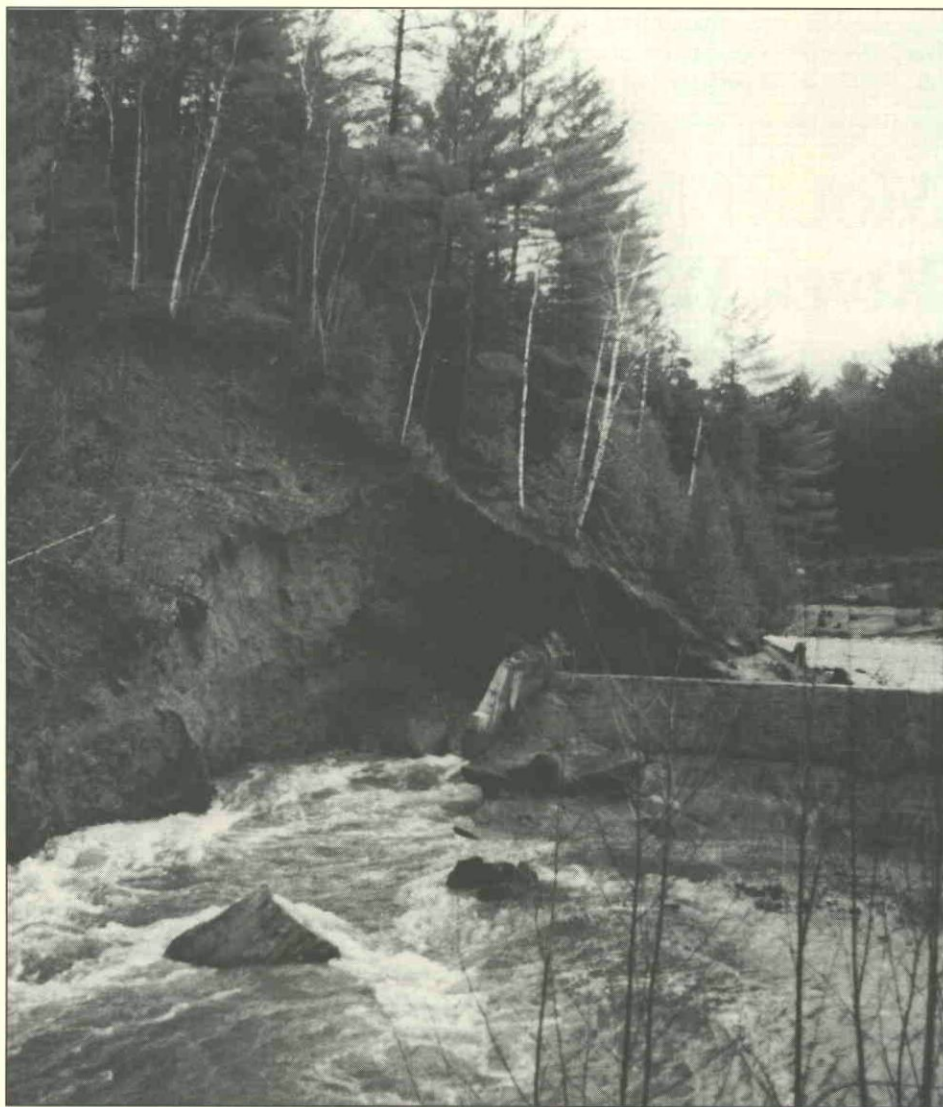
### THE LEGENDARY PRE-DAM SALMON

Salmon are the Clyde's other great legacy. Trapping them for eggs in 1941, the Vermont Department of Fish and

Wildlife caught salmon averaging 6 pounds 7 ounces, and 25 inches in length. People once traveled from all over New England to fish the river's fabled fall and spring runs. But a dam built in 1957 by Citizen's Utility Company virtually ended the run.

Called Newport #11, the dam stopped adult salmon from reaching 1,400 feet of spawning water upstream, and it repeatedly dewatered downstream sections, leaving salmon eggs high and dry and frozen in winter.

But all this will change.



*When the dam breached last May 1, the Clyde flowed freely for the first time in 37 years.*



*The dirt road up to the dam took on the aura of pilgrimage, with locals making the hike, some to see once again the river of their youth, others to finally see the river of their dreams. Breach it, and they will come!*

The North-east Kingdom Chapter of Trout Unlimited has been negotiating for four years to get the dam removed to restore the salmon and the river. The chapter convinced the Vermont Agency of Natural Resources to adopt a similar position, and with the legal help of VNRC, the relicensing of the Newport #11 dam has been turned down. Recently both the Agency of Natural Resources and the Federal Energy Regulatory Commission (FERC) have called for the removal of both the dam and its power house.

In the meantime, as the regulatory process dragged along, Mother Nature

intervened. During the early morning hours of May 1, 1994, the rain-swollen Clyde River cut into the steep clay bank that abuts the #11 diversion dam, collapsing it and causing the river to flow freely once again.

It had been 37 years since the full force of the river had flowed down the natural river bed. Water was now roaring at 2,500 cubic feet per second, or 500 times what the utility had released, down the old river bed, blowing out many years' accumulation of silt and vegetation. The river had escaped, the reservoir had drained, and the Clyde had been resurrected.

**A TIME FOR CELEBRATION**

For those of us who had been fighting for the dam's removal for four years, it was time for a celebration. Calls went out and Trout Unlimited members from all over the Northeast Kingdom came to see the

miracle. The dirt road up to the dam took on the aura of pilgrimage, with locals making the hike, some to see once again the river of their youth, others to finally see the river of their dreams. Breach it, and they will come!

The Clyde River dam's removal will be a landmark for the conservation movement in the United States. To date, FERC has never called for the removal of an operational dam.

*To learn more about the Northeast Kingdom Chapter of Trout Unlimited, call Richard Nelson, president, at 334-6867 or 754-2401.*

*(To learn about the Lake Memphremagog Watershed Association, which is concerned about educating and involving citizens in the watershed in monitoring and protecting the lake's tributaries, call Karen Coffey at 754-2254.)*

## PASSUMPSIC RIVER WATCH

### *Building Support for a Misunderstood Stream*

by Allan Boye

Although the Passumpsic River and its main tributary, the Moose, drain Vermont's largest roadless area, the Passumpsic has historically been perceived as an "industrial" river. For centuries this largest river in the Northeast Kingdom has supported mill races, dams and hydroelectric facilities, and factories. While the economic conditions that favored such use have changed, the perception of a working river has only recently begun to change as well.

In its sixth year, Passumpsic River Watch has concentrated on collecting and collating data on *E. coli* bacteria at 35 sites in the watershed. Surprisingly, a four-year pattern of those results indicates that the Passumpsic is one of the cleaner rivers in Vermont. More than 50 volunteers have worked together to establish a base line of data and to identify potential trouble spots.

Another long-term project has been the creation of a user's guide to the river, with articles and editorial help from journalism students at Lyndon State College and with technical support from Central Vermont Public Service. The book should be completed by the end of the year and will include historical, biological and recre-

ational information about the river.

Passumpsic River Watch also cooperates with the Fairbanks Museum and St. Johnsbury Academy to provide educational workshops and presentations to area schools.

### CREATING A DATA PORTRAIT

St. Johnsbury Academy students have worked closely with the river group to begin studies of aquatic insects in the area. The base-line data in this and future collections will allow the group to establish a more complete portrait of the river's health.

Recently, Passumpsic River Watch also joined with about a dozen other organizations in the area to create a network of groups working for the health of the Passumpsic. One recent project, undertaken through the Soil Conservation District, aimed at streambank stabilization on a Passumpsic tributary.

Passumpsic River Watch holds an annual meeting, usually in January, to present data from the year just passed and to establish goals for the year ahead. A steering group meets regularly to implement these goals and objectives.

*Membership in Passumpsic River Watch is open to anyone. For more information contact Alan Boye, Passumpsic River Watch, 57 Lafayette, St. Johnsbury 05819.*

## THE LAMOILLE RIVER ANGLERS ASSOCIATION

### *Hands-On Effort Aims to Improve Riverbanks & Habitat*

The Lamoille River Anglers Association (LRAA) was established in early 1994 by a small group of avid outdoorsmen as a grass roots, hands-on organization with four basic goals. These are:

- to improve all aspects of the Lamoille River fishery;
- to encourage the management of trout for the mutual benefit of both fish and anglers;
- to promote the sporting aspects of



- angling; and
- to work against pollution of clean water in all its forms.

As an organization, LRAA is committed to working with federal and state agencies, landowners and other concerned citizens to bring about tangible improvement to the Lamoille River watershed.

Two major riverbank stabilization and habitat improvement projects are scheduled for the summer of 1995, with the LRAA planning to supply both financial backing and physical labor. Ongoing projects that are currently underway or contemplated for 1995 include a river survey for the Vermont Department of

Fish and Wildlife, and a water quality testing program similar to the one begun on the Winooski River in 1994.

*As a fledgling organization, the group needs all types of assistance. To offer your help or financial support, please contact Kirk A. Brisson, president, Lamoille River Anglers Association, at (802) 253-9739.*

## OTTER CREEK RIVERWATCH

### *Community and High School Volunteers Testing Together*

by Heidi Willis

Otter Creek Riverwatch (OCR) is a joint effort on the part of community volunteers and high school students who are involved in testing and monitoring the Otter Creek. Community volunteers have so far completed five summers of river monitoring.

OCR was started in the fall of 1989 by Middlebury Union High School science teacher Davis Lawton and his students. In spring 1990, Lawton approached the Otter Creek Audubon Society with a request that the organization act as a sponsor for the riverwatch effort. As a result, Otter Creek Audubon Society has provided organizational support during the past five years; it has been joined in providing monetary support during the past two years by the New Haven River Anglers.

OCR's activities and goals are planned and implemented by a committee made up of Otter Creek Audubon members, Middlebury Union teachers and other interested people from the community.

Volunteers are recruited from the community, and a training session is held in the late spring. River monitoring is currently carried out through the summer on a biweekly basis at 14 sites on the Otter Creek and Middlebury rivers, from Salisbury north to Weybridge. During the school year, monitoring is continued on a reduced scale by MUHS students.

Samples are processed by a paid lab

technician in the summer, and by student volunteers during the school year.

Funding sources are OCAS, New Haven River Anglers, and in-kind contributions from MUHS. Grants have also come from community organizations such as the Rotary, Neat Repeats, the Lake Champlain Basin Program, and private contributions.

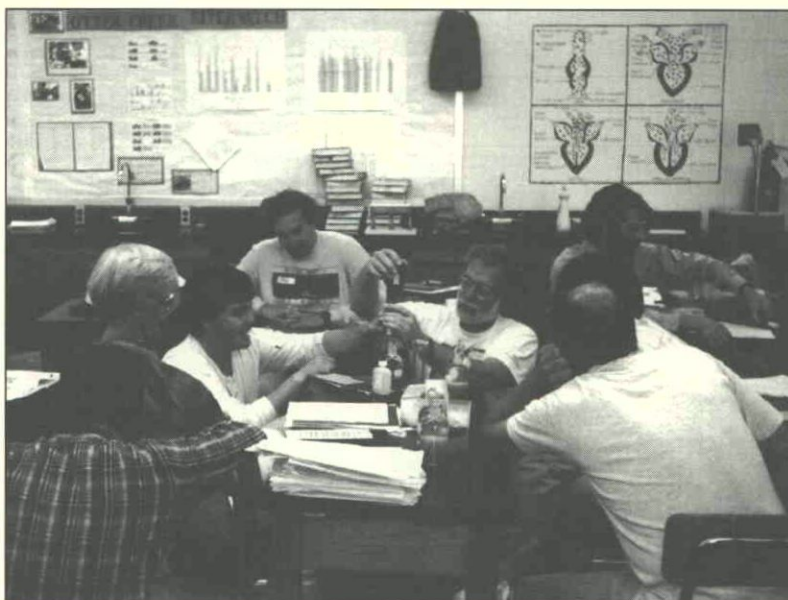
second sent to the state lab in Waterbury. A second dual sample from the same site was also collected and processed to test reliability. OCR has since learned that these quality assurance/quality control procedures added validity to our data collection and lab practices.

It was particularly satisfying to find our information and data being used by Middlebury officials when planning a bond vote on a stormwater separation project, and by a local conservation district in a successful grant application for state and federal money to fund projects to improve water quality protection on two farms within our test sites on the Middlebury River. We have published an annual report for the past two years. The 1993 report reflected our confidence in our data, was published in a professional format, and has been distributed to all towns within the Otter Creek Watershed.

As Otter Creek Riverwatch grows and expands, we have experienced the frustrations and confusion of any young organization, including

keeping people informed, achieving timely publication of the annual report, and finding the right role in the group for each volunteer. We are still working on closer links with MUHS students and community volunteers, and on ways to better inform Addison County about the Otter Creek.

*Contact people for Otter Creek Riverwatch are Heidi Willis (388-9207) and Paul Scarramucci (388-7324).*



*Otter Creek Riverwatch volunteers test water samples in a Middlebury Union High School lab.*

### TESTING FOR VARIOUS DATA

OCR collects information on temperature, dissolved oxygen, pH, E. Coli bacteria and phosphorus.

During the first summers of testing, a goal was to establish reliable baseline data regarding the waters of the Otter Creek. To that end, during the summer of 1993 a split sample was collected, with one sample processed for E. Coli and phosphorus through normal procedures and the



# THE WINOOSKI RIVER WATERSHED ASSOCIATION

## *Kickoff Project Draws a Diversity of Interests*

by Bob Magoon

During November 1989, the Vermont Agency of Natural Resources began asking for public input to develop a comprehensive river plan for the Lower Winooski River Basin. Approximately 400 people took part in 25 public meetings to help develop a vision statement for the river and its tributaries, and to make recommendations for improving and protecting the river.

The state reported its final recommendations in December 1992. In 1993 and 1994, River Watch Network convened a series of public meetings, including citizens involved in developing the comprehensive river plan, to identify the next steps for implementing the plan's recommendations. It was decided that the next step would be to begin a river-wide monitoring program, to learn more about the sources of problems on the river and to generate more community interest. That led to the creation of the Winooski Watershed Association (WWA).

One of the innovative aspects of our project is our goal of involving people who may not normally see eye to eye on issues concerning the river. Participants have included landowners, utility representatives, conservationists, local government, recreation users, and others. We continue to seek active involvement from this diverse constituency. Our belief is that everyone must be involved in identifying and learning about problems on the river if we want everyone involved in working on solutions.

### **MONITORING PROJECT GATHERED MOMENTUM**

Early last summer, the Watershed Association held a series of informal meetings to forge a river monitoring project. The first few meetings were spent visiting and identifying a number of practical and important monitoring sites. We then picked four sampling dates for over 30 different locations at two-week intervals between July and September. With help from the River Watch Network, the Association wrote a grant proposal

*In the first few meetings, everyone new to the project seemed to feel that this might be too huge and overwhelming to pull off — but as the first season neared the final stages, those feelings changed to a sense of great accomplishment.*

that provided us with a very important and helpful part-time coordinator, Hilary Besse.

The WWA decided that the most we could hope to handle during our first year was a bacteria count of the river. River Watch Network provided the sampling and lab training needed, and helped us attain use of the Burlington Department of Public Works Lab at the waste treatment plant on Lake Champlain.

The treatment plant provided us with the use of bacteria monitoring and analysis equipment. The Classic Outfitters Shop in the Champlain Mill and the Central Vermont Chapter of Trout Unlimited provided us with thermometers.

As the monitoring swung into full gear and the samples were brought to the lab, interest in our work grew and a larger, more diverse group of people became

involved. As the weeks went by, an "up and down" swing of count levels showed "hot spots" and low-count levels on our river site map.

The hot spots were places where the monitoring found levels of E. coli bacteria to be dangerously high. However, the river also appeared to be self-cleansing — levels downstream from the hot spots were safe enough to swim. Next year's project is to find the source of the bacteria contamination.

### **A SENSE OF ACCOMPLISHMENT**

In the first few meetings, everyone new to the project seemed to feel that this might be too huge and overwhelming to pull off — but as the first season neared the final stages, those feelings changed to a sense of great accomplishment. More than 40 volunteers helped with last year's monitoring program, and the WWA now has a strong 10-member steering committee. The group recently received an \$8,500 grant from the Lake Champlain Basin Program to greatly expand our monitoring and outreach program this year.

In the next few years, with the help of River Watch and the tremendous numbers of interested groups and volunteers, it's certain that great changes are going to take place on the Winooski River Watershed.

Thanks, people.

To learn more about the Winooski River Watershed Association, call Hilary Besse at 434-3764 or Bob Magoon at 878-5694.

# THE BLACK RIVER WATERSHED ASSOCIATION

## *Collecting Data, Recruiting Interest, & Planning a Cleanup*

by Beth Rayfield

This past spring and summer were busy times for the folks who live along or near the Black River. In addition to their usual activities, many of them joined with others in forming a community-based volunteer group interested in the river.

Numerous meetings began in January, and the group was officially organized as the Black River Watershed Association in

May 1994. At that meeting the group adopted its primary goal, to "restore and maintain the ecological integrity of the Black River system so that the uses and values desired by the community are supported by the river and the quality of its water."

The motivating spark for organizing the group came from the results of monitoring efforts led by the Connecticut River Watch Program during 1992 and 1993. The results of 300 tests at 14 sites



along the Black showed that 35 percent were in violation of Vermont water quality standards, or were in excess of contaminant levels known to degrade water quality.

In collaboration with the Connecticut River Watch Program, River Watch Network, and the Southern Windsor County Regional Planning Commission, the Black River group has actively

participated in water-quality monitoring of the river. It has also helped collect information on locally identified important uses and values of the river, including potential threats to those uses and values. The Association is now working toward planning a large-scale cleanup of the river and its streambanks.

Future efforts of the Black River Watershed Association will focus on the

members' desires to improve water quality and wildlife habitat, increase local knowledge about the Black River, and recruit the active involvement of residents, community groups, schoolteachers and students, civic groups, and local government in river resource conservation.

*To get in touch with the Black River Watershed Association, call Beth Rayfield at 674-9201.*

## POULTNEY RIVER WATCH

### *Model Effort Produces both Education and Action*

The interest of citizen groups involved in protecting and enhancing the Poultney River and its habitat has been far-reaching and diverse in both its mission and its history. Before the start of the current River Watch campaign, previous efforts had aimed at river component sampling and habitat restructuring, and at attaining an Outstanding Resource Water classification for certain sections of the river.

The latter effort took its course six years ago, when a core of six people called the Poultney River Committee put together a petition seeking the classification. They succeeded, and now the 22-mile section of river from the Poultney and Fair Haven town line all the way to Lake Champlain has been designated as an Outstanding Resource Water. Joanne Calvi, one of the project's initial sponsors, felt the classification was a way of protecting part of the watershed while demonstrating an appreciation for river values. Such efforts have since prompted interest from other conservation organizations, such as the Nature Conservancy, and from newer river watch groups.

In the late 1980s, a defunct branch of the Poultney River Watch, a group separate from the River Committee, bequeathed a \$1,000 grant from Coors Brewing Company to a spirited group of citizens attracted to the prospects of once again jump-starting a river watch campaign. Spearheaded by the Poultney PTA, which was interested in enhancing the local high school's integrated curriculum, a core was formed and the statewide River Watch Network was invited to help get things going.

Now under the guiding eye of active parents like Mary Jeanne Grove, the recreated Poultney River Watch has not only added a sense of relevance to the

school curriculum, but also offers a way to monitor and protect the river. An amalgam of good fortune has helped build a strong and motivated organization, blessed by talented volunteers and enough grant money to guarantee longevity. So far PRW has won a \$3,000 grant from the Lake Champlain Basin Association and a \$5,000 grant for environmental education from Philips Petroleum; these have enabled the local school to add an experienced science teacher with relevant skills.

Also, while searching for community

service projects at Green Mountain College, Americorp had to look no further than the college's own property. A streambank survey showed erosion on college land occupied for agricultural use, and volunteers were needed to assist in efforts to stabilize the bank stabilization and restore riparian vegetation.

Many of PRW's goals for the future aim at confronting such problems as erosion control and bank restructuring, but other concerns loom as well. Although the water itself is fairly free of bacterial pollution, parts of the river are riddled with turbidity and temperature fluctuation. PRW will continue its efforts to determine the source of these problems and to find effective solutions.

*To learn more about Poultney River Watch, call Mary Jean Grove at 287-2058.*

## THE LEWIS CREEK ASSOCIATION

### *Educating, Planning & Promoting Understanding*

*by Linda Henzel*

The goals of the Lewis Creek Association are, first, to educate landowners about how their land is an integral part of the watershed, vital to wildlife and to the water quality of Lewis Creek and Lake Champlain, and as an economic base for agriculture and forestry; and, second, to promote the concept of the watershed as an ecosystem.

LCA's accomplishments of this past year include:

The Association participated in a watershed planning process with the Otter Creek Natural Resources and Conservation District (NRCDD), the Soil Conservation Service, local farmers, and other watershed landowners.

Four hundred students and 300 adults

learned about the connections between the Creek, streamside vegetation, and nearby land uses through field trips along about half of the Creek, and during other public programs held throughout the watershed.

Other inventories include Central Vermont Trout Unlimited's survey of in-stream and streamside habitats, a back roads program in Charlotte, and citizen bacteria monitoring of creek water. *E. coli* were again found to be high at many swimming holes last summer.

Our River Watch Program involved students at all the elementary schools in the watershed, including Bristol, as well as Champlain Valley Union, Mt. Abraham, and Vergennes Union High School.

We sent two issues of our newsletter, *The Kingfisher*, to watershed-area resi-



dents. Its themes were agriculture and wildlife.

We also planted vegetation on streambanks, made a video about stream-side road maintenance practices, and produced new map layers to be used with our Geographic Information Systems base map, displaying topography, soils, prime agricultural and forestry soils, land use, parcel boundaries, and wildlife data.

Here are our plans for 1995:

- Streambank planting demonstration programs, using innovative techniques, with support from Lake Champlain Basin Program;

- Citizen wildlife tracking programs in the creek corridor, with professional guidance from Morse & Morse Forestry and Wildlife Consultants (support from Vermont Land Trust and the Vermont Housing and Conservation Board);
- Being highlighted at this year's Addison County Conservation Congress on March 11, as "A Study in Cooperation";
- Working with the Vermont Land Trust to develop conservation techniques with agricultural landowners in the watershed (support from Vermont

- Housing and Conservation Board);
- Forestry management workshops, including technical assistance and landowner networking about sustainable forestry practices (funds being sought);
- Building connections and data-sharing with neighboring watershed groups; and
- In-season walks and canoe trips for getting together and getting outside!

*To learn more about the Lewis Creek Association, call Linda Henzel at 434-4113.*

## FRIENDS OF THE MAD RIVER

### *Building a Valley-Wide Partnership for Long-Term Results*

*by Brian Shupe*

**D**uring the Mad River's short journey from the Green Mountain National Forest to its confluence with the Winooski River, this remarkable stream shows a diversity rarely found in rivers many times its size. In the short span of 30 miles, the Mad crashes through rugged forest, rolls past classic New England villages, and meanders around rich farmland, all in the shadow of high mountains branded with alpine ski slopes.

The River's remarkable variety is characteristic of the entire Mad River Valley. Containing an eclectic community, stunning landscape and a unique sense of identity, the valley is home to a mix of Vermont natives and newcomers who share a common appreciation for their natural surroundings.

This appreciation is embodied by the Friends of the Mad River, a grass roots river conservation and advocacy group that has worked enthusiastically for the past four years to raise public awareness of the threats to the Mad River, and to provide a clear direction for addressing those threats.

The Friends were formed in 1990, largely as a result of the controversial proposal by Sugarbush Resort to withdraw water from the river and expand the snowmaking capacity at Sugarbush South ski area. A handful of local residents, representing varying opinions on the merits of the withdrawal issue, recognized that the heightened attention on the river

was an opportunity to move beyond the snowmaking debate and focus on the river's long-term health.

### JOINING WITH MAD RIVER WATCH

The Friends were fortunate that the highly successful Mad River Watch (MRW) Program was in need of a sponsoring organization. Mad River Watch has been responsible for monitoring water quality in the Mad River and its tributaries since 1986, and the opportunity to assume organizational and fundraising responsibility for it brought credibility, a wealth of technical data relating to the health of the river, and a core group of organized river advocates to the Friends.

The Friends were also fortunate that their mission to "preserve and enhance the ecological, scenic and recreational values of the Mad River and its tributaries" was widely shared by local officials in the valley. A result of this shared mission is a close working relationship between the Friends and the Mad River Valley Planning District.

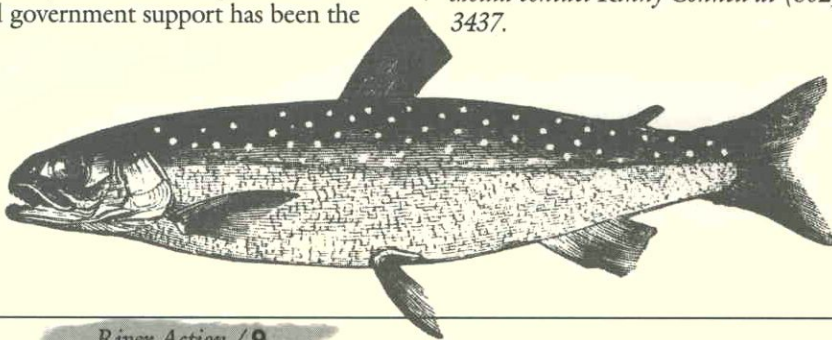
Perhaps even more important than local government support has been the

active interest that has been taken in the Friends by a number of talented Valley residents with a variety of skills. Their help has allowed the Friends to assume an ambitious agenda, which in addition to the MRW program has included working on erosion control and streambank stabilization projects, raising funds through activities that have included publication of a full-color calendar, and pursuing the development of a Watershed Management Plan.

The latter project, made possible through a grant from the Lake Champlain Basin Program, will result in a comprehensive management plan that will guide public policy regarding river conservation and will provide a clear agenda for Friends efforts over the next several years. This planning effort has included a number of public forums, during which broad support was expressed for the Friends' objectives.

Friends of the Mad River and the Mad River Watch have coalesced, and they recently drafted a comprehensive conservation plan for future efforts.

*Anyone wishing information on the Friends of the Mad River and their goals should contact Kinny Connell at (802) 496-3437.*





# NEW HAVEN RIVER ANGLERS' ASSOCIATION

*Busy Group Works with Many Others on Proactive Projects*

by Peter Diminico

The aims and purposes of the New Haven River Anglers' Association (NHRAA) are to improve the New Haven fishery, to encourage the management of trout for their benefit rather than for the recreational fisherperson, to promote fishing among young people through education, and to work against pollution of clean water in all its forms.

The NHRAA meets the second Tuesday of every month at 7 p.m. at the Dog Team Restaurant in Middlebury. There are 83 dues-paying members and a mailing list of 207. The annual dues are \$15 per year. A free junior membership is provided to anyone 14 and under.

These meetings are publicized in local newspapers, and the public is always invited to attend and participate. The preliminary meeting offers a fly-tying demonstration and the discussion of angling philosophies. The meeting itself consists of a business session and a guest speaker.

The NHRAA has always taken a proactive approach toward educational, environmental, and fish and wildlife issues. Some educational projects the Anglers have been involved in are the annual offering of three \$325 scholarships to the three surrounding schools for high school seniors who will be attending a college and majoring in a field related to the natural resources; the Association's annual youth night, held at the July monthly meeting; and assisting the Mount Abraham High School science department with classes that collect and identify data on the New Haven River.

The NHRAA has established a River Watch program in alliance with the Mount Abraham science department. Periodically the anglers also set up educational booths with the Audubon Society and the Addison Conservation Congress. The Anglers conduct annual fly-tying classes and fly-casting clinics.

Many NHRAA members visit local schools to demonstrate fly tying and show movies that portray river ecosystems and how this delicate balance affects the

salmonid species. Afterwards a discussion with the students evolves on environmental and conservation issues.

The NHRAA has a close communication and working relationship with the Vermont Department of Fish and Wildlife. The Anglers supported the Fish and Wildlife's new fisheries management plan by testifying at many of its public hearings during summer 1993. The NHRAA assists the department in the rearing and stocking of trout species in the New Haven River, and in taking "shock" surveys of the fish populations in the river.

The NHRAA is actively involved in many environmental issues and projects. Some environmental projects the group has accomplished are: annual river cleanup, with the assistance of local schools and scouting organizations, riparian projects such as the planting of willows, installation of riprap with the assistant of the Soil Conservation Service, and the mending of cattle fences along the New Haven River.

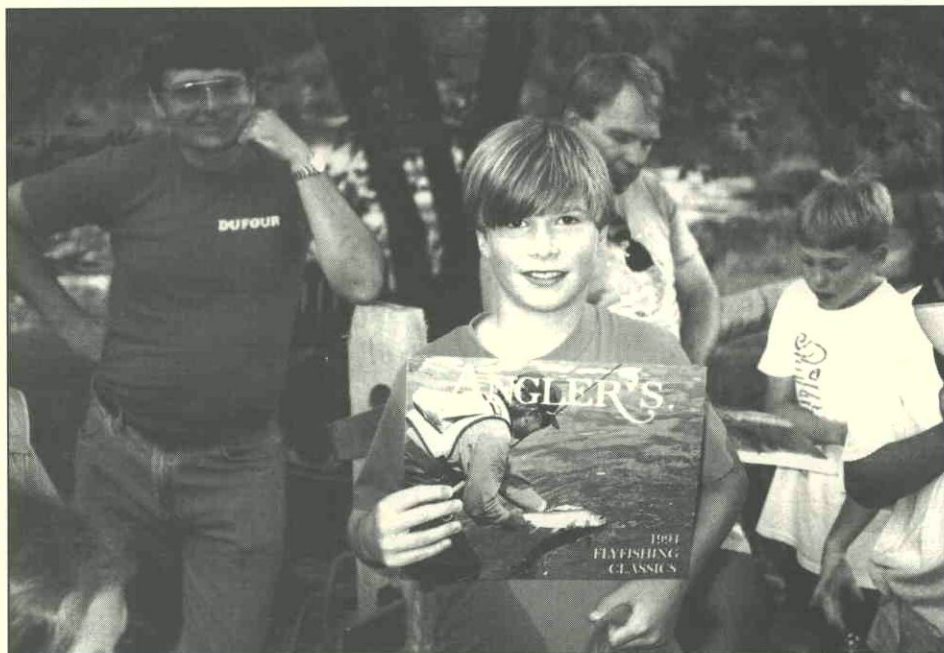
The group has aided the U.S. Forest Service in the restoration of stream habitat structures in the New Haven along the

periphery of the Green Mountain National Forest. In 1987 the NHRAA received The Stanford Miller Club Award for its contribution to education and conservation. The NHRAA has a close working relationship with Addison County Community Trust and The Middlebury Land Trust. In 1992 the NHRAA received a donation of 2.1 acres along the New Haven River to continue its stewardship for preservation and conservation of the resource.

The NHRAA is also an affiliated member of the Fly Fishing Federation, Trout Unlimited, and the Vermont Watershed Coalition, and is participating on the citizen advisory council for the Friends of the Mad River in conjunction with the Lake Champlain Basin Program. The Anglers are also involved in an intensive river survey to collect data that will help facilitate a plan for future stream habitat restoration projects. This plan will be designed with the assistance of the U.S. Forest Service and the Vermont Department of Fish and Wildlife.

Currently, the NHRAA is working with the Forest Service to compile two years of river monitoring data in order to assess a comprehensive stream plan. Habitat restructuring and stream bank stabilization will most likely be on the agenda, as well as a two-year fish shocking survey to make population and habitat comparisons.

*To learn more about the New Haven River Anglers Association, call Pete Diminico at 453-3899.*



*The New Haven River Anglers have done much to introduce young people to the joys and beauty of fish and fishing.*



# HOW THE STATE IS WORKING WITH CITIZENS

## *DEC Rivers Program Reports Progress on Several Fronts*

by Mike Kline

*(Mike Kline is Water Resources Planner at the Vermont Department of Environmental Conservation.)*

On the wall of my office, I have a state map covered with dots that represent watershed associations, River Watch groups, and other river protection efforts. Over the past five years it has been dramatic to watch the map fill up with dots. The amount of citizen action and dedication to Vermont's rivers continues to be an inspiration to me and my coworkers at the Department of Environmental Conservation (DEC).

I am now taking note of the elementary schools and high schools where teachers have developed river units for their classes. My growing impression is that Vermont high schools *without* a team of teachers using rivers to teach science, math, history, writing and environmental studies may now be the exception.

Needless to say, Vermont rivers are on the front burner, and the DEC Rivers Program is busy. Local citizens are taking the lead in the following river protection projects that involve state reclassification:

- The Northeast Kingdom Chapter of Trout Unlimited is working on a petition to designate the Clyde River as an Outstanding Resource Water (ORW).
- The Friends of the Ompompanousuc are working on an ORW petition to designate a segment of that river in Thetford.
- Citizens in the town of Belvidere are working to build support for the reclassification of the upper reaches of the North Branch of the Lamoille River from Class B to Class A. This river segment includes the Belvidere Bog.
- The Green River Watershed Preservation Alliance is working on a petition to designate the Green River in Marlboro, Halifax, and Guilford as an Outstanding Resource Water.
- Citizens of Wilmington and West Dover have petitioned the Water Resources Board to reclassify Cold Brook from

Class B to Class A.

The DEC Water Quality Division has a number of initiatives underway to improve opportunities for citizen involvement in river restoration and protection. Here are briefings on these initiatives and their status:

1. Two databases have been developed as a way to improve the effectiveness of state river planning and provide a meaningful structure for citizen input. The first is a rivers-and-streams assessment that tracks water quality threats and impairments, so that DEC can prioritize pollution prevention and remediation projects in a State Clean Water Strategy. The second database is an inventory of river uses and values that guides river protection decisions in the environmental permitting process.

The Rivers Program has worked on the development of these databases as an avenue for people to access the state's river management process. Both databases are set up, and people are welcome to submit river monitoring data at any time, along with information on local river use and value.

2. A new watershed program to encourage active local involvement in the restoration and protection of water quality

has been started. The watershed program will address nonpoint sources of pollution, such as streambank erosion and sedimentation, in small- to medium-sized watersheds. Several projects to address water quality and habitat improvements were considered, with some funding awarded. Stay tuned for a deadline for submitting proposals for next year.

3. The burgeoning of bike paths has created a new call for river protection. Bike paths provide an exciting transportation alternative, and communities around Vermont are enthusiastic about the bike-path funding that is now available. A concern now being heard, however, is that if bike paths are not planned properly, they too may have undesirable environmental consequences, especially for rivers and streams in rural Vermont.

The Rivers Program is working with other technical people both within and outside the Agency of Natural Resources to create guidance for bike path planning that will encourage the protection of riparian areas. Guidance on water quality and aquatic habitat is available.

*If you would like more information about these initiatives or the Vermont DEC Rivers program, please call us at 241-3770.*





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## "BUFFER BOOKLET" IS AVAILABLE

If you're interested in re-establishing a strip of natural vegetation along a river, lake or wetland, a booklet titled "Native Vegetation for Lakeshores, Streamsides, and Wetland Buffers" is now available from the Vermont Department of Environmental Conservation.

The booklet offers brief discussions of the values and widths of buffer strips, and it outlines how to plan for and plant trees and shrubs. Following these introductory

sections are descriptions of over 75 native trees, shrubs, ferns, flowering plants and other herbaceous species that could transform eroding, slumping shorelines into stable, vegetated, dynamic communities that help protect our soil and water.

For a copy of the booklet, call 241-3770 and ask for Cathy Kashanski. For information on nursery sources of native plants, ask for the listing "Sources of Native Plant Materials in Vermont."



**VERMONT NATURAL RESOURCES COUNCIL**

9 Bailey Avenue  
Montpelier, VT 05602