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Environmental Report

Published by the Vermont Natural Resources Council



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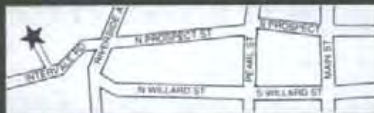
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The Vermont Natural Resources Council is a non-profit environmental organization founded in 1963 to promote the wise use of Vermont's natural resources. VNRC does research, legislative lobbying, advocacy and educational work on issues including forestry, agriculture, water, energy, wastes, and growth management.

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BOTTLE BILLS, BILLBOARD LAWS . . . and Other Radical Ideas

Susan Clark, Editor

Vermont without returnable bottles. Vermont roads lined with billboards. Vermont where money must have the final word in development decisions. Perhaps you're a Vermonter who, like me, can hardly remember that Vermont. Today, we're accustomed to the state as protected by conservation laws affecting both the specific, like litter and roadside aesthetics, and the more far-reaching, like land use management and water resources protection.

But to our many readers whose memories stretch further back — and to VNRC's founding members — nearly every one of Vermont's outdoor pleasures has a conservation story behind it. As you'll read in these pages, most of the environmental programs we now take for granted were radical ideas when they were proposed — food for thought, as we fend off attacks on our new Act 200 planning law. You'll also find inspiring evidence that when it comes to the environment in Vermont, we've come to know a good thing when we see it.

One of the most fun — but most frustrating — aspects of putting together this issue on the last 25 years of Vermont conservation has been becoming intimately familiar with so much that had to be left out. Many heroes are unsung, local success stories unmentioned, legislative battles only synopsisized. We all have our favorites, and we'd like to hear about yours. Meanwhile, though, we hope you'll sit back and savor the stories we've included.



There are gems here. Enjoy Tom Slayton's recount of the day James Watt came to town (there's nothing like a bad guy to energize a movement!). Look for Mollie Beattie's subtle planning message: "What we call 'local control' is the 'act locally' without the 'think globally'; the 'freedom' in Vermont's motto without the 'unity.'" And keep in mind poet Mac Parker's simple point: "You like those leaves and you like that steeple, but beneath those trees there's a state full of people." As you will read, the story of Vermont conservation features some remarkable personalities.

A note on the format of this issue: Most of you will notice that the V.E.R. has been redesigned from top to bottom. Working with graphic designers from the Laughing Bear Associates, we have revamped the lay-out of the magazine with the goal of making environmental news more approachable.

You'll see better use of space, photos, and graphics, and a format that we can now produce in-house with desktop publishing. You'll see the addition of new sections: this column, for example, where you'll hear from different VNRC staff members on Council work; and in future issues, columns on VNRC's "Hot Spot" projects, citizen activism, and more. What you won't see is any skimping on the straightforward, thorough reporting that you've come to expect from the V.E.R. With this 25th Anniversary double issue behind us, we will return to our regular quarterly schedule and the usual in-depth coverage of current conservation issues. There will also be a Letters section — so let us know what you think! ●



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VERMONT ROADSIDES: CIRCA 1968 AND 1970 / PHOTOS BY JUSTIN BRANDE

VERMONT PERSPECTIVE

FOR OUR CHILDREN'S CHILDREN

Governor Calls for Third Century Trust

"I ask you to make a generous, long-term, intergenerational investment in the future of Vermont. What better gift to give to our children and our children's children than clean water to drink, mountains to climb, and woods to walk through?"

Governor Madeleine Kunin

Governor Madeleine Kunin took advantage of the September 16 Vermont Conservation Celebration to issue a clarion call for protection of Vermont's environment. The Conser-

vation Celebration, organized by VNRC to cap off its 25th anniversary celebration, was co-sponsored by eighty conservation groups and attended by some 2,000 people.

Emphasizing that Act 200 "defined a vision for the future ... of Vermont," Kunin outlined her plans to help implement that vision in the upcoming legislative session. Highlights from the Governor's proposal:

The Third Century Trust: Kunin proposed the establishment of a \$300 million "Third Century Trust" to fund environmental infrastructure for clean drinking water, waste treatment, and recycling facilities. She also suggested a massive infusion of funding for the Vermont Housing and Conservation Trust Fund — \$50 million for land conservation and affordable housing around Vermont. To pay for the new

environmental clean-up package, Kunin said she will support a tax that would create incentives for recyclable/recycled packaging, further investigation of structural property tax reform, new environment savings bonds that will be available to Vermonters, and "additional ways to increase the private infrastructure contribution." VNRC and other groups have begun working with the Administration on the configuration of new revenue sources for the environmental infrastructure program.

Global warming and energy planning: Kunin said that she will soon issue an executive order for the development of a state energy plan by January 1, 1991. She committed to the preparation of a state global warming strategy for Vermont. She restated her opposition to extension of the license for the Vermont Yankee nuclear plant, and

said that the state of Vermont will "test the feasi-



TOM MINER

At left: Face painting and be-friending rabbits were just two of the activities enjoyed by the over 2,000 Vermonters who attended the September 16 Conservation Celebration. In addition to music and kids' activities, the day featured a major address by Governor Kunin and over forty workshops on conservation issues.

bility of converting state vehicles from gasoline to propane."

Political leaders from both parties have expressed support for the proposed environment package. At VNRC's annual meeting, a motion to support Kunin's environmental vision for Vermont was passed unanimously.

Conservationists are now focusing concern on how the plan will be implemented. "It is critical to piece together the details of a strong environmental program for the 1990 Legislature that will clean up Vermont's environment, ensure that polluters and developers pay their costs, increase funding available for human service and environmental needs, and strengthen the Housing and Conservation Trust Fund," says VNRC Executive Director Tom Mauer. "Governor Kunin has expressed a fine vision for Vermont, in plenty of time for us to prepare for the legislative session. We look forward to helping implement such a vision for Vermont."

NF

APPALACHIAN TRAIL EASEMENT PROTESTED

Not-So-Happy Trails

When Killington Ltd. received an easement in early 1989 for ski trail and lift crossings across the Appalachian and Long Trails, the National Park Service heard quickly from some very unhappy hikers. Trail protection groups had been left out of the "behind-closed-doors" agreement process, and the easement ignored the recommendations of the Park Service staff who found that the agreement failed to protect the trail adequately. (See "Vermont Perspectives," V.E.R. Spring, 1989.)

VNRC joined the Appalachian Trail Conference and the Vermont Chapter of the Sierra Club in filing suit in federal court against the Park Service. The suit charges that the easement was issued in violation of the National Environmental Policy Act (NEPA) and the Federal Trails Act mandate to protect the entire Appalachian Trail.

In July, Vermont Senator Patrick Leahy introduced an amendment to the Interior Appropriations Bill that, as passed, requires the Park Service to complete an Environmental Impact Statement before any implementation of the easement is allowed. Leahy's amendment directs the Park Service to back up and begin to comply with the requirements of NEPA.

VNRC Southern Vermont Associate Director Seth Bongartz praises Leahy's amendment as "a major step that will open up the entire process and provide for full and complete public participation." MM

FINALIZING WETLANDS RULES

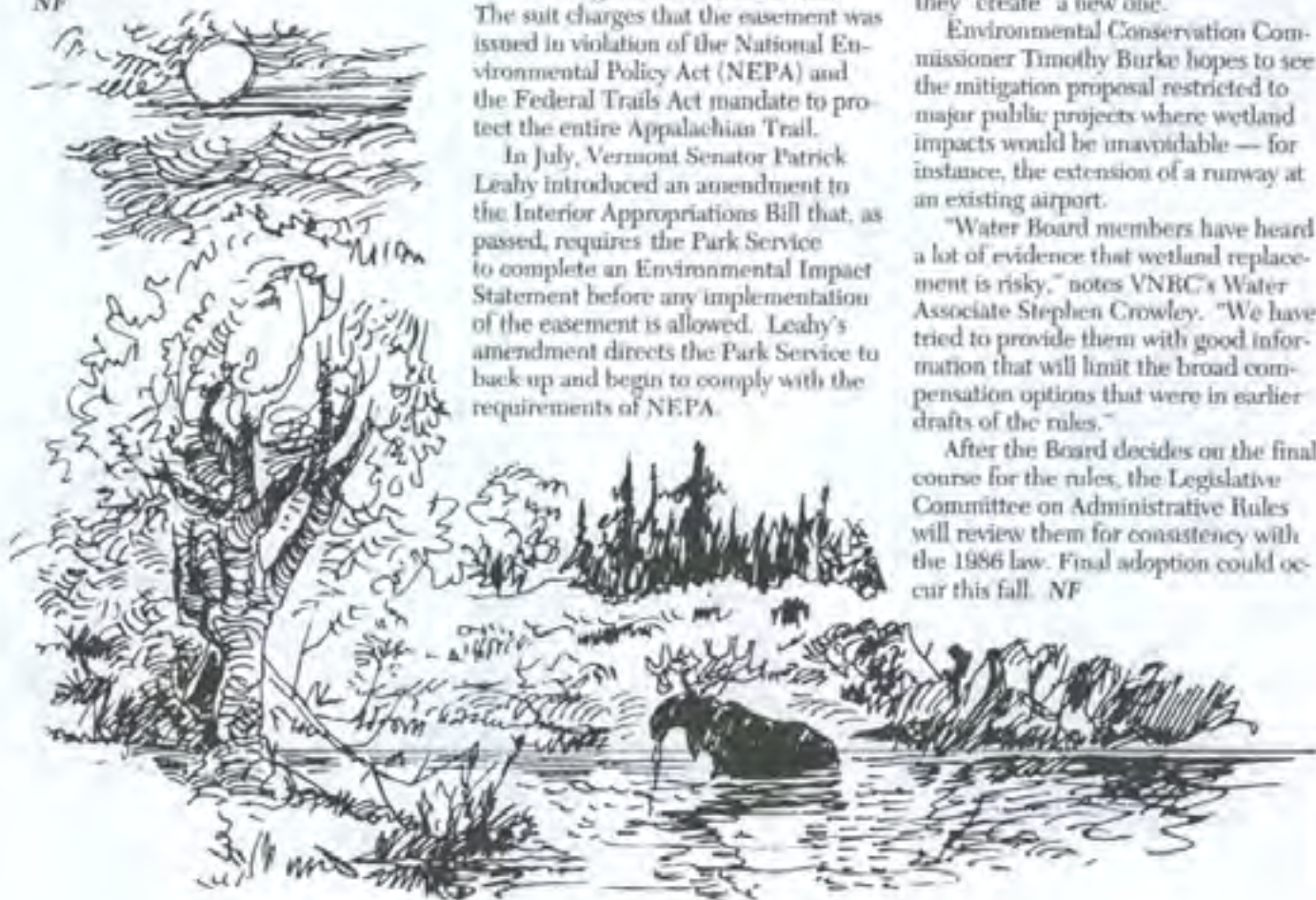
Still Battling Mitigation from the Black Lagoon

The Vermont Water Resources Board is in the last stages of drafting rules to implement the 1986 wetlands law. At this time the Board is still considering "compensatory mitigation" measures — opposed by most conservationists — that in some cases will allow developers to destroy a wetland if they "create" a new one.

Environmental Conservation Commissioner Timothy Burke hopes to see the mitigation proposal restricted to major public projects where wetland impacts would be unavoidable — for instance, the extension of a runway at an existing airport.

"Water Board members have heard a lot of evidence that wetland replacement is risky," notes VNRC's Water Associate Stephen Crowley. "We have tried to provide them with good information that will limit the broad compensation options that were in earlier drafts of the rules."

After the Board decides on the final course for the rules, the Legislative Committee on Administrative Rules will review them for consistency with the 1986 law. Final adoption could occur this fall. NF



TAKING LESS TO THE DUMP

Support for Recycling and Reduction

In 1987 when the Vermont legislature passed Act 78, a strong solid waste law, it was clear that there would be years of difficulty and expense ahead.

Today, thousands of Vermonters are working with state agencies and solid waste districts to deal with closure and lining of landfills, as well as reduction and recycling of waste. Meanwhile, local problems have developed with the disposal of hazardous wastes, incineration, and illegal dumping.

Working with a group of industry and government officials, VNRC hopes to develop a package of strengthening amendments to Act 78 for the 1990 legislative session. These may include product and packaging bans, waste reduction requirements, standards for the separation of wastes, and incentives for local and district recycling and waste reduction.

"Act 78 made waste reduction and recycling high priorities," says VNRC Associate Director Ned Farquhar. "But so far most of the attention and funding have gone for landfill closure and siting. Energetic support for waste reduction and recycling is needed at the local, regional and state levels," Farquhar says.

Recently announced Agency of Natural Resources (ANR) programs begin to address this need, Farquhar notes. In addition, Governor Kucin has announced her support for a new packaging tax to help limit packaging and increase the use of recycled and recyclable materials.

The ANR has issued a call for citizens to get involved in local recycling committees, which, through Act 78, have now been established in eight of Vermont's twelve solid waste planning regions. The committees will help develop recycling systems appropriate for each region. Citizens can contact their solid waste management districts for

information. (See "Where Can We Dump It?" V.E.R. Spring 1989, for listing of districts.)

Early calls for amendment of Act 250 to exempt landfill siting seem to have died out. Environmental Board chair Leonard Wilson told the Senate

Natural Resources Committee at a September hearing that he believes landfill siting can be accomplished under Act 250 without amendment as long as the solid waste districts and district environmental commissions cooperate early in the siting process. SC/NF



MILKING THE COWS OR THE FARMS?

BST Debate Escalates

A new synthetic growth hormone, bovine somatotropin, or BST, was developed by four chemical companies now seeking federal approval to market the hormone around the U.S. According to its producers, BST could increase a cow's milk production by about 15%.

VNRC opposes federal licensing of the new hormone. Along with many small farm advocates in Vermont and other states, VNRC is concerned that BST could increase milk production and reduce the competitiveness of small dairy farms in U.S. milk markets.

Animal rights activists also have concerns about the drug's effect on cows, and dozens of groups are petitioning the Federal Drug Administration with concerns about potential human health effects of BST.

VNRC Board member Mark

Schroeder raised VNRC's concerns about BST at a recent hearing of the U.S. Senate Agriculture Committee in Montpelier, attended by hundreds of Vermonters and U.S. Agriculture Secretary Clayton Yeutter.

"A place like Vermont, where land prices are driving up farming costs, is particularly vulnerable to economic change as a result of the federal approval of BST," says Schroeder. "Large industrial dairy operations in other states might benefit, but our small farms would face higher veterinary costs, faster 'burnout' among the herds, and a market flooded with more milk, possibly at a lower price."

BST's approval is not assured. Congress and federal agencies are looking closely at the product, and VNRC has communicated its concerns to Vermont's congressional delegation. NF



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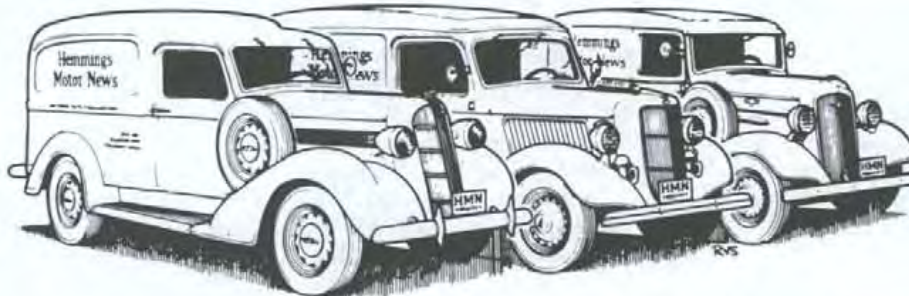
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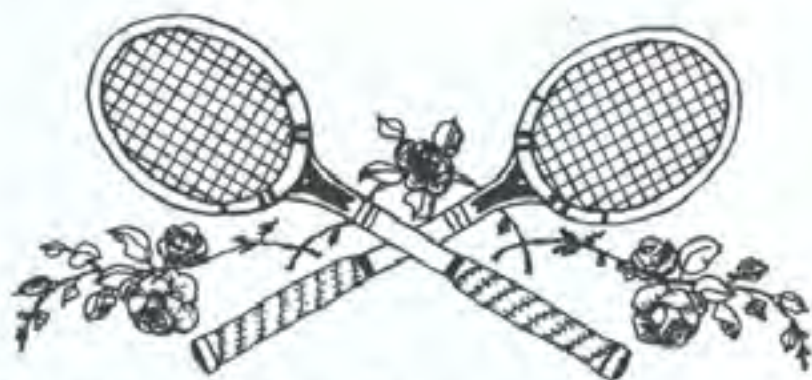


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VOLVO SPORTS-ARTS COMPLEX

R.I.P.

Although some of the alligator-shirt crowd may bemoan the loss of the Volvo tennis tournament, most Vermonters seem only able to offer crocodile tears.

Promoters of the 15,000-seat sports-arts complex, which was proposed to house the Volvo tournament, estimated \$40 million in economic benefits for the state — a figure disputed by opponents. VNRC argued that the huge development would do long-term damage to Vermont's environment and communities. (See "No Fan of Sports-Arts Complex," V.E.R. Spring 1989.)

"We were adamant that the proposed sports-arts complex was inappropriate anywhere in Vermont," notes VNRC's Southern Vermont Associate

Director Seth Bongartz. "And I must say that at times we felt like a very lonely voice."

But now that Volvo has pulled out of Vermont in favor of a more lucrative arrangement in New Haven, CT, even its proponents seem unable to rustle up more than a sigh — of relief. When the announcement was made, Governor Kucin — whose Secretary of Development Elbert Moulton was the project's chief supporter — commented simply, "Maybe it's for the best."

Robert Lawson, Vermont Business Magazine editor, got to the heart of the matter when he compared the glamorous Volvo tournament with a long-held traditional Vermont event. We reprint a portion of Lawson's essay here. SC

"Losing the Volvo Tournament to Connecticut will mean some lost money to the Vermont economy, but in one sense, it's only money. If an event like the Tunbridge Fair were ever to fold, the loss to the state would run much deeper.

The difference between Tunbridge and Volvo is first evident in the parking lot. Instead of the Audis, BMWs and other imports, the hay fields that serve as parking lots in Tunbridge fill up with Chevys and Fords and a whole lot of pickup trucks....

Nearly everyone at Volvo, it seemed, wore clean white tennis shoes,

even though they were only there to watch. At Tunbridge, work boots were the footwear of choice.

"It was clear that the average family income of those visiting Tunbridge was well below the reported \$100,000 earned by families coming to Vermont to see tennis. A rough guess would put the Tunbridge figure at about \$30,000... the average family income in Vermont. The figure could actually be lower given the small proportion of Burlington yuppies in the crowd....

"The World's Fair is more than just a source of income for Tunbridge and surrounding towns. It is an important

part of people's lives. By providing a forum for everything from ox pulls to pumpkin competitions, the Tunbridge fair and many like it help reinforce the character of Vermont.

"If the state is intent on spending money on some event, maybe Tunbridge is the place to do it....

"One thing is certain: the price tag will be far below the \$15 million that the Volvo tennis tournament sought. By supporting country fairs, the state can also do something that goes beyond simply pumping new dollars into the state economy. Support for fairs and similar events helps strengthen Vermont in other ways, too."

Lawson's essay first appeared in his business column in the *Barre-Montpelier Times Argus*, *Bennington Banner* and *Brattleboro Reformer*.

THE RUTLAND WETLAND MALL

Hearings Completed on a Swampy Proposal

At 250 hearings for the 442,000 square-foot Zambias Mall in Rutland Town were completed this July. Working with a local citizens group, "Citizens for Responsible Growth (CRG)-Rutland," VNRC submitted findings to the District 1 Environmental Commission in August.

VNRC Southern Vermont Associate Director Seth Bongartz has worked with Act 250 veteran attorney Harvey Carter to identify critical ecological and community concerns in the mall case.

"Not only would the mall destroy eight acres of wetland," notes Bongartz, "but it is to be built outside of Rutland City's commercial business district. This vastly increases the potential for additional strip development along Route 7, and threatens the economic viability of downtown Rutland."

Wetlands and planning consultants for VNRC and CRG testified before the Commission that the areas should be preserved. Former mayor and state

senator Gilbert Godnick testified that the mall would "destroy" downtown Rutland and the surrounding area.

Both the U.S. Fish and Wildlife Service and Environmental Protection Agency have supported VNRC's assessment of the wetland's value.

"Wetlands play a critical role in our ecosystem," notes Bongartz. "The list is impressive: wetlands recharge our groundwater, they can alter floodflow, they stabilize and retain sediments and toxics, they remove and transport nutrients. And they are critical to wildlife for migration, feeding and overwintering. It is heartening that two federal agencies agree that the Rutland wetland is valuable in these ways."

The U.S. Army Corps of Engineers, charged with protecting wetlands, may now officially assert jurisdiction over the wetland. If it does, the mall developers will have to prove that at the time they entered the market, there were no other sites available on which to locate the mall. The Commission intends to rule on the case before the first of the year. *SC/SB*

A BOOST FOR RIVERS *ORW Designation and Reclassification Progress*

At the same time the State has developed the Comprehensive Rivers Program, grassroots citizen involvement is focusing attention on Vermont's waterways.

"Our research indicates that many of Vermont's river resources are eligible for additional protection," says VNRC's Southern Vermont Research Coordinator Marcy Mahr.

Mahr notes that four petitions are currently being prepared to designate Outstanding Resource Waters (ORWs) in southern Vermont. ORW designation would help protect a waterway from streamflow alteration, limit gravel extraction, and recognize community support for protection of the waterway.

VNRC and the Southwestern Vermont Chapter of Trout Unlimited have

collected 1,000 signatures supporting designation of the Battenkill as an ORW. The completed petition, submitted to the Water Resources Board in September, should be heard this fall. Three other local citizen groups in southern Vermont are in various stages of petitioning for ORW status for Pike's Falls, the Green River and the Poultney River.

Recently the Vermont Water Resources Board voted to upgrade Kidder Brook in Stratton from Class B waters to Class A. Class B waters, which make up some 90% of Vermont's waterways, are classified as suitable for swimming, irrigation and other uses, while Class A waters are defined as having "uniformly excellent" character or "significant ecological value." A well-documented petition prepared by the Stratton Area Citizen's Committee with VNRC assistance provided the basis on which the waters were eligible for reclassification. This landmark decision set a precedent for further reclassification proceedings.

"A waterway either is or isn't of Class A quality, and we've been confident all along that Kidder Brook clearly is," notes Mahr. "But what is particularly important is the Board's interpretation of the public policy issues. It found that the reclassification—which recognizes and protects the Class A qualities of this waterway—is in the public interest."

VNRC is hopeful that the Board will continue to address public interest issues and management goals in other reclassification cases. *SC/MM*

PLANNING MADE EASY *New Materials Available*

Materials from VNRC and other conservation groups are making planning and citizen participation easier — welcome news for citizens getting involved in the Act 200 process. Among the offerings:

◆ **Open Space Lands: A Community Resource** will help towns identify their most important undevel-

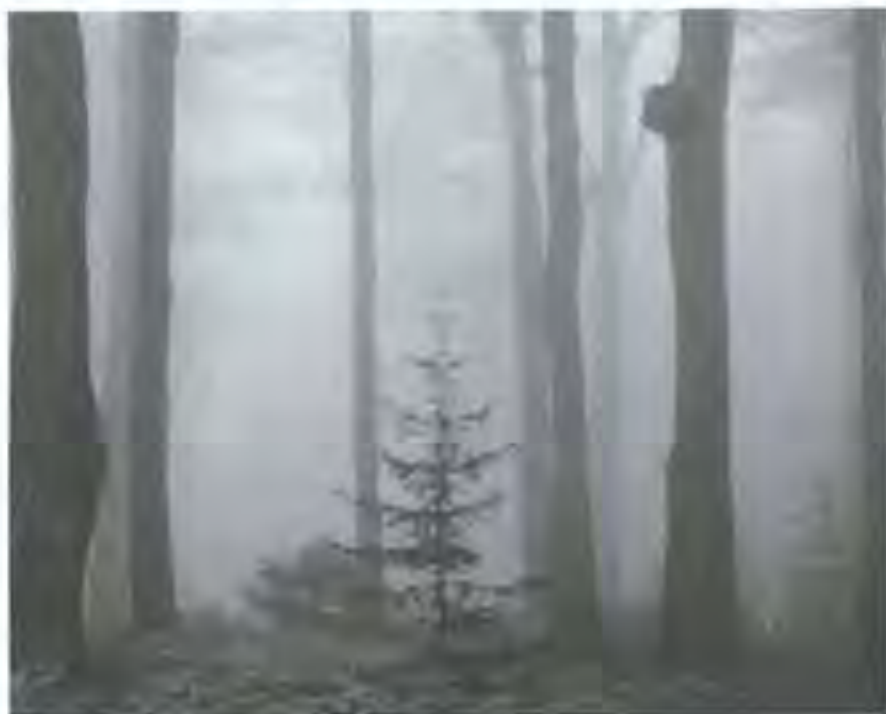
oped land. This 75-page manual encourages citizens to conduct an inventory of their town's open spaces, suggests criteria for evaluating them, and describes open space protection strategies. Available for \$5.00 (includes postage) from the Upper Valley Land Trust, 411 First New Hampshire Bank Bldg., Lebanon NH 03766.

◆ Materials from this summer's outstanding **Planning for Open Space Workshop Series** include examples from Vermont town by-laws. These materials, addressing planning and regulatory techniques for protecting open lands, were collected by Humstone Squires Associates and include the workshop presentation outline. Available for \$4.00 (includes postage) from VNRC's Montpelier office.

◆ "How To Form A Citizen Advocacy Group," "Checklist for Evaluating the Environmental Impact of a Development Proposal," "What To Do When An Unwanted Development Comes To Town" are just a few of the articles included in VNRC's **Citizen Involvement Kit**. Available from VNRC for \$5.00/VNRC members, \$10.00/non-members, plus \$1.00 per kit for postage.

◆ VNRC's **Vermont Environmental Directory**, now in its second edition and over 120 pages, contains complete information on Vermont environmental groups including land trusts, nature centers and advocacy organizations. The Directory also covers state government, college programs, regional and town commissions, and more. Available from VNRC for \$5.00/VNRC members, \$10.00/nonmembers, plus \$1.00 per book for postage.

◆ "So Goes Vermont" was created as a slide-tape presentation in 1971 by the VNRC "EPIC" Project in order to increase public understanding of Vermont's growth issues and the newly enacted Act 250. A powerful portrait of Vermonters and their issues, and perhaps even more compelling today, "So Goes Vermont" is an excellent opener for land use discussions. Now available in 23-minute video format, on 7-day loan from VNRC's Montpelier office at a cost of \$3.00 to cover postage and handling. *SC*



THE FATE OF THE FORESTS

Northern Forest Lands Study Released

When news about the sale of large timber company land holdings hit the press last year, alarm spread throughout the northeast about changing forest land ownership patterns. (See "Pardon Me — Is This A Land Rush?" V.E.R. Winter 1989.) In response, Congress funded a \$250,000 study, to be conducted by the USDA Forest Service and the Governors' Task Force on Northern Forest Lands.

The results of the year-long study, which looks at 26 million acres of undeveloped forest lands in northern areas of Vermont, New Hampshire, Maine and New York, are contained in a draft report issued this October for public review and comment. A series of public meetings are scheduled for this fall at which the public will have a chance to comment on the report.

The *Northern Forest Lands Study Report* details the nature and extent of land ownership and use changes — changes that have come to pose an in-

creasingly serious threat to the long-term integrity of the northern forest both as an ecological unit and as a commercially manageable resource. While the report does not recommend specific actions, it presents a number of forest conservation strategies, which range from tax incentives to encourage continued private ownership, to land use controls, to public acquisition of land and conservation easements.

VNRC and other conservation groups throughout New England are now preparing comments on the draft report. The report and reactions to it will be covered in the Winter 1990 issue of the V.E.R. Interested citizens are encouraged to review the *Northern Forest Lands Study Report*. For a copy, contact the Northern Forest Lands Study, P.O. Box 520, Rutland, VT 05702.

The Forest Service has set January 19, 1990 as the deadline for public comments. TM

VERMONT'S GREAT LAKE

Lake Champlain

Protection Possibilities

Does anyone have a spare \$10 million or so for Lake Champlain? Research by the University of Vermont, as well as recent beach closings due to pollution, point to the fact that Lake Champlain is suffering from both increased use and benign neglect.

Governor Madeleine Kunin of Vermont, Governor Mario Cuomo of New York, and Quebec Premier Robert Bourassa took a step toward protection last year when they signed a Memorandum of Understanding to work cooperatively on developing a lake plan. The agreement created a nine-member Steering Committee representing the two states and the Canadian province, as well as a 28-member Citizens Advisory Committee, of which VNRC Executive Director Tom Miner is a member. No significant action has resulted from a 62-page work plan intended to guide the planning effort, however, because of a lack of funding.

Speaking at a two-day symposium in October on the future of the lake, Vermont Senator Patrick Leahy pledged to introduce federal legislation designating Lake Champlain as the sixth Great Lake, making it eligible for a wide range of federal programs and funding. Vermont Senator James Jeffords and Representative Peter Smith are also pursuing efforts to bring federal attention to the lake.

Symposium participants agreed that a more formal interstate governmental structure was needed. As a result, Vermont and New York environmental staffs are working on such a proposal for review by the Steering and Citizens Advisory Committees.

Note: The Vermont Agency of Natural Resources is seeking a volunteer to work for ten hours or more per week on lake-related issues. For information on this internship or on the Agency's lake research, contact Nancy Bazilchuk, 244-7347.

This article prepared by Nancy Bazilchuk and Tom Miner.

GAS PIPELINE STALLS

Fast-Track Project Derailed

A trans-Vermont gas pipeline proposal, which proponents had asked be put on the fast track for review, has been stalled — perhaps indefinitely.

The owners and operators of the proposed pipeline have now requested the suspension of federal and state regulatory proceedings. Canadian natural gas suppliers have rejected proposed contracts for the pipeline, and most of the pipeline's owners and supporters have pulled out of the project.

The Champlain Pipeline Company proposed constructing the pipeline from Canada to southern New England markets, distributing about 3.5% of the

gas in Vermont. (See "The Champlain Pipeline," *V.E.R. Spring, 1989*.) Natural gas is generally considered a "clean" energy alternative; however, VNRC argued that a thorough review was necessary for energy planning, replacement of "dirty" energy sources, alternative corridor analysis, and town planning and environmental review.

VNRC had urged the Vermont Public Service Board (PSB) to assert jurisdiction over the project to provide for adequate review. In August, the PSB required the pipeline to apply for approval under Vermont law, recognizing that more review time were needed.

VNRC has contacted state officials to indicate interest in participating in state energy planning and to prepare for a better natural gas pipeline planning process in the future. *NF/SC*

For more information on how you can get involved in Earth Day activities, call toll-free 1-800-932-7100 or contact VNRC at 223-2328. *SC*

PROTECTION FOR UPLAND WATERS

Indirect Discharges Rules

Septic systems and spray irrigation systems, long unregulated in Vermont because they did not cause "direct" pollution to waterways, came under legislative scrutiny in 1986. VNRC and other conservation groups fought hard at that time for strong water quality legislation, and these "indirect discharges" are now controlled by statutory standards. This fall, the Department of Environmental Conservation (DEC) completed draft rules to implement the 1986 law.

At recent DEC hearings, representatives of VNRC, the Connecticut River Watershed Council, the Environmental Law Foundation and other conservation groups generally supported the draft rules. However, the law and proposed rules have drawn some criticism from recreation industry interests who see the requirements as a limit on growth in Vermont's upper elevation watersheds. Ski area representatives in particular have complained the Department's draft rules are too strict and not scientifically based.

The 1986 law says that indirect discharges may cause "no significant alteration of aquatic biota" when they eventually reach a stream or pond. This stipulation, which protects stream life from spray and below-ground disposal of wastes, will require special attention for operations at high elevations, where soils are thin, stream volumes lower, and slopes are extreme.

"Upland watersheds feed the streams Vermonters drink from and swim in, and they are areas that we enjoy in a natural condition" says VNRC Associate Director Ned Farquhar. "The Legislature adopted a strict protection standard for these areas, and the rules should reflect it." *SC/NF*

EARTH DAY 1990

Welcome "The Decade of the Environment"!

Twenty years ago on April 22, Americans pooled their energy in what has been called the largest organized demonstration in history.

Some 10,000 schools, 2,000 colleges and an estimated 20 million people participated in Earth Day — and the awakening of today's environmental movement. Activities ranged from nature walks to teach-ins, and from lobbying to direct action against polluters. Significantly, within two years after Earth Day 1970, the U.S. Environmental Protection Agency was formed, and the federal Clean Air Act and Clean Water Act were passed.

Today, conservationists are gearing up across the nation to celebrate the twentieth anniversary of Earth Day, April 22, 1990. And Vermonters are organizing a variety of events.

"Earth Day 1990 will be a grassroots



celebration in Vermont. We hope to see tree plantings, environmental fairs, curriculum materials, and more," says Paul Markowitz. Paul and Deborah Markowitz are spearheading an Earth Day committee, made up of interested citizens and representatives from conservation groups including VNRC, the committee will act as a clearinghouse for Earth Day information.

"Diversity and local action will be the keys to making Earth Day 1990 a success," agrees VNRC Executive Director Tom Miner. "We hope people in every Vermont community will find something special about their local environment to celebrate — and to commit themselves to protecting."



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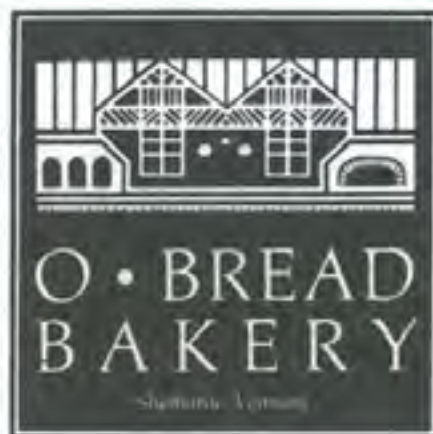
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RICHARD W. BROWN

WHERE LOVE AND NEED ARE ONE

A Perspective on the Vermont Environmental Movement

Tom Slayton

“Only where love and need are one
and the work is play for mortal stakes
Is the deed ever really done
For Heaven and the future’s sakes.”

Robert Frost

In the decade between 1968 and 1978, the State of Vermont built a protective structure of environmental law unsurpassed in the United States. The Vermont Legislature hammered it into being carefully and gradually over the years, the way a farmer puts together a complex of barns. By 1979, the state had banned billboards and throwaway bottles, had cleaned up most of its polluted lakes and rivers, had enacted a tough development-control law and had put firm controls on the nuclear power industry within its borders. It was a major accomplishment for a state with fewer people than most medium-sized U.S. cities.

That flurry of lawmaking, which codified the Vermont environmental movement, grew from a two-pronged rootstock: the affection Vermonters felt and still feel for their beautiful land, and their reaction to the urban pressures which threatened their state in the late 1960s. Love and need.

Some said that by 1982, Vermont environmentalism was waning, that its sense of mission had crumbled and it was simply engaged in rearguard actions. But in April of that year, the state's environmentalists proved they could still triumph in a major confrontation.

James Watt, archdeacon of the environmental backlash, looked angry that rainy spring evening. He had reason to be mad. He'd been slapped in the face by a tiny pipsqueak state with not half a million inhabitants and a lot of undeveloped land.

As President Ronald Reagan's Interior Secretary, Watt had lived up to his advance billing: scion of the Sagebrush Rebellion, developers' lawyer *par excellence*, and scourge of environmentalists throughout the country. Reagan had ignored the Sierra Club's petitions bearing a million signatures demanding Watt's recall. After all, Reagan approved of Watt's environmental policies, and Watt was a witty, forceful speaker: in all the Reagan Administration, only the President had raised more money for the Republican Party than James Watt.

But in Vermont, Watt flopped. It was neither the chill of early spring nor the misty drizzle that sapped Republican spirits and lengthened faces on the night of April 17, 1982. Rather, it was the Republican leadership's knowledge that fewer than 100 people had bought tickets for the GOP's spring fund-raising dinner, which was scheduled that night at Killington Ski Area's Snowshed Lodge. When Vermont Republicans learned that Watt was to be the keynote speaker at their dinner, they bailed out in platoons. Not one state-elected Republican office-holder was in attendance. It was, after all, an election year, and no Vermont official wanted to risk sharing the platform with a man so clearly out of step with Vermont

as James Watt. Republican Congressman James Jeffords said he would be unavoidably detained in Florida. Republican U.S. Senator Robert Stafford was planning a European tour. Governor Richard Snelling, also a Republican, had another meeting to attend. Secretary of State James Douglas, more



The Vermont Legislature hammered environmental laws into being carefully and gradually over the years, the way a farmer puts together a complex of barns.

forthright than many, said an evening at home with his family appealed to him more.

Former Republican National Committeeman Roland Q. Seward saved the evening from total ruin by organizing a last-minute reception and cocktail party for the Interior Secretary. Seward (who had previously entered the realm of legend when, at the height of a struggle for a state-wide land use plan, he declared: "What are we saving the environment for? The animals?") hustled the reception together when it became apparent that tickets to the dinner weren't selling. Pulling in all his political IOU's Seward produced about 200 people, enough to save face for the President's man. But not even Seward could make the attenders smile.

It was a singularly grim little party and, irritated with advance news coverage of the controversy, Watt's staff had arranged to cordon reporters into one corner of the meeting room. When Watt eventually appeared, his speech was short, snappy, and acerbic. He jabbed at what he said were press misrepresentations of his record, criticized the "neglect" of the national parks by the previous administration, said energy resources locked up in the 340 million acres of land overseen by his Bureau of Land Management could reduce the nation's dependency on

foreign oil, and in general portrayed himself as a friend of the environment – as long as the environment didn't get in the way of American Progress. There was a short, combative question-and-answer session and then Watt disappeared.

People began to shuffle into their coats and leave. No one but loyal Republican ticket-holders

this," Hathaway said as he handed over the turkey, and the audience roared. Laughter and festivity, music and several speeches filled the next three hours. Fay and Dudley Leavitt of Lincoln sang their song, "Mr. Watt's Funeral Ball," and in a sing-along led by Reverend John Nutting of Waterbury Center, the gathering belted out a spirited rendition of Woody Guthrie's anthem, "This Land is Your Land."

"We are here tonight to serve notice on the politicians of any color, or to anyone who would aspire to public office, that Vermont is not for sale," said Carl Reidel, head of the University of Vermont's Environmental Program and then President of the Vermont Natural Resources Council. He went on to attack the Reagan Administration's environmental policies and concluded: "Get involved. Let this event be remembered as a truly new beginning for us all."

Although the party lasted late into the night, participants remember two aspects of the anti-Watt dinner as most significant. First, they remember that (like the state Legislature that had enacted Vermont's environmental laws in the preceding decade) the dinner seemed to be representative of the state as a whole. It wasn't an exclusive affair. Democrats and Republicans attended, young people and old, men and women, college professors and farmers and scientists and businesspeople. Secondly, they remember that at some point, the focus of the evening somehow changed.

"Watt and the fact that he was coming to Vermont was the catalyst," recalled Reidel a year after that night. "But as the dinner went on, I felt that people turned away from simply attacking Watt, and instead were celebrating what we had and what had happened over the last ten to fifteen years in Vermont."

Vermont's reputation as a bastion of environmental quality is nationwide. However, few people get beyond the view of the state as Munchkin Land: an impossibly neat, clean, virtuous place best seen from a distance, where the farmers wear red woollens all year long, and everybody says "ayuh," when answering in the affirmative.

People with such illusions are often shocked by their first glimpse of the grim pockets of poverty hidden in the lee of many of those picturesque red barns and crisp white farmhouses, by the rusty, beat-up cars many Vermonters drive, by the rapid intolerance and economic desperation tucked away behind some of those rolling hills, and by the conventional ranch-style suburban subdivisions that now fringe every Vermont city.

Vermont symbolizes environmental cleanliness for many of its residents and neighbors. But the reality of life here today is more complex than any symbolism will allow for. In fact, Vermont today is



James Watt was slapped in the face by a tiny pipsqueak state with not half a million inhabitants and a lot of undeveloped land.

would be admitted to the Watt dinner, an unprecedented approach by the state Republican Party, which was usually eager to generate news coverage of its ceremonial occasions. As reporters left the ski area, some of them counted the remaining cars and understood clearly why Watt's dinner had to be held in secret: there were fewer than 35 cars still there. GOP officials later said the party had sold 61 tickets.

Not 25 miles away, at Castleton State College, another dinner was underway, and it was hard to shoehorn oneself into the crowded college dining hall. Without realizing it, Watt had given Vermont environmentalists the occasion for a celebration. More than 500 of them attended the dinner, which had been planned by state conservation organizations to protest Watt's Vermont appearance. Unlike the GOP gathering at Killington, the anti-Watt dinner wasn't grim or duty-ridden. It was a party.

Master of ceremonies Richard Hathaway of Montpelier gave Dartmouth College Professor Walter Stockmeyer the award for naming the festivity the "Watt Go Ohm Dinner." Stockmeyer's prize was a frozen turkey.

"I want you all to know there's no symbolism in

no longer either completely rural or completely isolated (despite its status in the latest federal census as the most rural state in the nation). Interstate highways and satellite communications technology now link its people to the rest of the world.

Not only do Vermonters absorb their share of second-rate sitcoms about Southern white thugs and Northern Black apartment-dwellers, they can lately sample an urbanite view of themselves on "The Bob Newhart Show," a second-rate sitcom about inn-keeping you-know-where: ersatz Vermont characters and phony Vermont humor strained through the mind of a city dwelling showbiz scriptwriter and fed, via television, back to the Vermonters it fails to describe. Such stuff approaches intellectual incest. The Age of Innocence is over in Vermont, gone forever.

When the state really was rural and isolated, as it was for most of its history, very few of its people thought consciously about environmental preservation. There were notable exceptions, among them George Perkins Marsh, the great 19th century author, ambassador, linguist, and Congressman, the man many regard as the intellectual progenitor of the ecological movement worldwide. However, for the first three centuries of their recorded life, Vermonters were more concerned with what nature might do to them or for them than with what they might do for nature. It was Vermonters who needed preservation, they were sure, not Vermont.

In his book *Wilderness and the American Mind*, Roderick Nash points out that America didn't begin to love wilderness until there wasn't much of it left. When wilderness covered an entire continent America hated and feared it, wanted only to cover it with civilization. The same principle was at work in Vermont. As long as they had an abundance of rurality and isolation, Vermonters were reasonably happy to eliminate it or escape it. But when Vermonters saw the alternative to isolation bearing down on them in the form of overpowering commercialism, slipshod development, the destruction of natural systems that sustained them, and the weakening of their traditional institutions, they reacted. A product of their reaction, it is now evident, is that state's strong body of environmental law, and its prevailing pro-environmental ethic.

Viewed that way, as part of a macrocosmic historical dance, the creation of those laws and that ethic assumes the overpowering logical force of continental plate tectonics. And yet, such a view oversimplifies the Vermont experience tremendously.

Vermont is a poor state, one where the per capita income has long been dismally low, one that in the mid-1960s had rivers as polluted, roadsides as littered, downtowns as commercially blighted as many less beautiful places. Why did it emerge from the

1970s with one of the strongest bodies of environmental law in the country? Why did a massive effort succeed in returning 90% of the state's waters to clean, free-flowing health? Why, despite strong opposition, did Vermont create a state-wide system of land use and development control?

The story of environmental protection in the



Green Mountains is an intensely human story, whether the arena is Montpelier's elegant little gold-domed granite State House, or a hillside hunting camp. It is in the hands and minds of Vermonters themselves that the key to this intriguing puzzle lies.

In most cases, that receptive soil was built by people who worked hard for their living. Vermont has never been an easy place to earn one's bread.

Now in her late sixties, Josephine Metcalf grew up in her own right place, but lost it through the misfortunes of time and circumstances. As thin and spare as a birch sapling, and as resilient, Metcalf grew up and spent her strongest years on a farm in Cabot so remote that the town no longer maintains a road there. Today, she speaks of the place with a fierce pride and love, remembers that she gave birth to four children on that farm before she had one in a hospital. She loved to fish Cabot's little streams, and says she knew "every crook in the brook." The feelings that generations of Vermonters have had for their land ring in her words, and her strong hands are clasped firmly when she talks.

"I gave the best years of my life to that place, and

The story of environmental protection in the Green Mountains is an intensely human story.

we had some hard sledding there," she recalls. "But the land, that 160 acres – it used to make me feel good inside just to have it around me."

Farming for Josephine Metcalf was no romantic adventure. It was hours and hours of bone-bending

and loggers are financially strapped, mortgaged to the hilt simply to pay for the equipment they need to do their work. Energy needs shift, inflation keeps pressing, forest and farmland ownership patterns change with every new house and ski lift. Will the maintainers of Vermont's working rural landscape wake up soon to find that Vermont has passed them by, taken their strength and good will, and left them to flip burgers or load ski lifts in a high-priced sterile vacationland?

Will the maintainers of Vermont's working rural landscape wake up soon to find that Vermont has passed them by?



labor and a life devoid of most of the luxuries we now think of as necessities. In the end, the difficulties of that life overcame her family: they had to leave the farm and seek work in town. Now the only thing she says about the move is that she couldn't watch a baby and drive a tractor at the same time. Her feelings for the remote farm are still evident.

"For many years that place – well, it was my center," she recalled recently. "I didn't think I'd ever leave there."

She still keeps a garden on her two-acre homestead in Marshfield, and remembers the Cabot farm as fondly as though it were a child, grown up and gone its own way. It's no longer farmland, but because it was carefully planted to good trees, it hasn't gone back to brush. Today it supports a fine stand of timber. Metcalf is glad, she says, that the land she farmed "amounted to something."

Metcalf isn't the only Vermonter to lose her farm to forest, and other farms have become houselots, commercial developments, and second-home complexes as pressures build in the busy metropolitan world beyond the quiet hills.

How many rural Vermonters will be forced to give up the life they love? Already many farmers

The Abenake Indians, who lived here before any Europeans, have legends that show their appreciation for the land's intangible gifts. One of the legends says that Oziodzo, the creator of the universe, waited until he had completed all the rest of the world before he made the valley between the northern mountains and the lake that later came to bear the name of the French explorer, Samuel de Champlain. After practicing creation for millenia, Oziodzo's skill as a landscape artist was great. He finished off his work with a place of special, unsurpassed beauty. And when Lake Champlain and its valley were complete, the Indian god turned himself into the large rock that thrusts today from the water near the mouth of Shelburne Bay (Rock Dunder), so that he could sit in silence, gazing forever upon the jewel of his creation.

Vermont's undeniable beauty, the closeness of nature in every corner and cranny of the state, has sculpted the consciousness of virtually everyone who has lived or visited here. We are, after all, a stateful of immigrants, even though some of the immigrants have camped here longer than others. The land, the weather, the grand spectacle of the seasons have worked their way under our skins over many, many years, and the continuing interaction between humankind and the land is one of the basic threads out of which Vermont's own existential fabric has been spun.

Whether in the past or the present, the Vermont reality is more complex than any symbolic representation of it. The state has some of the strongest environmental laws in the world, yet it's not completely protected against change. It's under tremendous pressure to grow and develop into an affiliated chapter of mass America, yet it continues to want to go its own way.

And so it goes. Some twenty-five years after the flowering of the environmental movement in Vermont, it is the best of times and the worst of times, the season of both hope and despair. ●

Tom Slayton is Editor of Vermont Life magazine. His twenty years of work for Vermont newspapers included extensive coverage of environmental issues.

THE ORIGINS OF ACT 250

A Talk With Former Governor Deane C. Davis



It would have been difficult to predict that Deane Davis would come to be viewed as Vermont's environmental governor. His career included positions as Washington County State's Attorney, Vermont Superior Judge, Counsel for National Life Insurance Company, and chair of the commission which called for an administrative overhaul of Vermont state government; but this resume does not hint at the ground-breaking environmental laws Davis would foster in his two terms as governor.

The Republican governor guided Vermont through the challenging, heady years between 1968-1972 — a time of booming development for Vermont, and the era that we now recognize as the dawning of the modern environmental movement. Act 250 (10 V.S.A. Chapter 151), Vermont's landmark land use law, and Act 252, (water law discussed on pp. 31-32 of this issue), are his legacy.

Born in 1900 in East Barre, Davis is a feisty and articulate eighty-nine years old this November. He was interviewed in his Montpelier home by writer Kimberly Hagen and V.E.R. Editor Susan Clark.

VNRC: Can you give us some of the background that led up to the creation of Act 250?

Davis: To begin with, when I first started running for governor, it was not one of my plans or goals because I was not fully aware of the extent of the problem. I think the real, actual physical evidence of the problem was then contained in Windham County, and spreading over a little into surrounding counties, like Bennington and Windsor. And it was almost entirely connected with ski development which was going along very rapidly at that time. While I was campaigning I got the chance to tour the areas.

I remember in the town of Dorset, for example, there was a proposed development where the developer had stuck up signs for each lot. Somebody — I don't know if this was a joke or not — had counted the number of signs up on this development and several other adjoining developments. And then they went to the Town Clerk's and checked all the applications that had been filed locally, and counted everything up. They figured that if all the lots set aside were indeed developed, there would be more

houses in Dorset than there were in Brattleboro.

That startled people a little bit, including myself. Later I toured a development where the buildings had been started, and they were located on hastily improvised roads which were very steep and had curves in them that were entirely unsuitable for school buses or any large vehicle of any kind. And one of the things you have to keep in mind is that often these second homes become first homes at some time in their history...

I noticed that not only would it be impossible for those roads to be developed, but among those houses that had been built, we found open sewers running into the ditches, which startled me. People were up in arms; even the real estate men who were engaged in the business of selling lots were deeply concerned.

There were some good organizations at that time, from different perspectives, that were organized for the very purpose of protecting various aspects of the environment of the state. But VNRC and Justin Brande [VNRC Executive Director at the time] were very active. He was pretty filled in with the information of what was going on in the state, and what was contemplated.

He was a wonderful person to deal with, very objective. Although a staunch environmentalist, he was, nevertheless, when he came to problems, open minded until all the evidence was in. Once that was done, he took his stand and that was it as far as he was concerned. And of course, all the others — Mr. Brett from over at Woodstock, and the lady from Fairlee, Lucy Bugboe, she used to come see me all the time.

So that's what got me started — to realize that the rights of the public had to be heard where major developments were to be.

VNRC: What was your first step?

Davis: I called a meeting of people I thought might be interested in both sides of the issue, there in the Statehouse. I made arrangements with Barry Commoner whose name was very prominent back in those days, to come and speak to the crowd. I think we sent out 600 invitations, and about 500 showed up. I never saw such a response!

In fact we had trouble getting them all in there.

"We found open sewers running into the ditches.... People were up in arms."

"We knew we couldn't put this thing across unless we... took the time to get a lot of people to participate, and that's what we did."

Commoner did an outstanding job of awakening those that weren't awake already. After his speech, they decided to break up into smaller working committees, and spread out through the Statehouse, and they spent hours discussing certain phases of the problem.

Well, their conclusions all seemed to be the same thing — that something had to be done — but nobody was quite sure what was to be done or how. So they made one recommendation, and that was that the governor create a commission on the subject, to study it and hear from people more directly.

VNRC: That was the Gibb Commission?

Davis: Yes — I appointed Arthur Gibb chairman, and several others to be on it with him — and not all fighting environmentalists either. There were real estate people and businessmen... By the time they got through, however, they were a pretty unanimous group.

I think the success in this exercise came about by reason that somehow God had his hand on our shoulder I guess, enough so that we knew we couldn't put this thing across unless we did it right. Unless we took the time to get a lot of people to participate, and that's what we did.

The report by the Commission is on file in the State Archives. They made two reports actually, after hearing from a large group of witnesses. The first one was what the development problems were, what had happened up to that point, and what was likely to happen. The second recommended, in general, a land-use management law at the state level.

We then started an arrangement through the Planning Office and Walter Blucher from Arlington, who had been a professional planner but was now retired, and the Attorney General's office. Jim

Jeffords, who was then the Attorney General, put a fellow by the name of Jon Hansen from Rutland, a member of his office, to oversee the legal draftsmanship as it had to continue under the guidance of the governor's office.

VNRC: So that's when the ideas were put into the form of legislation?

Davis: Yes. We worked on it in 1969 for the next legislative session. But we weren't ready to meet the legislature with it after all. By the time the second part of the session met, in 1970, we were prepared with bullets.

And we had quite a fight. But we had the help of these many organizations, particularly yours. Yours had been the outstanding one really, all during that period of time. I think because of the integrity they had been able to create as a result of Justin Brande's action. Now he was pretty nearly the whole office at the time as I remember. Of course now it's much larger, but it was an institution even then in 1970



ED EPSTEIN

with a lot of credibility and they were extremely helpful in getting this work done.

VNRC: What were the concepts the bill designers were trying to get across?

Davis: First we decided that we had to have two things: we had to put immediately into effect a quasi-judicial organization to grant the permits. And then we had to establish an act of standards, which became the ten criteria in Act 250. And those were debated and debated for hours and days. We had to have an organization to grant these permits, and we had to require these permits as a way of getting the matter before and into the jurisdiction of these regional groups. We set up nine regional groups, actually little courts, to decide whether this permit should be granted or not. And if so, on what condition.

And this, in my humble opinion, has been the genius of Act 250. The fact that even though there have not been a large percentage of permits declined officially, an amazingly high percentage have been [improved] in the process. I think that's good because everyone learns more and more doing this process.

VNRC: How about the planning component?

Davis: It was on the advice of my friend Walter Blucher that we needed a state [land use] plan. And well, you know the history of the state plan, that we didn't get it.

There were three things actually that were called for. First, that the governor should provide a temporary plan, [the Interim Capability Plan] and that was done. Second, the Legislature was to approve a Capability Plan, which was merely a factual plan — setting out what land was suitable or unsuitable for building, etc. And third, this plan was to be made legally enforceable — [a state land use plan].

We got two of them, but we didn't get the real one, that state land use plan. And this, I think, has somewhat contributed to the cost of operating Act 250, as they have had to resort to regulations by the State Board, some of them possibly questionable at times. And we don't have yet the uniformity that we would have liked to have seen, that would have resulted had we been successful in getting that plan.

As I look back I'm actually amazed at what we did get. Really this whole thing, Act 250, runs counter to Vermont's tradition with reverence to the use of land. I mean, Vermonters feel land is sacred, and we don't want anybody messing around with our land, much less the government.

But now I do think the ethic of environmental control is pretty well established in Vermont. I know there [were attempts] in 1971-1972 while I was still in office, to scuttle the Act. Every one of

those failed. Watching that happen, and what has happened since then, I've made up my mind it would be pretty hard for anybody to scuttle Act 250 now.

The need, the desirability, in Vermont's case anyway ... to bring some kind of orderly approach to what's going to be done with Vermont's land, is pretty solid in the political end of it, and the social, philosophical field is pretty well established.

VNRC: How would things be different if the planning element had remained strong?

Davis: Let me give you an example. Much thought was being given back then to the question of altitudes, where fragile soil begins and ends. One has to look at Act 250 with Act 252 [Davis-initiated water protection law] in your left hand at the same time because the two go together so closely. I'm thinking for instance of the fight Governor Kunin had with Killington. I've a strong feeling if we'd had that plan in place, there would have been no fight.

One of the principles we adopted back then was that pristine waters were not going to be allowed to be touched with anything. In other words, we had our problems cleaning up the secondary waters and the tertiary waters, why let anybody do anything with our pristine waters which feed into them? We had a plan, and that [Killington] development at that altitude would have been an absolute no-no. And nobody would have gotten a lot of money invested.

You see the problems come up when somebody has already invested a lot of money, innocently or at least legally innocently, and *then* the issues are raised. With the plan in place, they would know beforehand what was considered proper or what wasn't.

That's just a recent example I give, but there are hundreds more with the same idea. I think that [the state-wide land use plan] would have brought more uniformity to the whole process and the state. I think Act 200 is an attempt to do what politically couldn't be done along the idea we had in the state plan. But after all, [Act 200] is only planning, and back then we were talking about standards and prohibitions that would be written into the law.

VNRC: What about the future of Act 250?

Davis: I think the idea is so ingrained now, the idea of the need for something to be done is almost religion in Vermont now. The next big test to come on Act 250 is if and when we have a major [economic] depression.

As for you, VNRC must continue its great work of educating and making people think about Act 250 and the need for it. [VNRC] was in on the genesis of it more than any other organization, so you have the background and history to carry on with this. ■

"We didn't get the ...state land use plan. And this, I think, has somewhat contributed to the cost of operating Act 250."

BEYOND THE GIBB COMMISSION

An Interview with Arthur Gibb

"I never could see any reason why people had to be so paranoid about a land use plan."



In his personal files, Arthur Gibb keeps the original of a memo written by planner Walter Blucher in October, 1969. The memo outlines an idea for a development permitting process, and the foundation for ten criteria by which to evaluate proposals.

As chair of the commission appointed by Governor Deane Davis to review Vermont's development problems, Gibb was an active shepherd of Blucher's ideas — as modified by the "Gibb Commission" — as they were worked into bill form and finally, into Act 250.

A Republican member of the Vermont House from 1963-1970 and the Senate from 1971-1986, Gibb chaired both Natural Resources Committees. Now a member of the Environmental Board, Gibb maintains an even-handed perspective on development and environmental control. And his expertise in Vermont's growth issues is far-reaching. Susan Clark and Kimberly Hagon interviewed Gibb at his home in Weybridge.

Gibb on the progress of Vermont environmental laws:

"The late sixties saw a great deal of environmental legislation. The Planning Act, the billboard law — that was the beginning of it. You wouldn't have activated Act 250, I don't think, without the fact that you had already laid the groundwork with local zoning and control. Look back on the early sixties and you will see that there was literally nothing, no environmental law; and you couldn't bring actions for environmental reasons.

"It was in 1967 that we worked on, and then in 1968 passed, the Planning Act. That was the first step in comprehensive planning and zoning, and the 1970s carried that out. Now in the 1980s we've hit an acceleration of development, which has made us realize we have got to go beyond simply controlling things project-by-project on a strictly local basis.

"I'm not against development. But this is the basic difference between the '80s and the '70s: the pace of development is much faster."

On Act 250 today:

"Generally speaking, it definitely works. I'm sure you're familiar with the statistics. The number



of turndowns is relatively small, but the number of approvals is all with mitigating conditions, which you wouldn't have had otherwise. I mean, in the '60s developers just stuck things down as they wanted to. Now, you have controlled development. It's brought some problems, it's brought a complicated procedure. But in the long run, it's certainly worth it."

On Act 200 and planning:

"Of course there are a few problems with Act 200; when you pass a 90-page bill in one session like that, you're bound to have a lot of sticky points. But the thing I like most about it is the state-wide goals — they're going to be your framework.

"I never could see any reason why people had to be so paranoid about a land use plan, because all it needs to be is a general framework. For instance, if you say the Champlain Valley sections of Addison and Franklin County are suitable primarily for agricultural use, that's there and there's no argument about it. So you don't put a steel mill in the middle of it, and I don't see what's so complicated about that." ■

20 YEARS OF ACT 250: WHAT'S THE DIFFERENCE?

Quotes from the Field



◆ Public Participation

"If a person can demonstrate that their interests may be affected by a proposed development, they can be granted 'party status' which puts them on an equal footing with the state, the board of selectmen, and the developer. They may testify, present evidence, cross-examine witnesses and appeal a decision of the local commission to the Environmental Board. This kind of meaningful, individual participation in the decision-making process is central to Vermont's democratic tradition.

"The amount of power that Act 250 gives the average citizen is not without problems. For example, the fact that John Doe may be able to stop XYZ Corporation's \$2 million gravel pit because 85 trucks per day will rumble within 25 feet of his home makes a lot of people uncomfortable. They would prefer that Mr. Doe not have this kind of power. Perhaps it should make us all uncomfortable, because along with the gravel pit may go some good jobs. However, a solution to the conflict which says, 'Sorry, Mr. Doe, you don't count' should make us even more uncomfortable."

John Lippincott,
District 2 Environmental Commissioner

◆ **Energy Conservation:** "Act 250 has been the most cost effective energy savings program in this state. Since 1983, we have avoided adding about 21-22 megawatts of electric demand — the amount of electric demand of a city the size of Barre. A recent national survey showed that the level of insulation in residential construction in Vermont is the highest in the nation."

Dave Lamont, *VT Public Service Dept.*

◆ "While electric heat is the cheapest to install, it is not the cheapest to operate ... so it translates to an increase in cost for power for all ratepayers. We've been very successful in this state, through Act 250, in discouraging the use of electricity for space heating. The push now is to require energy-conserving lighting systems in commercial/industrial developments."

George Campbell,
Central VT Public Service Corporation

◆ **Economy:** "It's hard to prove, but I believe that Act 250 should get some credit for tempering speculation in real estate in Vermont so that we are not as subject to economic downturns. Act 250 has had a positive effect on the real estate market by weeding out the ill-conceived larger projects. Act 200 should extend this principle further — that good planning does result in a healthier real estate market."

John Ewing,
Vice President, Bank of Vermont

◆ **Fish and Wildlife:** "Act 250 has made Vermont a leader — light years ahead of most other states — by establishing a state-wide regulatory mechanism for protection of fish and wildlife resources. As opposed to following a zoo approach of saving the last one or two of a species, Act 250 is enabling Vermont to assure the state-wide survival of a healthy population."

Stephen Wright, *former Commissioner,*
Vermont Fish and Wildlife Dept.

◆ **Aesthetics:** "How a project looks, its design and how it fits into its surroundings has more effect on people — because it is so obvious — than most other aspects of a project. Through Act 250, major gains have been made through the conditioning of the appearance of development in this state."

Stephen Sease, *Planning Director,*
Vermont Agency of Natural Resources

◆ **Water Resources:** "Last year Vermont had 900 Act 250 permit applications and out of those 143 involved wetlands. Through the permit process we were able to get 103 of those projects out of the wetlands, and the remaining 40 were reduced to a minor impact. Act 250 protects water resources which have yet to gain protection under other statutes or regulations."

"The true strength of Act 250 is that it can consider a watershed nutrient control plan or the overall change in the hydrology of the watershed. A permit, on the other hand, generally is project specific."

Tom Willard,
Vermont Water Quality Division

Compiled by Peg Elmer and Jim Shallow.

Some people would prefer that John Doe not have this kind of power.

TAKING BACK OUR FORESTS

Protecting Economy and Tradition

Mollie Beattie

The forests of Vermont, long the remotest places in a remote state, have begun, over the last 25 years, to belong as well to the world market.



The big change in Vermont's forests over the last 25 years is that they aren't Vermont's forests anymore. For one thing, an unknown but very large percentage of Vermont's 4.5 million acres of woods is owned by people who don't live here or who haven't lived here very long. It's a good bet that lots of them are from places where privacy, trees, and green spaces are as rare as a taxicab in North Danville. They're from New Jersey where there are more people per square mile than any other state in the nation. They're from New York City, where the average life of a tree is seven years. They're from Chicago, where the fire department isn't much smaller than the Vermont State Government.

The value of woodland in Vermont is increasingly assessed from a perspective shaped by an urban experience with different standards of ruralness, wildness, and land and resource use. Where locals see a woodlot, the city-bred see trees as permanent

and precious. Ten acres of forests seems vast compared to the scale of the suburbs, but that much land can't support a single white-tailed deer. In a sense, then, Vermont's forests belong increasingly to the cities. How they are used seems to be less and less determined by local economies and traditions and more by what life is like and what things are worth in places far away.

The forests of Vermont, long the remotest places in a remote state, have begun, over the last 25 years, to belong as well to the world market. To Japan, where a bowling craze created a log shortage in the 1970s when most of our sugar maple went across the Pacific to build alleys. To western Europe, where furniture of the red oak that grows in Vermont is now stylish. To Canada, where a shortage of spruce and fir is sending Canadian procurement foresters southward and perhaps pushing Vermont's spruce-fir woods past a sustainable rate of harvest. To Taiwan, where boatloads of Vermont logs are

RICHARD W. BROWN

made into furniture and, amazingly, returned to the U.S. to undersell domestic products.

For Vermont, a much more damaging claim on our forests than that of world markets is from the midwestern utilities and the other sources of air pollution: acid deposition, heavy metals, and ozone. In the 1960s a significant decrease in the growth rate of trees occurred throughout the northeast; yet we still continue in our willingness to trade our forests' health for cheap power to fuel an overconsumptive standard of living.

In addition to what are probably direct effects of air pollution, our forests also seem to be increasingly susceptible to insects and disease. It is not hard to believe the theories of many who say that the forests, weakened by air pollution and perhaps pollution-related climatic change, are predisposed to severe attacks by pathogens. Why are the recent peaks in the populations of some insect pests so high and so synchronous? How can the large areas of die-back and decline be explained? Why are we noticing so many new pests? With the losses of the chestnut and the elm fresh in our memory, a new canker, a just-discovered caterpillar, and the now infamous flea-like thrips present chilling possibilities for the butternut, the hemlock and the sugar maple. Is it possible that air pollution is to blame for this hostile takeover?

Our forests are no longer ours for the same reason that our state isn't. Our persistent belief in what we think is "local control" has, until recently, left us unable to manage effectively most of our natural resources and many of our social needs. What we call "local control" is the "act locally" without the "think globally"; the "freedom" in Vermont's motto without the "unity." It is a form of wishful thinking, namely that we each can be concerned only about our own town and somehow, against all logic and evidence, thereby end up with an effective plan for our state.

The forests are a good demonstration of how that approach doesn't work for natural resources. The woods and the critters that live in them don't recognize political boundaries and besides, a single township is much too small for a sawmill's or a bear's

needs. As for restoring our forests' health, the remedies are not local but political — in the form of clean air legislation and fuel conservation — and collective — in our willpower as a nation to give up our dirty habits.

Taking our forest back will mean, first, that we stop wishing that things were as simple as they were 25 years ago. While we were not looking, the complexities we refuse to see — urban pressures and sensibilities, the world economy, air pollution, global warming — have taken over.

Second, we must use Vermont's new planning law, Act 200, to identify and protect timber values on enough good forest land in the right places to maintain a viable wood products industry. Through Act 200 we must, as a state, decide to set aside big spaces for deer and bear, and to allow in those spaces only those land uses which do not threaten their habitat.

And we must have sufficient space for us, too: woodland with real wildness, with a whole and uninterrupted experience of the natural world. We must speak up, through planning, for the landscape, the "sense of place" which was the underlying value in so much of the

testimony before the 1987 Governor's Commission on Vermont's Future. As important as the valley villages and farmland is their backdrop of ridges of visually unbroken forest. In our hilly, wooded state, it isn't technically hard or economically punishing to place development so that it is screened from the valley floors. The hard part, curiously enough, has been getting Vermonters to admit, through planning, that the character of their countryside is a dearly held value.

Because of the expanse of Vermont's forests, we must begin to address them with concern of equal scope. Because of their intricacy, we must begin to manage them by acting like an ecosystem ourselves which, after all, we are. To deal with our forests with any less vision and collaboration is to remain forever dispossessed of them. ■

Mollie Beattie is the Deputy Secretary of the Vermont Agency of Natural Resources and former Commissioner of Forests, Parks and Recreation.



Taking our forests back will mean, first, that we stop wishing that things were as simple as they were 25 years ago.

A TOUGH ROW TO HOE

Keeping Vermont Farms in Business

Kimberly Hagen

Vermont contains about a third of New England's remaining agricultural land. Yet right now the state imports over 87 percent of its food.



"The time has come for land use planners and conservationists to add farmland to the list of scarce natural resources."

Senator George Aiken addressing Congress in June 1973.



Driving the stretch of I-89 from Concord, N.H. to the Vermont border, with its alternating patches of dense woods and factory outlet center gives an indication of what Vermont could look like without farms. Open meadows and pastures criss-crossed by hedgerows give Vermont its visual character.

The farms are important, and not just because tourists appreciate them. Without them the state would lose its ability to expand or even maintain its food base. Vermont contains about a third of New England's remaining agricultural land. Yet, right now the state imports over 87 percent of its food, primarily from large western farms.

"The handwriting is on the wall for the West — for water and for energy," argued William Darrow in a 1980 *Vermont Environmental Report* interview when he was the state's Agricultural Commissioner. "It costs them so much to get the water up now to say nothing of the fact that they are going down so far that there is little water left. I would argue that

a state should save and protect enough farm land to feed its people."

In many ways, VNRC's battle to save the Gingie farm from the construction of Interstate 93 through their corner of Caledonia County symbolizes the uphill struggle to save Vermont's farmland. The battle, which began in 1980, was VNRC's most intensive effort to preserve a single piece of farmland. Despite the state's own admission in court that the highway could be built to cut a less destructive swath, the Council lost the fight. Although the Gingies are still farming, much of their acreage is either under asphalt or landlocked.

Trying to save farmland has become something akin to rolling a rock uphill. Prime agricultural land is also often prime property on which to build. Between 1967 and 1977, 22,000 acres of Vermont farmland were converted to urban construction, rural transportation and water uses. Since 1978, nearly 1,000 dairy farms have gone out of business.

"A thriving rural economic policy will be Vermont's first defense against sprawl and conversion of farm and forest land," argues VNRC Associate Director Ned Farquhar. In response to the economic pressures of land speculation threatening farmland, VNRC has begun to call for a state rural economic policy. "We are already working closely with other groups including farm advocates, and the

Vermont Economic Commission, to urge new state policies that will support agriculture, forestry and related manufacturing," Farquhar notes.

"Realistically, how long do we expect farmers can compete?" asks Amanda Legare, former Development Director at the Vermont Department of Agriculture. "Lots of farmers are getting knocks on their doors every day now, with offers for more money for their land. They are seeing all these people move in, building beautiful homes, and getting long vacations...What do we expect?"

Farm advocates argue that national policy also favors agri-business over family farms.

"Perhaps the most dramatic example of how devastating our national policy can be on our farms here in Vermont, is in the field of bio-technology," says Anthony Pollina, Director of Rural Vermont.

"Just take a look at this BST [the growth hormone bovine somatotropin]. First there is the cost of it, which of course will be greater to the small farmer. Second, because it will bring about greater production of milk, it will drive the price down even further. And third, it requires more management as the cows must be monitored closely." Adds Pollina, "Small farmers are already pretty well stretched to the limit on manpower, so the overall net gain for the small farmer is pretty insignificant. But it will be

profitable at the large-scale level."

State government has tried to come in where the federal programs leave off, but is limited both financially and politically. And despite the creation of its own dairy subsidy, on top of the federal one, and tax reduction programs, as well as a Housing and Conservation Trust Fund that contributes to farmland preservation, the loss of farms and farmland in Vermont continues at a pace many find disturbing.

"I'm in favor of subsidies," notes Legare, "but these are all expensive bureaucratic programs. I'd rather see it come straight to farmers' paychecks. Let's pay them for their product — a fair price."

Mark Schroeder, farmer and VNRC Agriculture Task Force Chair notes, "We need to get farm incomes up, otherwise there's no incentive for young or new folks to get into it. We'll see our farms converted to — whatever, and it won't take long. That's why the state, if it wants to keep its farms, is going to have to make that decision, and be willing to pay for it." Says Schroeder, "One of the only ways to save land is to improve comprehensive planning. Unfortunately, some people still think planning is a dirty word. But it's really a big part of the answer." •

Kimberly Hagen is a freelance writer living in Middlesex.

"TOO CHEAP TO METER" And Other Energy Stories

Leigh Seddon



Twenty-five years ago, Vermonters owned more cows than cars. Vermont was an agricultural state, but one in a state of rapid transition. Beginning in 1964, Vermont's annual net population growth tripled, bringing with it land speculation and uncontrolled development. Energy consumption was rising even faster than the burgeoning population, with demand for electricity increasing a phenomenal 10% a year.

This was the era of the all-electric "Gold Medalion" home. Touting this "house of the future," utility executives promised that with the construction of new nuclear plants such as Vermont Yankee, electricity would soon be "too cheap to meter." By 1970, Vermont was using two and a half times as much electricity as it was in 1960.

The 60's was also the era of the federally subsidized interstate highways that opened up Vermont to southern New England. Our tax dollars were at

By 1970, Vermont was using two and a half times as much electricity as it was in 1960.

Energy has become a public policy issue, not merely an engineering problem.

work, building roads that devoured our best farmland, increased land development, and squandered our finite petroleum resources at a prodigious rate. Some Vermonters worried aloud about our decaying railroads and state highway system, but with an expanding economy and falling energy prices no one was listening.

By 1970, many Vermonters were worrying, but not about energy. We had lost half our dairy farms in the last ten years and our land and water resources were suffering at the hand of development. The immediate solution was Act 250. Fortunately, the legislators and planners who drafted the Act had the foresight to include a short provision about energy. Development shall "incorporate the best available technology for efficient use and recovery of energy," it read. These simple words would become the most important energy policy the State ever issued.

In 1973, energy finally became an issue — it became a crisis. The Arab oil embargo tripled petroleum prices overnight. Vermonters were startled to realize that petroleum products supplied 70% of our energy and that we were at the very end of the oil pipeline, with only enough petroleum storage to last a few weeks. In the next two years, Vermont households reduced energy use by nearly ten percent and District Environmental Commissions began to explore what "best available technology" really meant.

In 1974, the fifty-five mph speed limit, right on red, and funding for van pooling were adopted by the Legislature. Based on U.S. Department of Energy estimates, the 55 mph limit alone saved Vermonters \$20 million the first year. By 1979 there were 70 van pools operating in the state, saving close to \$500,000 per year.

As utilities geared up to build more nuclear plants, Vermonters showed the foresight to discuss the economic and environmental consequences first. The result was a vote by 41 communities during 1977 town meeting to ban nuclear facilities or transportation of radioactive materials within their borders. The Legislature followed up with bills requiring legislative approval before any new nuclear facility or waste site could be built.

In 1978, reeling from another oil embargo, the Legislature approved a 25% tax credit to supplement the recently enacted 40% federal tax credit for installations of solar energy equipment. The result was a blossoming solar industry that proved we could cut our household energy bills in half, even in cloudy Vermont, by utilizing simple passive and active solar systems.

The following year, the Residential Conservation Corporation (RCC) was established to assist homeowners with energy audits and retrofits. During the

next four years, the RCC completed over 18,000 energy audits, resulting in energy savings of nearly \$7 million a year.

This steady progress toward a sane, secure, and sustainable energy future suffered a profound setback during the Reagan Years. By 1987, federal funding for conservation and renewable energy research had been cut by 75%, the conservation and solar energy tax credits had been eliminated, the RCC had been dismantled, and auto fuel efficiency standards were on hold. In their stead, subsidies for the oil, coal, and nuclear industries were increased, along with the speed limit. Being penny wise and pound foolish, the Vermont legislature endorsed these federal actions.

Despite the complacency that low energy prices brought, the 1980's did teach us about the environmental consequences of our energy use. As acid rain from coal plants was linked with the tragic decline of mountain vegetation and lakes, radioactive waste piled up at Vermont Yankee, and we began to feel the heat of global warming, Vermonters began to realize that energy choices touched every aspect of their lives. Energy was a public policy issue, not merely an engineering problem.

In 1987, VNRC, VPIRG, the Conservation Law Foundation and a number of other environmental groups published *Power to Spare*, a report on the energy efficiency potential for New England. The report's findings quantified what conservationists had been advocating for the last decade — Vermont and the other New England states could be using 30% less electricity if cost-effective investments in energy efficiency were made. The billions of dollars saved would be directly reflected in a healthier economy and environment. Six months later, the Vermont Public Service Board opened its investigation into energy efficiency and least-cost energy planning.

Today, Vermont is at a crossroads as it plans for its energy future. The wisdom and need for massive new supply projects such as the proposed natural gas pipeline and Hydro-Quebec are being debated before the Public Service Board. Should Vermont spend billions on these new sources or invest billions in energy efficiency and in-state renewable energy resources instead? Unfortunately we are not in a position to answer that question without a well-articulated energy plan for both Vermont and the New England region. That will be the story of the next twenty-five years. ■

Leigh Seddon is the president of Solar Works of Vermont in Montpelier and chairs VNRC's Energy Committee.

TAKING A STAND ON WILDLIFE

Will Curtis



When we were dairy farmers in Vermont, we had little time left for anything but the tilling of the soil and the caring for our Jersey herd. But while mowing the field, there was the quick raising of the cutter bar to avoid a tiny fawn. There were many crisscrossing tracks of the animals and birds in the snow as we gathered our sap in our sugarbush.

When a road was being plowed to our sugarbush, a fox moved her entire family to another den, alarmed by the sound of our tractor. We learned that foxes usually have another den to use in an emergency. In April as we cleaned our buckets, there was the wonder of the blossoming buds all around us. And before we knew it our sugarbush had changed from its deep cover of snow to greenness and bird songs and nests.

Nature is filled with such questions. What is it? Why is it? What is it doing? And where did it come from? One could study for years an inch of topsoil.

A lot of the answers are in books and so our library grew. But our 165 acres were the best school I could have attended. And as I understand more, I seem to know less.

Before Vermont was settled, the land supported a wealth of wildlife. Elk, bear, muskrat, wolves, salmon, passenger pigeons, moose, were to be seen in numbers and the panther or catamount was a frequenter of the forest. Trout weighing 25 pounds were hauled from our streams, and during salmon

runs in the spring the fish were speared with pitchforks and thrown onto the banks.

When the settlers arrived everything seemed to be hunted with a vengeance, and by the early 1800's there was little wildlife left. Slowly, the turn-about came when the first state game act became law in 1779. The Vermont Fish and Wildlife Department in later years worked hard to reintroduce native species. In addition, private groups



have secured a place for the peregrine falcon, the bluebird and other species.

The return of animals is exciting indeed. But there is a shadow cast over their future. Vermont's human population was fairly stable before 1900, growing to about 379,000 by 1960. Suddenly its

numbers swelled to some 550,000 by 1987. Comparable to killing off game with guns and traps, housing developments are obliterating the deer yard, the nesting areas, and the wetlands.

Surely we have learned that our land cannot take on all uses. If that is so, then we can plan and find ways to live with our precious wildlife for us and future generations to enjoy. ●

The return of animals is exciting indeed. But there is a shadow cast over their future.

RETURN OF THE NATIVE

Warner Shedd



Significant changes have taken place in Vermont's wildlife scene since the Vermont Natural Resources Council was founded in 1963. Perhaps a good starting point is with one of the most important and far-reaching changes — the gradual desanctification

of Vermont's very own Sacred Cow, the female white-tailed deer.

The Vermont General Assembly, which had full control over deer management, had long since sworn a solemn oath that only antlered bucks could be hunted. By the early 1960s, this practice had

Habitat destruction and human encroachment continue to take their toll on Vermont wildlife.

built an enormous overpopulation of deer. However, both the public and the legislature were largely deaf to the warnings of professional wildlife biologists.

Disaster approached as the weight, reproduction, and antler development of deer all dropped to abysmal levels, clear indication of the terrible malnutrition which the deer suffered each winter.

When the legislature, after essaying a couple of "doe seasons" (actually antlerless deer seasons), finally gave the Fish and Game Department very limited deer management powers, it was too late. The antlerless seasons coincided with a resounding crash in the deer population, and the Fish and Game Department was blamed. The legislature responded by taking back deer management authority, and a rigid "bucks only" law was reimposed.

Although the annual buck kill rose at first, in 1979, after seven consecutive years without antlerless deer seasons, the annual buck kill dropped to a 27-year low.

In the face of public demand, the legislature then allowed the Fish and Game Department to initiate a series of carefully regulated antlerless deer seasons. The results, in terms of the health of the deer and the condition of the winter range, have been spectacular; weight, reproduction, and antler development have all returned to normal.

Another trend of particular note is the return of native wildlife species. The fisher is a fine example. Nearly extinct in Vermont, this medium-sized, fairly



arboreal member of the weasel family is the only major natural predator of porcupines. In its absence, the porky population soared and caused much damage to forests.

Then, about 25 years ago, a number of fishers were live-trapped in other states and released in Vermont. The fishers spread throughout most of the state, and the porcupine population was gradually brought down to normal levels. The only trouble was that the fisher became highly controversial. Some hunters blamed it for every shortage of game; homeowners blamed it for the loss of



cats and dogs. "Letters to the Editor" warned of the danger of fisher attacks on small children, and one person even phoned the Fish and Game Department to say that he had seen a fisher sling a heifer over its shoulder and leap a fence — a truly remarkable achievement for an animal which averages about ten pounds in weight!

The savior of the fisher's reputation turned out to be, of all things, the coyote. As these newcomers gradually established themselves in Vermont, they, in turn, became the object of much mass hysteria, and the fisher was largely forgotten. Opinions on the coyote were, and to some extent still are, divided, running the gamut from wanting to kill none of the coyotes all the time through wanting to kill all of the coyotes all of the time — preferably with tactical nuclear weapons! One legislator testified that due to coyotes there was not a single deer left alive in his town, and that if he had a flat tire at night he would not dare get out of his car to change it.

Gradually, though, most people have come to see the coyote as an interesting animal which is neither saint nor villain. In any case, views on the wily coyote's future in Vermont are largely academic, since the animal is clearly here to stay.



The wild turkey's return has been a stellar example of successful wildlife management. Eradicated in Vermont and throughout much of its historic range by habitat destruction and uncontrolled market

hunting, the wild turkey was the subject of numerous releases of pen-raised wild stock; these releases were uniformly unsuccessful. Then live-trapped, fully wild birds were released, a technique which proved highly successful.

"Although some species are having difficulties, birds in general are doing better in Vermont than in many states," notes Sally Laughlin, Executive Director of the Vermont Institute of Natural Science. "Audubon's 'Bluebird Across Vermont' project has increased the bluebird population, peregrine falcons are again breeding in Vermont, and we are seeing more ospreys." Laughlin also cites the thousands of hours put in by volunteers on the *Breeding Bird Atlas* as a sign of the growing interest in wildlife in Vermont.

Efforts to restore yet another native, the Atlantic Salmon, may also see success. With their spawning runs completely blocked by dams, salmon and shad were eliminated from the Connecticut River and its tributaries nearly 200 years ago. However, encour-

aged by successful salmon and shad restoration in Maine, joint federal and state Fish and Wildlife efforts include the installation of many fish ladders and elevators, a salmon hatchery at Bethel, Vermont, and the stocking of many young salmon.

Habitat destruction and human encroachment continue to take their toll on Vermont wildlife. Of particular concern is the future of the black bear in Vermont. Recent research indicates strongly that Vermont's breeding habitat for bear is far more restricted and the bears' habitat requirements — including isolation from human activity — are far more complex and exacting than previously realized.

Meanwhile, increased human activity on and around lakes has reduced the nesting success of Vermont's beloved loon. Acid rain is also probably having an adverse effect on the loon's food supplies, and an overpopulation of raccoons destroys many nests.

Ben Day, Chief of Wildlife Management for the Vermont Department of Fish and Wildlife, is also deeply concerned about many of the smaller forest birds, such as warblers. "We know

populations of these birds are down," says Day, "and it may be due to a combination of destruction of tropical rain forests, pesticide use, and urbanization.



This broad range of species comprises a key indicator, and I think its decline is very significant."

Stephen Wright, former Commissioner of Fish and Wildlife, sees hopeful signs, however. "I'm pleased that we are now, for the first time, acknowledging the importance of habitat and the significance of the overall ecological picture."

Wright's words serve as a clarion call for the greatest future wildlife battle — the fight to save vital habitat from destruction. ■

Will Curtis of Hartland is an author and naturalist, and commentator on National Public Radio's "The Nature of Things."

E. Warner Shedd, wildlife writer and educator, is the former National Wildlife Federation New England Regional Representative. He lives in Calais.



PHOTOS BY RICHARD W. BROWN

THE DAY OF THE DUMP IS PAST Vermonters Come to Grips With Their Trash

Ben Rose



Twenty-five years ago, there were fewer than 420,000 Vermonters, and lots of garbage was fed to pigs. Less than two percent of the waste stream was plastic. There was no bottle bill. Saturday morning at the dump was a tradition. The term "litterbug" had not been coined. Neither had "leachate." Those were the days.

Already, though, the bliss of ignorance was com-

ing to an end. Rachel Carson's *Silent Spring* had recently captured national attention, and Madison Avenue's images of "Better Living Through Chemistry" were targets of rebellion for an emerging youth culture. In rural Vermont, two hundred quaint dumps were breeding rats and flies, and sometimes caught on fire.

Since then, we have begun to come to grips with our trash, but the process has been slow and notice-

We have just begun to pay the price for decades of disposability.

ably repetitive: In September 1970 a Task Force on Solid Waste Management presented findings to Governor Deane Davis. Act 252, passed in 1971, touted recycling as "a positive goal in managing Vermont's solid waste needs" and directed the Secretary of Environmental Conservation to "develop a state plan for the establishment and operation of solid waste recycling throughout the state." A consultant's study was presented in 1973. Vermont became the second state in the nation to pass a bottle bill in 1973; but cardboard, newspaper, and other items not covered by the deposit kept right on going to the dumps.

Meanwhile, in Washington D.C., Congress was hearing increasingly alarming testimony about the impacts of poor disposal practices, and in 1976 passed the Resources Conservation and Recovery Act (RCRA), laying a cornerstone for hazardous waste management. In 1978 Vermont adopted solid waste regulations based on EPA's new RCRA regulations, and in 1979 the Agency of Environmental Conservation published a federally funded "Interim Solid Waste Management and Resource Recovery Plan."

In 1980 Ronald Reagan arrived, and the EPA's resources for solid waste management virtually disappeared for eight years. The most significant solid waste management initiative in Vermont during the first half of the 1980s was the planning done in Rutland County leading to construction of the Vicom incinerator.

Now, at the end of the 1980's we have begun — just begun — to pay the price for decades of disposability. With the passage of Act 78, Vermont's 1987 solid waste law, we are back at the beginning — attempting to implement a new set of planning priorities as we develop a new generation of solid waste facilities.

Professional associations predict that waste management will be the second largest municipal expense category (education is the first) by the year 2000. As one solid waste planner recently remarked, "It took us at least thirty years to create this mess — and it will take at least ten years to turn it around."

That may be optimistic. Vermont is a few years behind metropolitan areas in experiencing the solid waste "crisis." At least in the northern half of the state, we have not yet officially "run out" of landfill space. But Act 78 requires that all large unlined landfills in the state must be closed by 1992, thereby guaranteeing that the crisis will occur, on schedule.

Vermont is 80% wooded; the prospect of burying ourselves in trash is unlikely. The issue, in fact, is not burying, but poisoning. Drinking water is all too easily tainted by substances such as batteries, disposable diapers, solvents and used motor oil. Of the truly toxic materials in our waste stream, the majority are associated with automobiles, lawn and garden upkeep, home improvements, and/or household cleanliness. The root of the problem goes deeper than most of us care to admit, and it cannot be defined exclusively by and for engineers. We are a society of waste generators unwilling to live near our wastes, unwilling to accept that there may be no "good place" to get rid of our own refuse. This brings us to the heart of the matter: what kinds of facilities do we really need, and where shall we put them?

The Japanese, of course, have much more experience in this sort of thing, because they reached the crisis point sooner. Japan now generates half as much waste per person as the USA, and recycles twice as much. After seven or more different categories of materials are sorted for recycling, Japan's remaining residuals are incinerated. Only a handful of America's 100+ incinerators — arguably including both the facilities at Rutland and Claremont, N.H. — come close to meeting Japanese emission standards.

The catch-phrase among solid waste experts these days is "Integrated Waste Management" — reduce and re-use and recycle and incinerate and site new landfills. Nothing less, warn the experts, will be sustainable for the long haul.

Taken as a package, this approach contains at least one component to rankle virtually everybody. Waste-to-energy proponents tend to dismiss calls for re-examination of lifestyles. Recyclers, on the other hand, resist the notion that large high-tech facilities will be necessary even after reduction and recycling are fully implemented. But an environmentally and economically sound and sustainable solid waste management strategy probably lies somewhere in between, in the swampy politics of compromise. In the past twenty-five years, our society has become conscious — and justifiably afraid — of our own trash. For solid waste managers, the next twenty-five years will be harder than the last. ●

Ben Rose is the Manager of the Central Vermont Solid Waste Management District.



Our society has become conscious — and justifiably afraid — of our own trash.

THE WATERSHED YEARS

Protecting Vermont's Clean Water Investment

Eric Palola



The story of the last 25 years of Vermont's water resources would open alarmingly, with a close-up of waterways slowly choking from the by-products of the industrial revolution. By the early 1960's many of our lowland rivers were putrid avenues of raw sewage, sawmill tailings, animal renderings and garbage, slowed by remnant dams that had powered Vermont's early mills.

In 1959 Vermont had proclaimed that "the water resources of the state shall be protected, regulated and, where necessary, controlled under the authority of the state in the public interest." This policy was extended in 1964 to emphasize *improvement of existing water quality*. But by the late 1960's, Vermont's original water classification system had become unwieldy and ineffective.

It was during the heady years just prior to Earth Day in 1970 that

Governor Deane Davis cemented Vermont's environmental reputation. With support from legislators like Arthur Gibb and Royal Cutts, Davis ushered in key programs in land use — Act 250 — and water pollution control — Act 252.

"With the 1969 passage of Act 252, Vermont became the first state to establish a permitting program for discharges," says Tex LaBosa, Chief of Operations at the Department of Environmental Conservation. "The new policy was that nobody has a right to either an existing or new discharge."

Act 252, which also made broad administrative changes among three state agencies, vastly im-

proved pollution monitoring. Now, although the classification system remained an important part of overall watershed management, individual permits controlled *each* discharge. Private developers were not the only polluters reined in; municipalities, some of which were straight-piping sewage into waterways, were also brought under the bill with flexible compliance schedules.

Following passage of Act 252, Davis went before the Water Resources Board in 1970 to win his now well-known upland streams protection policy. Davis-initiated regulations would now protect all streams above 1,500 feet in elevation from new discharges. Recalls Davis, "If we were struggling to clean up lower streams and rivers, what sense did it make to allow new pollution in upland areas?" As one of the first states to link into the federal Clean Water Act discharge program, Vermont invested some \$63 million in state and local

funds with another \$172 million in federal assistance, and the state was well on its way to achieving the Act's "fishable and swimmable" goal by 1985.

Davis's position on upland streams proved to be one of the early and eloquent statements on pollution *prevention* as public policy — a concept that has recently re-emerged as a federal EPA priority.

But the Davis concept was to come under incremental attack. In 1984, the Water Resources Board relaxed the rules and redefined pristine streams as all those over 2,500 feet. Meanwhile, a vague area of Vermont water rules created the assumption that given enough land, most "on-site" sewage systems,

In water protection, private advocacy groups have pointed out public contradictions.



such as septic or spray irrigation systems, were either so small or infrequently used that they had little impact on nearby streams or groundwater. Thus, the rules allowed for new development to sidestep limits on effluent, as well as the publicly scrutinized, potentially explosive stream reclassification process required for new sewage discharges.

This program was fair for most household-sized systems. Predictably, however, large on-site sewage disposal increased dramatically, especially in moun-

tain resort areas. The hard-won Davis upland stream rule was steadily whittled away as new land based sewage systems, several operating in volumes of a quarter-million gallons per day and larger, added "indirect discharges" to once-pristine streams. The increasing ambiguity over headwater streams policy prompted three landmark cases before the Water Resources Board. Two of the cases,

Ranch Brook and Little River, began in the Stowe area. In each, a local conservation group and VNRC successfully argued that development proposals to relax stream standards violated "anti-degradation" policies of state and federal law.

"These cases were great examples of private advocacy groups pointing out public contradictions," says Don Hooper, former VNRC Operations Director. Darby Bradley, Vermont Land Trust Counsel and former VNRC staff attorney, notes that these cases "pushed the state to rethink the classification and river basin planning program in the context of new competing uses," helping reform a system that had simply inventoried uses and impacts.

A third case before the Board in 1985 set the stage for legislative scrutiny. The Sunrise Group (a luxury second home project) and the Killington ski area proposed to spray sewage effluent at several steep-sloped, high elevation sites. VNRC again prevailed before the Water Resources Board, as well as in a companion case with the Natural Resources Defense Council and Connecticut River Watershed Council in federal court; both decisions determined that these sites needed federal discharge permits due to probable in-stream impacts.

The Sunrise and Killington cases launched a lively 1986 legislative debate over upland stream policy, technological reliability, resort expansion plans, and, ultimately, the terms under which large-scale indirect discharges would have unprecedented access to

Class B waters. Environmentalists implored Governor Kunin to reinstate the Davis upland stream principle; meanwhile, the ski and real estate industries promised unfailing engineering and threatened, if thwarted, economic stagnation. The legislature became a carnival of high-priced lobbyists stirred in part by media attention, incendiary cartoons and bumper stickers ("Killington: Where the Affluent Meet the Effluent").

Class B waters, comprising some 90% of the state's waters, had previously been off-limits to major sewage discharges. Act 99, the law that was passed in 1986, changed this, calling for new discharge standards on systems handling over 6,500 gallons/day of treated sewage into Class B waters. The Water Resources Board was instructed to adopt standards to ensure that discharges create "no significant alteration" in aquatic life — a standard actually proposed by ski industry representatives confident of new wastewater technologies. The law also included a partial prohibition on discharges above 2,500 feet to protect Vermont's pristine streams. After lengthy wrangling over rules, it is still uncertain whether the law will have its desired effect in controlling large indirect sewage discharges.

While Vermont water battles have raged most fiercely, due to real estate stakes, over discharge and permitting issues, Vermont has also overhauled its policies in other important water resource areas — often with more far-reaching results.

"Vermont has been a leader in non-point source pollution control with the research done by UVM on the La Platte and St. Albans watersheds," says David Pierra, EPA New England Water Resources Director. Pierra notes that more recently, Vermont was the first state to get approval in a new nationwide non-point source program.

Between 1985 and 1988, water protection was a focal point of lobbying for VNRC. During these years, lawmakers passed critical bills addressing groundwater, underground storage tanks, wetlands, rivers protection, reclassification, and more. V.E.R. readers are familiar with the rule-making that is still ongoing, to implement these laws.

A 1986 UVM survey showed that Vermonters were evenly split in their opinion of whether the state's waters are getting cleaner or dirtier. Acid rain, toxic waste, indiscriminate sludge and garbage disposal, new development and the high cost of treatment facilities all threaten Vermont waters. If the past is any indication, VNRC must be prepared to move decisively in defense of water quality; Vermont's treasured water resources deserve no less 25 years from now. ●

Eric Palola was VNRC's Associate Director and lobbyist from 1984-1988.



The ski and real estate industries promised unfailing engineering and threatened, if thwarted, economic stagnation.

OUR NEIGHBORS, OUR HABITS

Tracing the Sources of Air Pollution

Richard Poirot



"The union of Vermont with the United States — may it flourish like our pines and continue unshaken as our mountains."

Toast in celebration of Vermont's admission to the Union, Rutland, 1791

The optimistic outlook of 200 years ago is difficult to sustain today, when our white pines stand threatened by ozone pollution, our high mountain lakes and forests appear badly shaken by decades of acid deposition, and we must continually take the United States to court to seek even minimal enforcement of the federal Clean Air Act.

But before we give up on our atmospheric future, we should note that humankind has been polluting the atmosphere for thousands of years, while serious efforts to control this pollution were only initiated a few decades ago.

Interestingly, at the time that VNRC was founded, there was little concern evidenced within the organization or Vermont about air quality. Yet in many ways, Vermont's air quality in 1963 was as bad as or worse than it is today. Thick, black and sometimes highly sulfurous plumes emanated uncontrolled from industrial and utility boilers. Open-burning dumps were common occurrences. Smaller numbers of cars and trucks emitted pollutants like carbon monoxide, nitrogen oxides (NOx), and hydrocarbons, but at much higher per car rates. All gasoline contained lead, and the resultant atmospheric concentrations of this toxic pollutant were an order of magnitude higher than today's levels.

National emissions of sulfur dioxide (SO₂ — the major contributor to acid rain and sulfate haze) were about 24 million tons in 1963, well below the 32 million tons emitted in 1970, but not much different from today's (intolerable) 23 million ton level. Our summer skies were about as unpleasantly hazy (from sulfate pollution) as they are today. Haystack Pond in Wilmington was probably already critically acidified by acid rain. Chlorofluorocarbons (CFCs) were being emitted to the atmosphere at ever-increasing rates, and global emissions and concentrations of carbon dioxide (CO₂) and other greenhouse gases had been on the rise for a century or more.

There were several reasons for our failure to perceive a problem 25 years ago. Measurements of pollutant concentrations or associated effects were sparse and of questionable quality. Global warming and ozone depletion were only "theoretical problems" unconfirmed by monitoring data. Routine measurements of traditional air pollutants like SO₂, carbon monoxide, particulate matter and ozone were nonexistent in Vermont and, on a national scale, were limited to urban and/or industrial areas. We were unaware that pollution could travel hundreds of miles from its point of origin, and that concentrations of pollutants were frequently higher in downwind rural areas than in urban centers. Severe localized pollution episodes, resulting in acute morbidity and mortality, had recently occurred in locations like London and New York City.

But perhaps these urban disasters only helped confirm our misconception that air pollution was just a problem in big cities, and no problem at all in little old Vermont.

Largely in response to these early urban episodes, Congress passed the first federal Air Pollution Control Act in 1955. But it wasn't until the Clean Air Act Amendments of 1970 that we saw the first truly effective national pollution control legislation.

The first serious efforts to improve Vermont's air quality date from about this same time, as our Air Pollution Control Program (formed in 1968), with the strong support of VNRC and other members of the newly formed (1970) Vermont Air Coalition, prohibited open burning at dumps, limited the sulfur content of fuel, and reduced particulate emissions from stacks. A state-wide monitoring network



Each of us makes choices regarding which car (if any) to buy, how often we share rides, how far we drive....

and a new source review and permitting program were established. Federally enforceable state plans were developed to assure attainment and maintenance of air quality standards and (following the 1977 Clean Air Act Amendments) to prevent deterioration of air quality in clean areas and to protect visibility.

Over time, the large individual pollution sources in Vermont have generally become well controlled, and today Vermont emits the smallest quantities of SO₂, nitrogen oxides and volatile organic compounds of any state. Vermont is, however, frequently downwind of major emitting regions in the Midwest, East Coast and southern Canada. Transported pollutants like acid rain and ozone are among the most serious current air quality problems in Vermont. As Congress now debates Clean Air Act revisions, the continued vocal support of VNRC members will be crucial to ensuring strong legislation.

Meanwhile, back home, we need to ensure that our own contributions to these air quality problems are minimal. In-state emissions of acid rain and

ozone precursors are small, but they are not insignificant. Cars and trucks are the largest contributors to acid rain, carbon monoxide and toxic air pollutants in the state, and are Vermont's major source of the CO₂ and CFC emissions that contribute to global warming and stratospheric ozone depletion.

Unquestionably, we must demand cleaner, more efficient products from Detroit. At the same time, each of us makes choices regarding which car (if any) to buy, how often we share rides, how far we drive, and how well we keep the engine and pollution control equipment maintained. A major challenge for VNRC over the next twenty-five years, as it continues its efforts to seek pollution reductions from the bad guys in Detroit and in the Ohio River Valley, is to continually remind ourselves about the other bad guys — the ones whose actions we can control — the ones we see each morning in the mirror. ♦

Richard Poirot is Air Quality Planner for the Air Pollution Control Division of the Vermont Agency of Natural Resources.

STRENGTH IN DIVERSITY In Environmental Education, Cooperation Is Key

Tom Hudspeth

There is close cooperation in Vermont among individuals and groups, each having its own niche.



Vermont's environmental education scene is thriving. Consider this sampling of current activities:

- ♦ Training programs to give teachers, parents and community volunteers tools to explore the environment with students.
- ♦ Resource guides that tell teachers how to implement a school recycling program, how to set up and run a school gardening program, and how to investigate energy generation in the community.
- ♦ A network of citizens, including high school students, which collects and analyzes water samples to use in river protection efforts.
- ♦ A museum of wooden hand-carved Vermont-nesting birds. Another with artifacts from all over the northeast and an active meteorology center and

planetarium. Another that encourages student and scout educational "camp-ins" among its science exhibits.

- ♦ A nature center widely recognized for its work with birds of prey. Another that is known state-wide for its educational "nature theater" activities in their forest and field environment.

- ♦ Week-long residential programs for school children and summer campers on environmental education themes.

- ♦ Environmental storytellers, musicians and interpreters.

- ♦ And more.

You would have witnessed virtually none of these environmental education efforts in 1963. In fact, the term environmental education — or "EE," as it

is abbreviated by educators — was not even coined until the late '60s. However, the pre-cursors of EE — nature study, outdoor education, and conservation education — did exist in Vermont in 1963.

VNRC played a key role in EE in its early years, listing education among its top objectives. In 1971 it launched its Environmental Planning and Information Center (EPIC) to inform citizens of the importance of Act 250 land use regulations. And in 1973, VNRC received a grant from the U.S. Office of Education to inventory existing EE resources, hold an EE conference, and lay the foundation for a Vermont EE plan.

The first and only Governor's Conference which focused on EE was held at this time; the UVM Environmental Program produced a series of thirteen hour-long television programs; and in response to the Arab oil embargo, energy education materials were developed on many fronts.

Prior to 1973 each organization had developed its own EE programs independently, often with considerable overlap and duplication. However, "Working together to inform and educate about the environment" best describes the EE efforts which have evolved in Vermont since 1973.

Environmental educators have found strength in their diversity and there is now close cooperation in Vermont among individuals and groups, each having its own niche. There is a blending of public and private efforts. There has also been a slow but gradual expansion of professional staff involved in EE within most of the organizations and agencies. Hard work and dedication by the individuals involved — professionals and volunteers — have helped stretch limited budgets and staffs.

These EE efforts include activities for youths as well as adults. They involve both the public and private sectors. And they encompass both the formal educational sector — schools, day care centers, colleges and universities — and non-formal sector — citizen groups, youth groups, museums, nature centers, farms, parks, and more.

Most environmental educators in Vermont view EE as a methodology, an approach to integrate environmental concerns into all subject areas. Few schools have full-fledged EE programs of their own. Teachers often take advantage of the many school programs offered by nearby outdoor centers. They also access supplementary curricula materials and activities such as *Project Learning Tree*, *Project WILD*, *Hands-On Nature*, and *Project Seasons* (described in depth in the Spring, 1987 issue of the *V.E.R.*).

This is not to imply that all EE efforts in Vermont have prospered over the past quarter century. Several education centers have come and gone across the state, and a number of workshops and programs



have fallen to economic pressures. However, Vermont's environmental education network continues stronger than ever. Much of the cooperation and coordination of efforts can be attributed to Vermont State-Wide Environmental Education Programs (SWEEP), which brings EE practitioners together twice a year for informal networking sessions. Recently, SWEEP has begun to offer an annual conference for teachers and citizens, publish a newsletter, and offer an annual catalog of members' programs.

With a strong, active core, Vermont's educators can be more effective than ever in the years to come. Among the challenges:

- ◆ In addition to raising ecological awareness, we must empower students and citizens to *take action* on behalf of the environment.

- ◆ We should shorten the lag time in developing activities on emerging environmental issues (for example, tropical deforestation, global warming, and connections between defense and the environment.)

- ◆ Environmental education efforts should be linked with Vermont's critical land use management efforts. (An Act 200 education task force spearheaded by the Vermont Department of Forests, Parks and Recreation is seeking to address this matter.)

- ◆ We must stress the connections between local and global environmental issues.

- ◆ SWEEP should include representation from business, the media, religious groups, and others.

- ◆ We must create a current, updated environmental education plan for Vermont: a blueprint for action, a plan to take us into the 21st century. ●

Tom Hudspeth is Chair of the Natural Resource Planning Graduate Program and Associate Professor of Environmental Studies at the University of Vermont.

Most view environmental education as an approach to integrate environmental concerns into all subject areas.

EVERYBODY TALKS ABOUT IT...

A Look at 25 Years of Vermont's Weather

Mark Breen

An
unspeakable
pride radiates
from one
whose
thermometer
has plunged to
the nethermost
reaches of
thermo-
meterdom.



"Why, I remember back ... now *that* was some kinda storm!" There is nothing so telling of the New England character as our conversation regarding the region's most laudable commodity — the weather. An unspeakable pride radiates from one whose thermometer has plunged to the nethermost reaches of thermometerdom. Awe is inspired by ever-growing mountains of discarded snow. Past summers' heat have fueled the battle for the hottest "hotspots." And inevitably, the comparisons of other years and other storms drift into the conversation like the aroma of a traditional holiday feast.

Although 1963 was the year VNRC was founded, as that new year dawned no notions of environmental issues such as acid rain or global warming were troubling most folks in the Green Mountains. No, the problem was much more immediate than

that: "Where do I put the snow?!" Cold and with few thaws, the winter of 1963 gave some towns their deepest snowcover on modern record, including Woodstock, Vermont with 73" of snow on the ground on March 13th. Also in 1963, the northeastern U.S. was in the midst of a long-term drought. Vermont's usual winter and spring storms were largely absent from 1961 up until 1966, when soaking fall rains finally signalled a return to more normal conditions.

Then it happened! A series of winters would change an entire generation's perception of winter for years to come. The four winters of 1968-69 through 1971-72 were, *by far*, the snowiest on record. One storm perhaps epitomized these winters, that of December 26-29, 1969. Burlington measured 29.8" for its largest snowfall on record, as well as the deepest snowcover. Amounts were even

greater to the north and east. In the Connecticut Valley, ten to twenty inches of snow was followed by ice, coating trees and powerlines beyond their capacity. The result was a long clean-up, forcing the Governor to declare a state of emergency.

The winter of 1970-71 came down hard and deep, with the snowiest winter of the century. Montpelier had 70" on the ground just after Town Meeting Day, and Readsboro reported 70" on the ground on the 24th of March. In Waitsfield, snowfall over the whole season added up to 198", while on top of Mt. Mansfield observers recorded 26 feet!

Of course a discussion of the last twenty-five years would not be complete without a look back at the gentler (?) season — summer.

Though brief, the intense heat of August 2nd, 1975 earned it the name Hot Saturday; in Corwall, a 100-degree reading was the first in Vermont since 1856, and the only one since then.

Although not noted for extremes of temperature, the summer of 1979 brought day after day of heat. Except for three days, Burlington's high temperature exceeded 80 degrees from July 8th through August 5th.

But the heat of the summer of 1988 continues to simmer as perhaps the most exceptional summer weather in the past twenty-five years. Day after day in July and August found temperatures topping 90 degrees; in St. Johnsbury, the twenty-three days of 90-degree weather tied a 1944 record. To accentuate the heat, very dry weather strained water tables and crops.

At the other extreme, floods have also made headlines in the past 25 years. Most widespread was that of June 30th and July 1st, 1973, when 4-7" of rain fell causing \$64 million in damage, the state being declared a disaster area. Other floods, though more limited in scope, are well-remembered for local damage. In June of 1984, thunderstorms remained stationary over a line from St. Albans through Morrisville, Plainfield, and down to Wells River, washing out dozens of roads including portions of Routes 2, 12, and 302. A month later, a flash flood in the Williston area resulted in the derailment of the Amtrak Montrealer, causing five deaths and 150 injuries.

If the past quarter century could be categorized in terms of weather trends, temperatures have been a few degrees cooler than the previous 25 years; and while precipitation has been somewhat less, snowfall has, on the average, increased. Perhaps more significant than these general trends has been the tendency for more variability — extremes of temperature, floods and droughts, etc. What do these changes and trends mean? Do they represent variations on our famed New England weather theme, or do they signal some important change in weather patterns?

Considering our period of scientific record is only consistent over the past 150 years, determining what constitutes "normal" is a challenge. From diaries of early settlers and through increasing numbers of records, it seems the present century is the warmest. In Europe, where records of crops, floods, and droughts provide some clues to climate change, this has been the warmest century of the past millennium. What remains unanswered is whether this is a trend, or a temporary warm spell.

Climate cycles come in various lengths, from months to millions of years, and we are just beginning to understand their causes and consequences. Over the past three million years, glaciers have advanced about every 100,000 years; this is followed by 90,000 years of cold, promoting the growth of the glaciers. In the last part of the cycle, warmer temperatures melt the glaciers and creating the temperate climate we now enjoy — the climate during which civilization as we know it developed.

The most recent warming reached its peak some 6,000 years ago, and it is estimated that we are near the end of the 10,000 year interim before the glaciers return. But whether the Ice Age will be here next year or next century is beyond our forecasting abilities. It is possible that we are already in the beginning stages of an Ice Age, with temperatures in the past one thousand years a few degrees cooler than the previous one thousand years.

Billowing larger and larger on our horizon are the effects of humans' continuing destruction of the environment. The "greenhouse effect," warming the Earth through excess carbon dioxide and other heat-trapping gases, could result in more desert, less arable land, and less water. Therefore the planet could no longer support the current population, to say nothing of the inevitable larger population of the coming years.

It is dramatically evident that pollution, deforestation, ozone depletion, and possible climate change bespeak human failure to meet our stewardship obligation.

What can we do? Individual efforts are important and are to be applauded. However, global problems need global solutions. Since we know that individual countries can destroy the world, it would seem that a united effort of the global community could clean it up. That means we must support leadership whose priorities will end our careless attitude toward the environment and institute a lasting "climate" of international cooperation, giving new hope for a climate that will last. ■

Mark Breen is Meteorologist and Planetarium Director at the Fairbanks Museum in St. Johnsbury, and is a host of Vermont Public Radio's "Eye On The Sky" weather program.

A lasting "climate" of international cooperation could give new hope for a climate that will last.

Fall Foliage

Mac Parker



The air is cool and the leaves are falling
Once nimble flies now are crawling
On the dairy farms we're chopping corn
And bathing suits are seldom worn.

On the radio we hear "leaf reports"
That most important autumn sport
When that comes on, oh, don't you speak
You might miss out on where it's peak!

Leaf peepers drive from town to town
They go real slow... and then slow down
Route Two, Route Five, and Route Fifteen
Vermont license plates are rarely seen.

Well, excuse me, folks, if I don't cry
When the weekend brings a rainy sky
Hell, it rains every other day of the year
Why should we make an exception
just because you're here?

See, we drive these roads every day
We work these woods, we make our hay
We drive to factories in nearby towns
That pretty lake is where my neighbor drowned.

Sure, I like the colors, but then there's March
There's maple steam pouring off the arch
The winter months drag on and on
The alarm goes off before it's dawn.

Hubie Adams wakes up feeling like hell
He don't like his job so well
His face is hard, he looks annoyed
But Hubie wasn't like that as a little boy.

And my own kids already drink too much
But it's something I really don't know how to touch
And farmers lately been pouring milk
on the ground
We watch the earth soak it up without a sound.

Up in the little village of Island Pond
Dottie Long is lonely, her husband's gone
She always wondered who'd die first
And she always knew this way'd be worst.

See, Vermont's not a painting, it's a place to live
Sure, there's lots of good stuff, but we take
what it gives
You like those leaves and you like that steeple
But beneath those trees there's a state
full of people.

Then when the leaves are gone,
these woods are still
Me, I kinda like the gray of naked maple hills
It's not spectacular, and it don't bring cars
But when the leaves are gone, these woods are ours.

Loggers don't tend to waste much time
Talking about beauty or their state of mind
But on a cool fall morning, we all agree
We're working and living in God's country.

The hotels and motels call this "off-season"
There's not too much here the tourists find pleasing
The color's gone, and there's no snow
The skiers aren't headed for Mad River and Stowe.

But I was born in November, with its frozen ground
I first saw the world when the world made no sound
The land's dry, gray and silent,
like a winter bee hive
But it don't take bright colors to know
this land is alive.

Mac Parker is a Vermont storyteller and poet living in Vergennes.

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25 Years of Vermont Conservation Work

"In its pragmatic, workmanlike way, Vermont has wrought a revolution."

Gov. Deane Davis, 1972 State of the State Address



1963: VNRC founded. Vermont Air Pollution Control Act passes. **1968:** Municipal and Regional Planning and Development Act passes. Vermont bans billboards. **1969:** Governor Deane Davis establishes the Governor's Commission on Environmental Control, to research legislation on environment/development problems. **1970:** VNRC gets a full-time office and staff. The Vermont Legislature passes Act 250, landmark land use management legislation. Act 252, Water Pollution Control Act is also passed, establishing a classification system for Vermont's water bodies. Agency of Environmental Conservation created. Vermonters join in first Earth Day celebration. **1971:** Governor Deane Davis argues successfully for \$50 million in bonds to clean up the state's waters by 1980. "Fair Farm Taxation Act" is first proposed, to tax land for its current use rather than its fair market value. VNRC testifies in licensing hearings against Vermont Yankee nuclear power plant. **1972:** Vermont passes "the bottle bill" beverage container deposit law. VNRC and a coalition of other conservation groups recommend the abandonment of further study for an east-west economic development highway across Vermont, Maine, and NH. **1973:** VNRC sponsors an environmental education conference to set up a plan for environmental education in Vermont. Vermont Legislature passes Land Gains Tax Amendment to discourage short-term land speculation. **1976:** A bill for the third part of Act 250, a State Land Use Plan, is defeated for the fourth and last time. A federal Tax Reform Act is signed into law allowing organizations such as VNRC to lobby. Vermont's first two federal wilderness areas are designated at Bristol Cliffs and Lye Brook. **1977:** Vermont legislature outlaws use of phosphorous detergents.



Legislation also passed to protect Vermont's scenic roads. Bill passes creating the Use Value Appraisal program (Current Use). VNRC begins legal advising for the Williston Citizen's for Responsible Growth opposing the massive Pyramid Mall proposal. VNRC and the Ottawaquechee Regional Planning Commission join forces to set up the Ottawaquechee Land Trust. **1978:** The Lake Champlain Islands Trust is formed through the efforts of VNRC, the Lake Champlain Committee, and the Green Mountain Audubon Society. Also: Pyramid Co. is denied an Act 250 permit for their proposed mall in Williston. **1980:** VNRC joins farmers in a lawsuit to halt



construction on Interstate 93 that would cut through two large productive farms. **1981:** Endangered Species protection law is passed. **1982:** VNRC challenges the Vermont Water Resources Board's decision to reclassify a portion of Ranch Brook in Stowe. **1984:** Vermont Legislature closes Act 250's "10-acre loophole." The U.S. Congress creates an additional 48,000 acres of wilderness land in the Green Mountain National Forest. **1985:** Over 150 Vermont towns pass resolutions urging federal action on acid rain. New environmental laws supported by VNRC include: the "Right-to Know" hazardous materials law; the Groundwater Protection Act; an underground storage tanks law; and a "mini Superfund" law. Green Mountain National Forest Plan proposed. **1986:** More key new laws pass on: indirect discharges and high-elevation waterways; septage and sludge; wetlands protection; and a non-game tax check-off. Two heavily debated growth management bills do not survive. VNRC joins with several other groups to form the Vermont Rivers Alliance. VNRC study reveals rampant corporate land speculation practices in Vermont. In response to a federal lawsuit



brought by VNRC, CBWC and NRDC, the U.S. District Court issues a precedent-setting ruling requiring a federal discharge permit for measurable indirect discharges such as spray disposal. **1987:** Another critical legislative session creates: Act 78; the Solid Waste Act; Vermont Housing and Conservation Trust Fund; Outstanding Resource Waters designation process; and tightening of Act 250 and tax law to clamp down on corporate land speculators. VNRC and Cady's Falls area residents win a decisive victory against a gravel pit expansion on the Lamoille River. Kuhn-appointed Governor's Commission on Vermont's Future hears from hundreds of Vermonters on growth control issues. VNRC, CLF and the State of Vermont file suit against U.S. EPA for refusing to enforce Clean Air Act. Act 250 permit denied for second-home development in Stratton decryard, a major victory for the Act 250 wildlife criterion. **1988:**



Act 200 planning law passed by Vermont legislature. Bottle bill expanded to include wine coolers and liquor bottles. 1988 The Pyramid Co. reappears after a ten year absence to propose a massive shopping center for the town of Williston. VNRC opens a southern Vermont office. **1989:** 2,000 Vermonters celebrate Vermont's natural resources at the Conservation Celebration. ■

THE NEXT TWENTY-FIVE YEARS

Diverging Roads

Carl Reidel



Twenty-five years ago I crossed the Connecticut River for the first time, and discovered Vermont. I fell in love, hopelessly. Nine years later I moved here to stay. I can now declare, as Peg Garland once said when questioned about her place of birth, "I wasn't born here, but I intend to die here."

Many of us who make up VNRC were not born here. Like Ethan Allen, we are immigrants who came here by choice, not birth. We made a personal commitment, like those born here who choose to stay. And that has made all the difference.

Twenty-five years ago few of us could have foreseen what Vermont would be like today (save a few of our "prophets," like Justin Brande). I never imagined that we would experience such courageous responses from citizens and government. The list of environmental accomplishments is astounding, from expansive state legislation to thousands of local decisions for conservation.

This issue of the *V.E.B.* chronicles the accomplishments of VNRC's first quarter century, and the people who made it happen. The failures are equally astounding, and scary. Who predicted that our air and land resources would become so degraded, or that uncontrolled change would overtake us so dramatically? The unfinished environmental agenda before us is vividly clear (even through the "haze" we now recognize as smog).

I can't predict the unexpected challenges we will face in the next twenty-five years, nor the creative responses we are capable of making, but I am certain that the nature of our responses must be very different from those of the past. It is all too obvious that laws and regulations focused on specific problems, or legal challenges to specific permits or violations, will not be enough to secure the future. The time has come to elevate the debate over environmental quality to higher ground.

Forty years ago Aldo Leopold said that "land use ethics are still governed wholly by economic self-interest; just as social ethics were a century ago." He declared: "It is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its value... far broader than mere economic value... value in a philosophical sense." He explained that "no

important change in ethics was ever accomplished without an internal change in our intellectual emphases, loyalties, affections, and convictions."

Leopold was a practical person. He knew that love and respect were more powerful than rules and regulations. Vermonters understand that. If we are to secure the future, and make a real difference in the next twenty-five years, we need to be equally practical. We must raise the issue of environmental quality to that of Constitutional standing: to secure forever our rights to a clean and healthy environment; to ensure respect for all the creatures with which we share life on this planet. It is time for a clear statement of policy — a Constitutional statement — that raises conservation to the level of ethics, of inalienable rights.

My definition of Constitutional policy is simple: a standing answer to recurring questions. The time has come when it should no longer be necessary to defend our rights to a quality environment at the level of hearings and permits and zoning boundaries. We must, in the next few decades, establish beyond doubt that every citizen, and Nature itself, has an inalienable right to live free from pollution and environmental degradation. Like our rights to free speech, to freedom itself, environmental quality must become a "standing answer" in Vermont. That will require bold new leadership initiatives by the Vermont Natural Resources Council. Twenty-five years hence, we will look back and see that our decision to strike for higher ground in our 25th year made all the difference. ●

Carl Reidel is the Director of the Environmental Studies Program at the University of Vermont. He is a past chair of VNRC and lives in North Ferrisburgh.



"The time has come to elevate the debate over environmental quality to higher ground."

PLANNING VERSUS DESIGN

Preserving Vermont's Unplanned Past

Justin Brande

Trying to correct market failures like pollution with regulations inevitably entails a cumbersome bureaucracy.



I am obliged to William Ophuls for the theme of this essay. Throughout his perceptive and provocative book *Ecology and the Politics of Scarcity* he argues that it is virtually impossible to bring about an environmentally sound and free society merely with more and better planning.

To be sure, some sort of planning and all that goes with it is necessary to all societies; but trying to redirect a society like ours from the outside in, by trying to correct blemishes and market failures like pollution with rules and regulations, inevitably entails a cumbersome bureaucracy to administer and enforce its demands. This bureaucracy inevitably grows and grows, trying to catch up with society's numbers and complexity. The history of avowedly socialist countries seems to confirm this reality.

Design conversely implies that the means of attaining a society's goals should be built into the fabric of everyday life, into its basic premises and institutions so that, as Ophuls puts it, "the desired result will occur more or less automatically." He points out "that design is nature's way... natural systems and cycles operate automatically to produce an integrated, harmonious, self-sustaining whole... reaching a climax that is the ultimate expression of the design criteria."

This last, from our environmental point of view, is supremely important. So it is, for example, that the further we get from true recycling of all our wastes as nature does, the more complex the problem becomes and the more bureaucratic the various solutions. In nature's way there's no such thing as "waste."

Ophuls gives examples of the design approach. He cites Ivan Illich's suggestion that the universal speed limit should be the human-scale of the bicycle, about 25 miles an hour, thus at a stroke resolving major traffic problems facing motorized society. And he suggests energy rationing so that each of us could determine how we would use our allotted energy — for our cars or recreation or whatever.

These proposals seem at the moment extreme. But we'll have to come to something like them eventually if we simply continue to ignore or temporize the problems we face, and continue simply

by planning to accommodate the growing unhappy results.

In Vermont in particular there would still seem to be opportunities to apply the design approach to retain or attain the goals most Vermonters seem anxious to accomplish. Thus for example, if in striving to implement a total recycling program, we required that all rottable waste like sewage and garbage be properly composted and returned to farmers, we would achieve desirable goals such as reducing the farmers fertilize bill, saving our soils, preserving open space and so on.

Likewise, if we were to take a closer, more critical look at our business and banking system, we might give serious consideration to such matters as limiting consumer credit, absentee landownership and discouraging franchise ownership in favor of owner-operators.

These sorts of design systems should tend to produce a landscape more like that of Scandinavia, Switzerland and the Amish regions of this country. Such designing is in keeping with Vermont's heritage. Consciously and unconsciously such thinking had much to do with producing the landscape and environment that we are hoping somehow to preserve today by megadoses of planning.

Obviously in adopting such an approach we must be careful and thoughtful, dealing with the whole spectrum of Vermont life as an integrated whole and not just a jumble of special interests and segregated sectors.

Fortunately this does seem to be the way our environmental movement is going. Though at times this seems to be going all too slowly, when we look back into the dim, dark days of the sixties, we can see real motion and progress. And we get some good ideas for what lies ahead and what we must do now and in the future.

Certainly we must continue to plan and correct past errors, but let us hope we do it more by design than by merely planning for more highways and high-rises and other high-cost expedients. •

A founding member and the first executive director of VNRC. Justin Brande is an educator and homesteader; he lives in Cornwall.

THE CONSERVATIONIST'S DILEMMA: *Too Much To Know*

Noel Perrin



Last year the magazine *Harrowsmith* asked its readers a question. Suppose they had a choice in a supermarket between getting their groceries in paper bags or in plastic sacks. "Which should the environmentally conscious shopper choose?"

Ha! I thought. That's got about as much suspense as the Easter sermon entitled "Did Christ Really Rise?" Either the answer is yes, or the minister plans to resign right after the service. And it's got as much moral tension as asking which is better: to feel happy because you've just split three cords of wood or to feel happy because you just took a hit of cocaine.

Then I read *Harrowsmith's* answer. Citing a 1986 study by the West German department of environmental protection, the magazine reported that the serious environmentalist chooses plastic. Making those nasty little sacks "uses one-third of the energy consumed in producing paper bags, and produces far less sulfur dioxide, carbon monoxide, and hydrocarbon emissions."

So I've been going to all that bother for nothing, have I? Obviously we *do* have a choice in the check-out lines. Say nothing, and you generally get plastic. Ask, and you can have paper. I always ask for paper, and up until now I have generally felt a tiny but perceptible thrill of virtue as I did so. Sometimes I have even lectured a bored checkout person on the evils of plastic. And all the time I was wasting energy and increasing pollution, not to mention bad-mouthing innocent and virtuous stores.

But wait! Was I? I haven't actually seen that West German study (and couldn't read it if I had). Is it universally valid? How do I know what assumptions its authors are making? The plastic sack is still made of non-renewable petroleum products while the paper bag comes from forests that will grow again. And what about disposing of the sack later? Were the West German scientists worrying about that?

Yes, and is there any actual bias involved in the study, perhaps unconsciously? Two of the few things I know about Germany are (1) It is one of the great chemical-producing, technology-trusting countries in the world, and (2) Many of its forests are



*Why do I
have to decide
all of this for
myself?*

dying, probably because of acid rain and car exhaust. Under such circumstances, maybe Germans want to find that it's virtuous not to cut trees to make paper bags.

But why do I have to decide all this for myself? *Harrowsmith* is a reliable magazine. The editors must check out the stuff they print. Why don't I just take their word for it? Well, for one reason, they won't let me. They, too, find it hard to arrive at the truth. "If the West German study is accurate," they say (my italics), then maybe one should relax and accept plastic grocery sacks. Meanwhile...

Here is the conservationist's dilemma. Right now, today, this very hour, we have decision after small decision to make on how we live, what we use, how we can least harm the environment. (Very few of us are bold enough to think we can actually help the environment — though our ancestors had sublime confidence that they could, right up to the beginning of this century and even later.)

We have to make these decisions, and we usually don't have enough information to go on. Or if we have, it's not comprehensible. It might as well be in German. Send away for a little packet of information on chlorofluorocarbons and you get both fascinating facts and daunting studies. The very word "chlorofluorocarbon" is daunting. Eighteen letters long, and its begins with three consonants. You can

How can we be good unless we know what goodness is?

call that chemical family the CFCs, and I sometimes do – but then I wind up forgetting what the initials stand for. Just as I've long since forgotten what DDT stands for. (I remember well enough what it did to hawks, in Vermont and elsewhere.)

There is too much to know and too much to decide. A person could give up in despair. Millions of people *do* give up in despair. And those of us who don't, run up against studies telling us our little virtuous act in the Grand Union was counter-productive – maybe.

What I would like to see is what I think of as the environmental Ann Landers. The environmental Dear Abby, too. There should be more than one.

By this I mean newspaper and magazine columns written by articulate laypeople with lots of common sense – and with access to the whole range of experts. Columns for the general public, giving reliable answers to our questions. What is the final truth about these paper bags? What about styrofoam? Is it true that at McDonalds you now get a kind made without CFCs? Is it then sufficiently virtuous to use?

What about cardboard milk cartons? The ones that when empty fit so nicely into a woodstove? Long ago these cartons were wax-coated, and I free-

ly burned them in my woodstove. Now they are plastic-coated, and I still burn them, most of the time. A chemist I know once told me he was pretty sure that this plastic puts nothing worse than carbon dioxide and water vapor into the air. When I'm feeling relaxed and cheerful, I figure he probably knows, and in the stove they go. On paranoid days they get stuffed into my plastic trash bag, later to clutter up the town landfill. What I'd *really* like is glass milk bottles back – unless, of course, a series of unbiased studies showed that would be a net waste of energy and a cause of pollution.

But meanwhile, where is a columnist I can write to, and get clear, well-informed answers? How can we be good unless we know what goodness is? Tell me that, environmentalists. •

Noel Perrin is an author and teaches English at Dartmouth College. He lives in Thetford.

Editor's Note: Since the submission of this article, VNRC has been investigating with Perrin the idea of an "environmental Ann Landers" for newspaper or radio. Meanwhile, kudos to Perrin and a local citizens' group for sensible thinking — they are promoting the use of canvas tote bags for shopping.

VERMONT IN 2028.

STATE HIGHLIGHTS AFTER 40 YEARS OF THE GREENHOUSE EFFECT.

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Jim Chase

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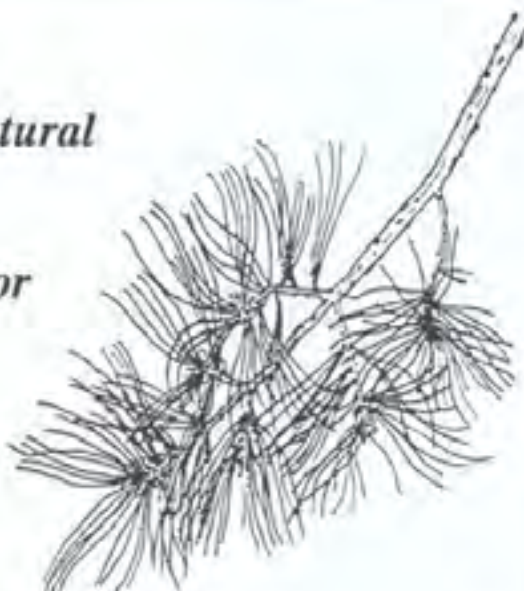
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VNRC NEWS & NOTES

A PERSONAL INTRODUCTION

Tom Miner,
VNRC Executive Director

There is a line from the Broadway show "The Music Man" that has been in my mind ever since I accepted the opportunity to head VNRC, "... but you gotta to know the territory." I imagine there are people asking that question about me. Does he know the territory? Well, if you're asking whether I know Newport, or Quechee, or Stamford, the answer is "no," although I have been to Ripton, Rupert, Putney and elsewhere in Vermont over the past 20 years. Clearly, however, learning the geography of Vermont is one of my first tasks.

The more important question, I believe, is whether I know and under-



stand the issues confronting Vermont and its communities. On that, I respond with a resounding "yes!"

There is a close parallel between

Vermont and the rural Catskills, where I spent the past 12 years heading an organization similar in purpose and program to VNRC, the Catskill Center for Conservation and Development.

At The Catskill Center I dealt with land speculation concerns — a report entitled "The Catskills, FOR SALE" that I co-authored in 1984 was the first public exposure of the Patten Corporation's land sale activities (a less than desirable Vermont export) in New York State. Protection of water quality from development impacts was another critical issue. Also, the displacement of farming by second-home development, the impacts of large-scale recreation development on environmentally sensitive mountaintop lands, strip development along scenic highways, management of publicly owned wilderness lands, open space protection, rural economic development... and more.

In case you have not noticed, the list begins to read like VNRC's agenda.

That was one of the attractions to accept the VNRC executive director position — I do in fact "know the territory," and I delight in learning geography first-hand.

The land use planning skills and rural interest that I bring to VNRC are hardly indicated by my personal background. I grew up in Connecticut near Long Island Sound and within sight of the tops of New York City's skyscrapers on a very clear day. I attended Princeton University, where I majored in Art History.

Following a tour of duty as a Naval Reserve officer that included service off Vietnam, I worked for eight years as a free lance and exhibiting photogra-

pher. My interest in land use only began when I bought my first home, in the Hudson River Valley foothills of the Catskills, and afterwards discovered that the wonderful woods behind our property was about to become 500 townhouses. Suddenly, "environmental impact assessment" assumed a new meaning for me and led to a new career. I got involved and was appointed successively to the local environmental commission, the town planning board and finally to the county planning board. My next step was to return to school — Besselaer Polytechnic Institute in Troy, NY, where I earned a Master's degree in urban and environmental studies.

Twelve years at The Catskill Center brings my personal history up-to-date, with one exception — my family. My wife, Whitty Sanford, is involved with folklife, cultural history and rural community organizing and advocacy in the Catskills (she has spent the past three years overseeing the reconstruction and adaptive use of a National Register-listed, 100-year-old round barn). We have four boys between us, from 12 to 21 years old, as well as four cats and a black labrador.

Vermont and VNRC present an exciting and challenging new horizon for me. I sense a vital community interest to protect what is Vermont. That does not mean freezing things in place. Rather, it means having an awareness that conserving environmental quality and sense-of-place is as essential to our well-being as is economic development. Pursuing those interests and purposes are a life goal of mine, one that happily coincides with what VNRC is and does.

...Now, back to my map of Vermont and plans for my next exploration to learn more of "the territory." TM •



PHOTOS BY CRAIG LINE EXCEPT BOTTOM LEFT BY SUSAN CLARK

VERMONT CONSERVATION CELEBRATION

From Awareness... to Action!

Workshops. Music. A major address by the Governor. Panel discussions. Puppets and poetry, storytelling and games. These were the ideas behind the September 16th event — let's *celebrate* our conservation work. And a celebration it was.

Organized by VNRC as a grand finale for our 25th Anniversary, the Conservation Celebration featured something for everyone. Over two thousand people attended, taking advantage of

booths and exhibits offered by the event's eighty co-sponsoring organizations. Over forty workshops covered topics from rivers protection to sustainable agriculture, groundwater quality to global warming. The Fairbanks Museum's meteorologist Steve Maleski offered tips on how to predict the weather; the Consulting Foresters Association of Vermont led field trips throughout the day on tree identification; and the Gardener's Supply Company's composting workshop drew such a crowd that it had to move outside onto the Statehouse steps. Meanwhile, dozens of children experienced the thrill of releasing live fish into the Winooski, thanks to the Trout Unlimited-organized trout release.

At noontime, conservationists thronged to hear a keynote address by

Governor Kunin. (See page 3 for details.) Panel discussions with environmental activists, agency heads and legislative committee leaders were also very well attended.

Throughout the day, participants of all ages enjoyed entertainment by such notables as Jon Gailmor, Banjo Dan and the Midnite Plowboys, Gould and Stearns, Mac Parker, and others.

"We are delighted that people seemed to come away from the event with a real sense of successes of the conservation movement," said Tom Miner, VNRC Executive Director. "And as important as celebrating our past is the enjoyment we gained from celebrating our future. If the positive spirit of the Conservation Celebration is a gauge, the future of Vermont's natural resources is assured." SC •

ONE OF OUR FIRST AND BEST FRIENDS

VNRC Remembers Brett — Brett Remembers VNRC

In an editorial this fall, the Barre-Montpelier Times Argus called him a "latter-day pioneer" in Vermont's conservation movement.

"He was not daunted by the slow pace of growing trees from seed and sought no short cuts. The best of the environmental laws we have today are like the trees grown from the seeds that Richard Brett planted," wrote Times Argus editors.

Richard Brett, banker, publisher, businessman, writer, forester, and co-founder of VNRC, died this fall at the age of 86. He leaves with us the inspiration of his dedicated advocacy for a comprehensive approach to land use.

At VNRC's Annual Meeting this fall, VNRC Chair Patsy Highberg recalled her long-time friendship with Brett.

"Dick Brett lived the principles that he advocated for the protection of natural resources," Highberg told VNRC members. "Dick and Elizabeth Brett started the Hawk's Hill Demonstration Forest to show that intensive management could lead to increased yield, which could create major increases in forest products and in income for the woodland owner.

"He also saw the trails, ponds, and brush piles as improving wildlife habitat," Highberg recalled. "It was a multi-use environment producing recreation which is sensitive to the environment."

Brett submitted the following article last summer for use in this 25th Anniversary issue. (With typical light spirit, Brett instructed the V.E.R. editor, "If you want a photo of me, use the one from my book *A Primer On Aging*. I like that picture with the hat — it makes people smile.")

Brett entitled his piece "VNRC: As I Remember It." VNRC also remembers Dick Brett — fondly, and with much gratitude. SC



At my 85 years of age, 25 years hardly qualifies as ripe old age. Still, in terms of changes made, the 1960s are eons away.

Everything starts with people, their perceptions and their aspirations. In the case of the Vermont Natural Resources Council, the spark was struck by a small group of people, some from the University of Vermont, some from governmental agencies, and some out-and-out mavericks. Probably, the total was around thirty.

I worked closely with Lucy Bugbee, Perry Merrill, Jim Wilkinson, Hub Vogelmann, and Jim Marvin. Of course, I knew and worked with many others, but not on such a personal basis. Knowing and working with those named above, I felt like a co-inventor of an important idea.

The main purpose of the newly conceived Council was to change, for the better, land use attitudes in Vermont. At that time, many Vermonters held firmly to the notion that any landowner could do anything he wanted to do on his own land, with the provision that he not foul his neighbor's brook.

In attempting to change attitudes on land use, it seems obvious that, water being the prime requisite of life, one must think about ways to protect and produce potable water. In this endeavor, forests play a prominent part in

making oxygen, creating new soil, slowing erosion and limiting siltation. In the process, it is necessary to consider the inter-relationships between plants and animals — in short, the ecological approach to human activity. This broad concept underlies the philosophy of VNRC.

Every newborn requires swaddling clothes. In the case of VNRC, the nannies were people, who were willing to advise, volunteer, and manage. Furthermore, they were willing to find the necessary catalyst — money.

Jim Marvin recognized that someone had to head up the new organization. He knew that I had retired from business as General Manager of the Macmillan Company and the first Business Manager of the New York Public Library, and that I appeared to be qualified, having just received an MS in forest ecology from Yale. He also felt that I had nothing very pressing to do at the time.

So I got elected president, probably also because I tend to sound off about things in which I am interested.

First things first. We built a mailing list to create a small paying membership to provide egg money for postage and office supplies. The first headquarters was in my recently finished attic room. I had a typewriter and used it — hunt and peck style, as now.

There I wrote a news sheet; did a column in the Brattleboro paper called "Man and Other Beasts," addressing the many faces of Vermont's ecological problems — development in the wrong place and in the wrong way, deer herd management, pollution of many kinds.

For several years, the office was in my hat and spare cash quite often came from my pocket. Soon, however, the Council outgrew this primitive arrangement and a change of the guard properly was called for, involving a paid staff and rental quarters in Montpelier. Directions did not change but methods and effectiveness did.

Our work included preparing the general population and its voters with knowledge of and solutions for the problems facing Vermont. Many of the problems are brought about by the fact that Vermont is perceived as a population and real estate vacuum by the nearby urban population of some 130,000,000 people. Many of these people live in crowded communities a mere day's auto ride away and many of these communities have already fouled their own brook.

I believe that the Council still rests on the firm base that it is impossible to have a sound economy unless this is based on a sound ecology.

Considering this fact, the Council is running a strong race to the goal of a sound ecology. ■ *Richard Brett*

VNRC IS OUR MEMBERS

We Couldn't Do It Without You!

VNRC Development Director Deb Crespin reports that VNRC's membership has grown by leaps and bounds during our 25th Anniversary year. As of October 1, over 720 new members have joined the Council — and the numbers are still rising.

"I'm delighted to report that our overall renewal rate is close to 85% and

still growing," adds Crespin. "This kind of faithful support from our members sends us a message — that we must be doing something right!"

Crespin also wants members to be aware that from time to time, VNRC trades our membership list with like-minded groups in order to spread the word about our work and recruit new members.

"Sharing lists is extremely helpful to us," notes Crespin. "However, some people do not want their names traded, and we respect that. All they need to do is let us know." Members who would like their names withheld from list swaps may simply drop us a postcard or call Membership Coordinator Rebecca Sheppard at the VNRC Montpelier office. SC



VNRC'S 25TH ANNIVERSARY ANNUAL MEETING

VNRC Honors Legislature and Williston Activist

The September 16 Conservation Celebration provided an upbeat setting for VNRC's 25th Anniversary Annual Meeting. After a full day of workshops and entertainment, and before a final serenade by Banjo Dan, VNRC members gathered in the House Chambers of the Vermont Statehouse to discuss ongoing projects, elect officers, and present this year's special awards.

Six at-large representatives were added to the VNRC Board of Directors: **Jane Difley**, Bennington; **Roberta MacDonald**, Williamstown; **Stephen Saltonstall**, Sandgate; **Charles Smith**, Burlington; **Katherine Vose**, Burlington; and **Stephen Wright**, Craftsbury.

In addition, two new board members representing organizations were elected: **Ann Clay**, Arlington, from the

Vermont Maple Sugar Makers' Association; and **Andrew Nuquist**, Montpelier, from the Green Mountain Club.

VNRC made a special presentation of the 1989 Merit Award to the **Vermont Legislature** "for over two decades of environmental legislation contributing to the conservation of Vermont's natural resources."

"It is particularly fitting that we honor the Legislature as a body at VNRC's 25th Anniversary Meeting," noted VNRC Executive Director Tom Miner. "Historically, Vermont has provided national leadership with strong legislation such as our bottle bill, billboard law, and Act 250. And more recently, we've seen fine water protection, solid waste and planning legislation." Senator Stephen Reynes accepted the award for the Legislature.

VNRC awarded its 1989 Achieve-

ment Award posthumously to Williston activist **Herb Painter**. Painter's widow Ruth and two daughters were present to accept the award, which was presented "for years of dedication to conservation and community." Painter died this summer in bicycling accident.

Painter was an organizer of the Citizens for Responsible Growth, which opposed the Pyramid Mall proposal ten years ago and is now fighting Pyramid's Maple Tree Place proposal. He was well known as a soft-spoken leader who gave years of service to the recreation commission, historical society and many sports activities.

"Herb Painter's example continues as an inspiration to us all, because he believed in a vision for his Vermont community, and he gave with unreserved generosity to make that vision a reality," said Miner. SC

WELCOME, NEW STAFF

And Thanks to Old Friends

The first face to greet you (or voice, if you're telephoning) at VNRC's Montpelier office is our new Office Manager **Sue Baird**. Sue fills the post of **Pam Fowler**, who left VNRC earlier this year. Sue comes to VNRC with a keen interest in environmental issues, and we are already benefitting from her organizational skills.

Thanks go to **Jim Shallow** for picking up some of the slack during our office manager search. Jim is now back full-time with VNRC's Action Center, doing issues research and organizing conservation workshops.

Also helping out in the Action Center is intern **Andrea Cohen**. While

working on a Master's in Environmental Communication at Antioch College, Andrea is doing research on recycling and source reduction issues.

Our Manchester office has benefited from the research of a Vermonter now attending the University of Washington School of Law. **Betsy Buckley** has been working since June on a citizen's guidebook to Act 250, which she will be wrapping up this winter.

VNRC bid a fond farewell this fall to Information and Education Assistant **Jane Burchard**, who moved on to a full-time job in Burlington. Her research and graphic work, notably on the latest edition of the *Vermont Environmental Directory*, was well appreciated. Special thanks to **Betsy Brigham** of Marshfield for interim graphics and editorial assistance; by the time this issue goes in the mail, VNRC will have filled this half-time position. SC



don hooper © 1/28/88

Suddenly, it occurred to Curt that neither the family fridge nor VNRC was gonna compost in his lifetime.

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December and January

Woodbury College of Montpelier will offer a series of short, intensive **Community Planning Workshops** led by experts and open to the public. Topics include: **Water Law and Planning** (Dec. 15 & 18), with Steve Crowley, Harvey Carter and Gar Anderson; **Tax Policy and Land Use Planning** (Jan. 8), with Deb Brighton; **Agriculture and Planning** (Jan. 19) with John Hall and Amy Jestes; **Transportation and Land Use** (Jan. 22) with Richard Cowart and Tony Reddington; and **Forestry and Planning** (Jan. 26) with Brendan Whittaker. Workshops are \$75 each; Continuing Legal Ed./Continuing Real Estate Ed. credit pending. Contact the college at 660 Elm St., Montpelier VT 05602, (802) 229-0516.

January 23-May 8

The University of Vermont Environmental Program will offer a three-credit Continuing Education course in **Environmental Leadership**. The course is designed for anyone, from citizen to organizational leader, who aspires to be more effective in environmental advocacy and organizational management. Topics will include: the nature of leadership; individual vs. group action; organizational skills; finding the pressure points; *ad hoc* vs. permanent organizations; tax status; fund raising; lobbying. Tuesdays, 7:00-9:30 pm at Montpelier High School. For more information, call Warner Shedd, 456-8752.

March 16-18

Denis Hayes, National Coordinator for Earth Day 1970 as well as Earth Day 1990, will be the keynote speaker at the 12th Annual **New England Environmental Conference**. Co-sponsored by over 200 environmental groups, with dozens of workshops. Contact the Lincoln Filene Center at Tufts University, Medford MA 02155 (617) 381-3451 for more information.

April 22

Mark your calendars — here comes the **20th Anniversary of Earth Day!** Join in the celebration of the planet,

and help make 1990 known as the Decade of the Environment! Events are being planned across the nation. Be on the look-out for notices of local projects, or call VNRC (223-2328) for information on Vermont events.

◆ The Vermont Department of Environmental Conservation is offering a variety of **free publications on recycling**. Directories include: *Vermont Recycling Collection Programs; Markets for Recyclable Materials; Recycling Collection and Processing Equipment*. Also available: *Profiles of VT and NH Community Recycling Programs; Waste: Choices for Communities; The Vermont Solid Waste Plan*; a brochure on composting; a listing of speakers who can address recycling issues; and more. *The Wasting of Vermont* video is also available on loan. Call toll-free 1-800-932-7100 or write 103 So. Main St., Waterbury VT 05676.

◆ For job hunters, the CEIP Fund has just published **The Complete Guide to Environmental Careers**. Trends and issues plus specifics on job outlines, entry requirements, salary levels. Soft-cover \$14.95. Contact CEIP at 68 Harrison Ave., 5th Floor, Boston MA 02111, (617) 426-4375.



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