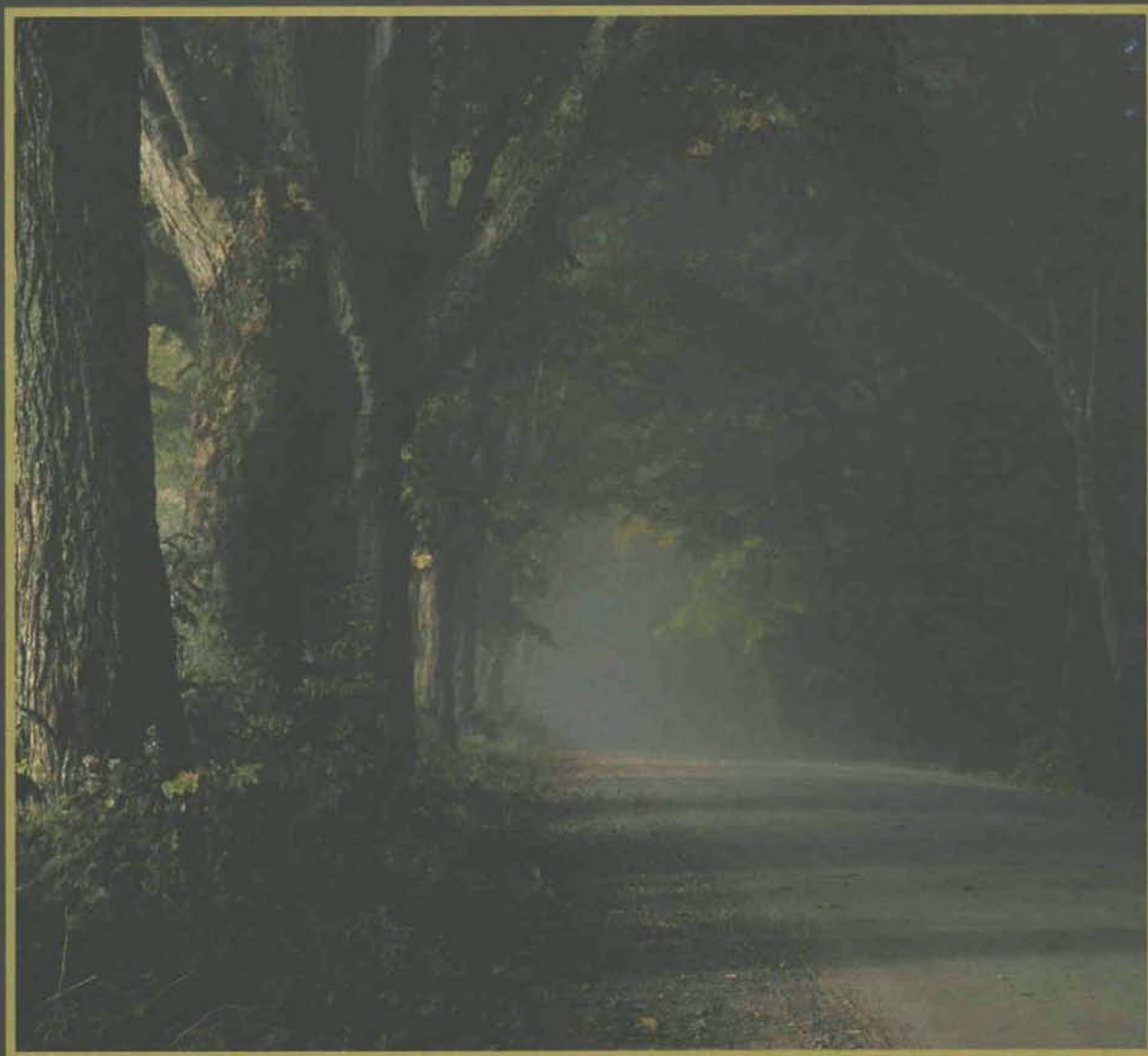


VNRC

# Vermont

## Environmental Report

Published  
by the  
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Natural  
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Summer  
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Join VNRC in protecting Vermont  
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# Vermont Environmental Report

Published by the Vermont Natural Resources Council, Inc.

Summer 2003

## TABLE OF CONTENTS

### NOTABLE QUOTES

Voices From Vermont's Past. . . . . Page 2

### THE INSIDE WORD

Remaining Uniquely Vermont, by Elizabeth Courtney . . . . . Page 6

### OPINION

Retaining Our Environmental Integrity, by Tom Slayton. . . . . Page 8  
It's the (Short-Term) Economy, (and it's) Stupid!, by Will Raap . . . . . Page 10

### VERMONT PERSPECTIVE

The Battle Over the Clyde River; Stormwater Issues Strike Again;  
Green Mountain National Forest Planning; State Lands Planning;  
Wind Energy and Ridgetop Development . . . . . Page 12

### FEATURE ARTICLES

Choices, Chances and Close Calls;  
How Vermont Grew to Value Its Natural Environment, by Will Lindner . . . . . Page 17

Sticking It Out; Dogged Effort Wins New Life for the  
Lower Lamoille, by Doug Wilhelm . . . . . Page 26

VNRC ACROSS VERMONT ACTIVITIES 2003 . . . . . Page 28

### VNRC NEWS & NOTES

Welcome Jamey; Outstanding Volunteer; Thanks SVFEPP; Thank You Alec; Lessons for  
Vermont; Clean Water Act's 30th Anniversary; VNRC's Legislative Bulletin Coming  
Soon; Thanks Ken; The Vermont Smart Growth Collaborative; Climate Action  
Resolution; Housing Endorsement Program . . . . . Page 30

Take Action! . . . . . Page 19

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Page 3 VNRC cartoons by Ed Koren and Don Hooper; Pages 3 (photo of Robert Frost),  
4 (photo of Calvin Coolidge), 15, 16, 17, 19, 20, 21 (stream pollution truck), 22, 23:  
Courtesy of the Vermont Historical Society; Pages 3 (photo of Mollie Beattie), 4 (photo of  
Bren Whittaker), 5 (photo of people canoeing), 6, 10, 17, 26, 27, 30, 31: VNRC Archives;  
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## VOICES FROM VERMONT

As the staff and board at VNRC work to protect and restore Vermont's environment, we keep in mind the wise words of our predecessors and contemporaries. Many of the people who have written the most eloquently about Vermont's uniqueness and beauty were founding members of VNRC or have served through the years as a board or staff member. VNRC is hopeful that Vermont's natural resources will continue to inspire writers in the decades to come.



From left: Warner Shedd, Gov. Deane Davis, Peg Garland, and Bernice Burnham (seated)

*"Consider their (the people of Vermont) support of the environmental movement in Vermont to control the use of natural resources, which philosophically runs counter to their traditional sense of land ownership. They recognize, however, that something has to be done to protect the state's land and waters from the ravages of unplanned development, and what has to be done, Vermonters will do."*

DEANE C. DAVIS,  
FORMER VERMONT GOVERNOR

*"It is indeed strange for conservationists to adjust to their new public image. After years of being Don Quixote, we suddenly find ourselves as St. George. The windmills are now dragons! Let us hope that with the assistance of an aroused public, we will be able to slay our dragons!"*

PEG GARLAND, FORMER VNRC BOARD CHAIR  
AND VERMONT ENVIRONMENTAL BOARD CHAIR



*"Our vision for Vermont's future is of a place where humans and nature coexist, and both are healthy."*

ELIZABETH H. THOMPSON &  
ERIC R. SORENSON, AUTHORS







*"Vermont will always remain the keeper of an alternative American Dream; a dream of a place where bigger is not better; where community is more important than personal riches and partisan politics; where the distinction between village and countryside remains; where people can live close to the land; and where they can see the stars at night, clean snow and a hawk on the wing; and where none of these values are submitted to the myopia of short term economics."*

MOLLIE BEATTIE, FORMER VNRC BOARD CHAIR AND  
DIRECTOR OF US FISH AND WILDLIFE SERVICE

*"It is not enough for us to pass laws or levy fines; we must know and show how ecology, economics, law and ethics all intertwine for our mutual benefit."*

JUSTIN BRANDE,  
FORMER VNRC BOARD CHAIR  
AND FOUNDING MEMBER



*"I said much earlier, that one of the possible meanings of the end of nature is that God is dead. But another, if there was or is any such thing as God, is that he has granted us free will and now looks on, with great concern and love, to see how we exercise it: to see if we take the chance offered by this crisis to bow down and humble ourselves, or if we compound original sin with terminal sin."*

BILL MCKIBBEN, AUTHOR



*"I came up here to see how man had failed!  
Down country he seems to have won all his wars;  
He's littered land and befouled water.  
He's a stranger to peace and the clean heart.  
The fear of God is not in him.  
Up here, I thought, maybe someone else  
Might have the upper hand."*

ROBERT FROST,  
POET

*"Having money to buy land is one thing; having the heart to love it is another."*

TED LEVIN,  
AUTHOR AND NATURALIST





*"I love Vermont because of her hills and valleys, her scenery and invigorating climate, but most of all, because of her indomitable people."*

CALVIN COOLIDGE,  
FORMER UNITED STATES PRESIDENT

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

RICHARD BRETT,  
FORMER VNRC BOARD CHAIR  
AND FOUNDING MEMBER

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

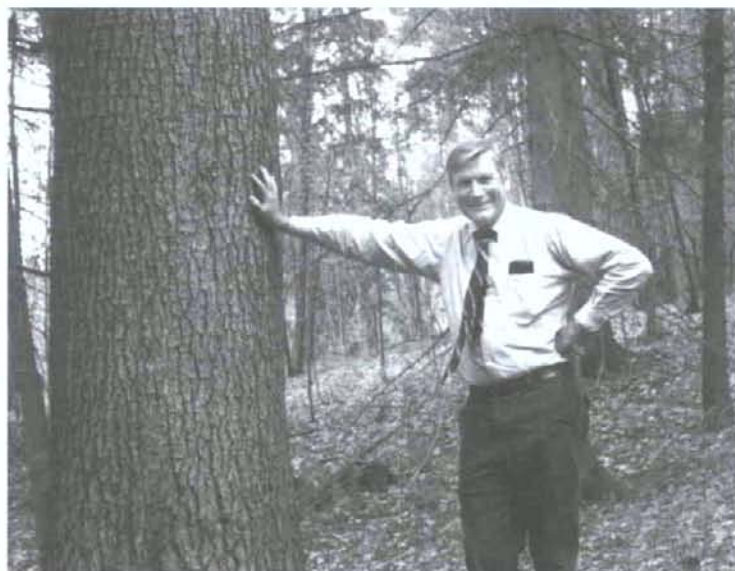
ART GIBB,  
FORMER ENVIRONMENTAL BOARD  
CHAIR AND STATE SENATOR

*"Along these ways I may sit and rest and just look about, at the span of time I have walked across or touched time of nearly immeasurable duration leading to this very place and moment. Then marvel at this convergence and, for a fleeting moment, if I'm lucky, feel an inseparable part of its unending future."*

CHARLES W. JOHNSON,  
AUTHOR

*"We all die eventually, and the land remains. This thought leads directly to the first tenet of ownership, a rural community standard, which happens to be very old, very simple, and very Vermont: 'A piece of land ought to be turned over to the next generation in as good, or better, condition than when it was acquired.'"*

BRENDAN WHITTAKER,  
FORMER VNRC BOARD MEMBER  
AND SECRETARY OF THE  
AGENCY OF NATURAL RESOURCES





*"The conclusion is clear: change the patterns of land use and you change Vermont. The landscape made by previous generations is their legacy to us; the way we turn our hands to the land will be our legacy to those who follow us in the 21st century. It's a challenging concept: the things we create on the land today, and the patterns in which we create them, will have an impact for centuries to come. The cumulative effects of what we do and the choices we make will be far greater than we can possibly anticipate."*

LYMAN ORTON,  
CHAIRMAN OF THE ORTON FAMILY FOUNDATION



*"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."*

NOEL PERRIN, DARTMOUTH PROFESSOR

*"What better gift to give our children, and our children's children, than  
clean water to drink, mountains to climb, and woods to walk through."*

MADELEINE KUNIN,  
FORMER VERMONT GOVERNOR



THE  
INSIDE  
WORDREMAINING UNIQUELY  
VERMONT

By ELIZABETH COURTNEY, Executive Director

The Vermont Natural Resources Council was founded 40 years ago. That's an impressive milestone when you consider the enormous changes in the world since 1963. Four decades later, the world is surely a different place. In 1963 we could hardly have conceived of the internet, a world-wide web, or a global

*We may be  
"hitched" to  
everywhere  
else in  
our universe,  
but we  
surely don't  
want to be  
like every-  
where else.*

economy, let alone the threat of global climate change. Certainly the world has become smaller as technology has brought us closer together.

Vermont has changed too, but thankfully has managed to maintain many of its unique and captivating qualities. People from around the world are finding these qualities more and more desirable as populations boom and the finite nature of earth's natural resources becomes more real. These are the qualities that Mollie Beattie, VNRC's former Board Chair and the nation's first female director of the U.S. Fish and Wildlife Service, called the "alternative American dream".

At the Vermont Natural Resources Council, our challenge is to be the keepers of these qualities, to nurture and to respect the values of a supportive community, to develop an intimacy with nature and to

pursue a long-term economic vision.

Vermonters are now, thanks to a combination of technological innovation and unintended consequences, much more inclined to realize, as John Muir once did, that "when we try to pick one thing out by itself, we find it hitched to everything else in the universe." Our air quality and forest health are hitched to power plants in Ohio; our water quality, to farming practices in Vermont, New York and Canada; our local economy, to a global market; our traditional settlement pattern, to the multinational automotive and oil industry.

*Amory Lovins, Elizabeth Courtney and VNRC Board Chair Dale Guldbrandsen at VNRC's April 2003 40th anniversary celebration.*

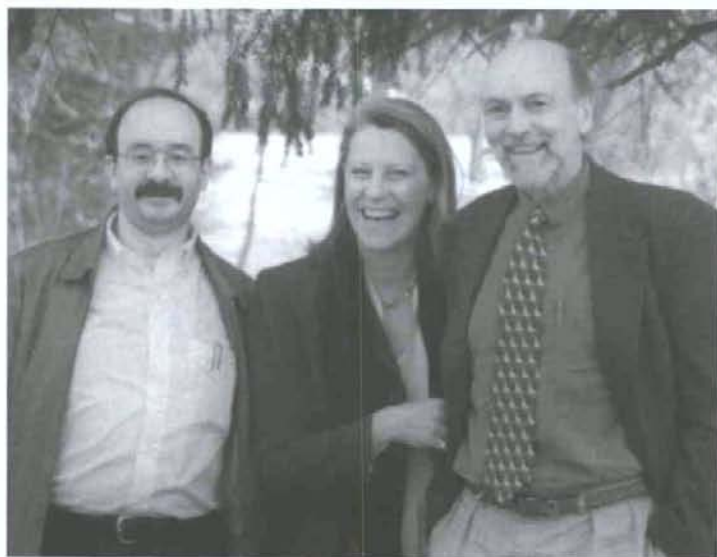


*Elizabeth Courtney presenting 79 towns' energy resolutions to Governor Douglas.*

And as we witness the relentless pressure for Vermont to become, as Tom Slayton mentions in this issue of the VER's feature article, "like everywhere else", we need to remain vigilant in

our advocacy. But at the same time, our advocacy must evolve to meet the new challenges of the 21st Century.

We may be "hitched" to everywhere else in our universe, but we surely don't want to be like everywhere else. We want





want to be like everywhere else. We want to remain uniquely Vermont.

Surely, the biggest change we've witnessed over the past four decades is the rise of globalization. As the Vermont Sustainable Jobs Fund reminds us, one of the greatest challenges we face is the force associated with the "tiger" of the global economy. Its homogenizing effect and the ease with which it can overcome small, local, characteristic landscapes and economic entities have an eroding effect on the qualities we have come to know as uniquely Vermont. We have only to remember the farm country of Taft's Corners that is now a sea of big box stores and Ben & Jerry's Ice Cream that is now owned by the multinational Unilever Corporation, to drive that point home.

Vermont can best "walk with the tiger" of global-homogenization if we start making choices to invest in Vermont's natural and human capital, invest in our locally owned businesses and work to keep profits here, re-circulating in the Vermont economy.

What if we were able to solve our long-term and short-term economic needs without sacrificing our environmental integrity? What if, we could say 'yes' to development in Vermont that nurtured healthy communities and restored healthy ecosystems?

Fortunately, new economic development strategies are emerging that could give Vermont a clear competitive advantage in an increasingly difficult global market, while adding value to our environment and to our communities.

During our 40th Anniversary year, VNRC is highlighting several strategies for the protection and enhancement of Vermont's unique natural and cultural qualities. We have assembled an all-star cast of world renowned authors to deliver a message of hope and prosperity in this time of transition.


In April, over 250 people joined us when we held our first celebration in Putney, at Landmark College with Amory Lovins, co-author of *Natural Capitalism, Creating the Next Industrial Revolution*. Amory's message was innovative and

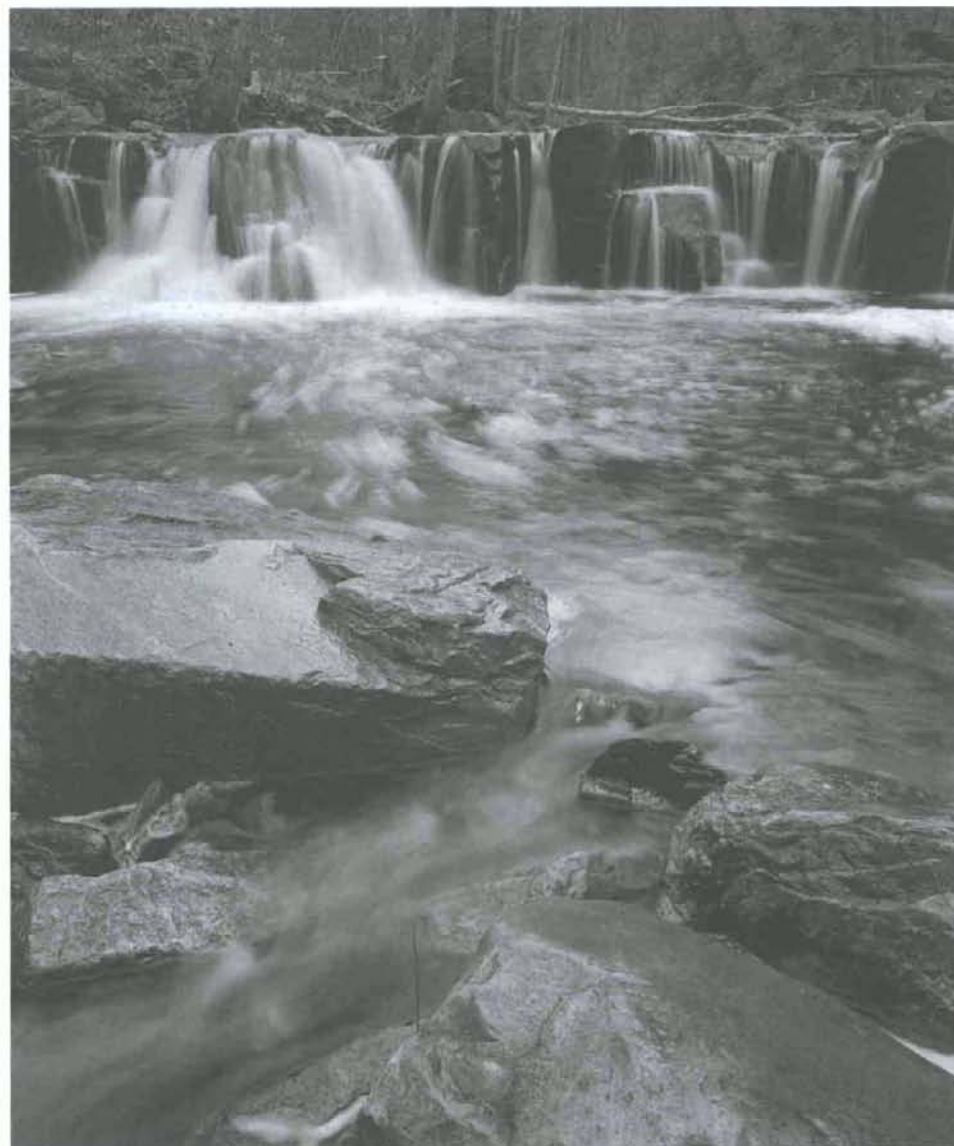
inspiring. He discussed the need to expand the traditional business approach of valuing only financial capital, to include the value of human and natural capital as well.

On August 14, VNRC will again celebrate our 40 years of conservation efforts at Hildene, in Manchester, Vermont. Our special guests will include Francis Moore Lappé, author of *Hope's Edge: The Next Diet for a Small Planet*, and Bill McKibben, author of *Enough, Staying Human in an Engineered Age*. On October 11th we will host our final celebration at Shelburne Farms' Coach Barn with the author of *The Restoration Economy*, Storm Cunningham. Cunningham will speak about his theory,

which is that the Restoration Economy is the environmentally responsible economic engine of the future.

Natural Capitalism, the Restoration Economy and Lappe's and McKibben's ideas offer us a road map of how we can expand and stabilize Vermont's economic base, by celebrating the link between Vermont's environment and Vermont's economy and by investing in the sustainable use and protection of Vermont's rich natural resources.

We hope you will join VNRC in celebrating our past and shaping a vision for Vermont's healthy and prosperous future. Let's ensure that while we keep ourselves firmly hitched to our star, we remain uniquely Vermont. 





## OPINION



# RETAINING OUR ENVIRONMENTAL INTEGRITY

BY TOM SLAYTON

In the last 35 years, Vermont has built and then defended a strong body of environmental laws. We have protected our land and water, set aside some of our most precious places as parks and wilderness and have somehow managed to keep most of Vermont's farmlands and forests open and working.

But even as these successes have been celebrated, the economic and social pressures on our landscape and environment have intensified. Now the suburban tracts that completely surround Burlington have been joined by other mini-suburbias and sprawl zones elsewhere in our state, and a new form of conspicuous consumption of real estate — huge, obscenely overblown “McMansions” — have begun to crop up on ridgelines and hilltops or are sprinkled through the forests surrounding resort areas.

These immense, grotesque houses speak not of closeness to nature or engagement with community, but of wealth and privilege. Especially those sitting on high, exposed hilltops send a visual message that is about as far from the traditional Vermont ethic as could be imagined: a rich person's private enclave, symbolically looking down on the masses below.

I don't want to imply that wealth, per se, is bad. To see the good a wealthy Vermonter's social conscience can do, all



*“...the real threats come from a mass consumer economy that chews up farmland and spits it out as subdivisions and shopping malls.”*

you have to do is drive to Shelburne Farms, where the Webb family has transformed their family's large private estate — barns, mansion and grounds — to public uses and created something unique to Vermont — an environmental teaching facility set in a grand pastoral landscape. Or consider what Lyman Orton has done with much of the money generated by the Vermont Country Store, which he owns. His Orton Family Foundation is currently devoted to helping maintain and preserve the vitality of small rural communities nationwide.

The cragtop “McMansions,” however, in addition to scarring Vermont's hillside and sending a visual message of elitist privilege, are also emblematic of suburban sprawl — a problem that has grown over the past 50 years and now threatens the integrity of Vermont's landscape and therefore its economy more than ever before.

Coping with sprawling development is still one of Vermont's primary environmental challenges. Vermont's open landscape is unique, and emblematic of our experience as a state and a people. Likewise, Vermont's small villages are valuable expressions of our shared past, in addition to being an environmentally sound way for people to live in and preserve a wider countryside. As develop-

ment creeps beyond the boundaries of traditional villages and moves into the countryside, Vermont's distinctiveness fades, and productive land is fragmented and lost.

One obvious way of coping with sprawl is to assure that farming and forestry remain economically viable on-the-land occupations. Another is to focus development downtown, where the necessary infrastructure already exists.

Sprawl, the resulting loss of open land, decline in water quality, growth of traffic congestion and air pollution are all complex and inter-related phenomena. These are not simple problems Vermont is facing; they overlap and intermingle with one another, and demand comprehensive solutions — the sort of fix that requires broad vision, cooperation and compromise.

There are no easy one-fix solutions to these interrelated problems, and, as noted above, the economic pressures to the contrary are enormous and growing. But I am hopeful (perhaps irrationally hopeful) that Vermont can retain its environmental integrity — if only because so many Vermonters love their state so deeply and are determined to make it so. Cooperative, cross-disciplinary actions by VNRC, the Vermont Land Trust, the Vermont Forum on Sprawl, the Nature Conservancy and other groups, working with state government will be needed, as well as every bit of thought, courage, and good will we all can muster if we are to successfully address the environmental challenges of the 21st century.

Take the emerging conflict over wind power generation, for example. Wind power is a clean, renewable energy source, one that can help Vermont reduce its dependence on fossil fuel and nuclear-generated electricity. A laudable and necessary goal.



But in Vermont, the most dependable wind is found high on ridgelines and mountain tops — the most environmentally fragile and visually exposed locations around. And so those of us who love mountains are concerned that they not be simply appropriated for power generation without some thought.

While no one wants to see 300-foot windmills atop Camel's Hump or anywhere on the main range of the Green Mountains, if we want to move toward a sustainable energy future, we must find other, less sensitive ridges and mountain tops for wind power sites. It's that simple — and that difficult.

Sorting out such complexities and finding common ground will not be easy. Most of the simple problems have been taken care of; it's the complex, difficult ones that remain: control of large extraction industries, eliminating infestations of exotics and weeds in Lake Champlain, reform of the Act 250 permit process, proper shared use of mountain tops and more.


The fight that erupted over the management plan for the huge Champion Lands reserve in Essex County is an example of the sort of misunderstanding that can result from even the best-laid plans. There, in spite of an eminently reasonable plan for management of the huge tract of wild land, mutual distrust and political manipulation resulted in a public outcry that continues to echo through public policy today.

The worst result of that meaningless fight was that environmentalists and traditional users — hunters, loggers, and fishermen — came away angry and distrustful of one another. Instead of fighting over legalisms, casting and re-casting blame, environmentalists and hunters and fishermen, loggers and others should realize that they all want essentially the same things: a healthy, renewable forest, land on which to recreate, a continuation of traditional lifestyles and pastimes. More trust and less name-calling on both sides could create a broad constituency for habitat preservation and sensible, cooperative use of wild lands.

The real enemies of a whole environment in Vermont, working lands to hunt, fish, hike and watch wildlife on, are not the native Vermonters who love them, nor are they the environmentalists fighting to

keep them unspoiled (in many cases, after all, the two groups are the same). Rather, the real threats come from a mass consumer economy that chews up farmland and spits it out as subdivisions and shopping malls; that thoughtlessly perches McMansions atop scenic hillsides, that manufactures cheaply and irresponsibly, creating and spreading pollution and a suburban lifestyle, divorced from the land.

We Vermonters must learn to work together, and we must learn to trust one another. It's the only way to save

Vermont's villages, farms and working forests and transmit a whole countryside, healthy and complete, to our children. 

*Tom Slayton has been editor-in-chief of Vermont Life Magazine for the past 17 years and is past president of the International Regional Publishers Association. Prior to his association with Vermont Life, he was a reporter, arts writer, and editor for Vermont newspapers for 20 years.*



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## OPINION



# "IT'S THE (SHORT-TERM) ECONOMY, (AND IT'S) STUPID!"

BY WILL RAAP

The modern world is driven by economics, and Vermont, like all other governments and regions, is caught in this worldwide political and economic revolution. Local, regional, national and international economies are compelled to seek competitive advantage: win those jobs, sell those products, get that contract.

But this is not a game Vermont can easily win. We don't have the labor pool or tax "bribes" to get a Toyota car factory, we don't have cheap electrical rates to attract the next IBM, and accessing all corners of the state from out of state is difficult...it's even tough to get there from in state! The core strengths of our economy

(diverse smaller businesses, community and environmental values and priorities, educated and motivated work force, entrepreneurial underpinnings, plenty of water, trees, meadows and fresh air) do not yield global competitive advantage. And that just might be the good news!

To be a player in the global economy invariably means sacrificing some of what makes places unique and special, and yielding to cultural homogenization. The loss of local distinction may be acceptable in the short run to gain out-of-state jobs and to boost tax collections. But the costs of these short-term gains can be steep and they can yield permanent and unwanted changes. These long-term consequences often are not understood until it's too late.

A plaque honoring Mollie Beattie hangs on the wall of the VNRC confer-



*Fortunately,  
Vermont has  
never been a  
land of fast  
opportunity.*

ence room. She was a special Vermonter who served as Director of the US Fish and Wildlife Service as well as Chair of the VNRC Board of Directors. Mollie died too young June 27, 1996, but she left a mighty legacy. Part of her vision for Vermont is noted on the plaque:

"Vermont will always remain the keeper of an alternative American dream: a dream of a place where bigger is not better; where community is more important than personal riches; where the distinction between village and countryside remains; where people can live close to the land; and where they can see the stars at night, clean snow and a hawk on the wing; and where none of

these values are submitted to the myopia of short term economics."

Mollie Beattie understood the risk of short-term gain overwhelming long-term purpose, and the need for guiding principles that keep us true to our purpose.

I am a fifth generation Californian, whose ancestors traveled west for the gold rush. California was indeed a "land of opportunity" for my forebears. But when I left there 25 years ago, the best of what California had to offer was being exploited in the name of economic opportunity. The best soil and family farms were becoming suburban malls and large, chemical-intensive industrial farms. The centuries old communities were disappearing among a sea of new housing. Wetlands, meadowlands, and woodlands were being covered by highways and industrial parks. Eons old rivers and

watersheds were being drained into irrigation canals to quench Los Angeles. There was no grand plan that authorized long term loss for short-term gain. It's just that our political and economic system had narrowed our vision so we could see only a few years forward at best, and our decisions reflected what was best within this time frame.

Fortunately, Vermont has never been a land of fast opportunity. That's one of the reasons I settled here. But times are changing. The new economy is coming to us whether we like it or not. And the question is whether Vermonters and those of us who have transplanted ourselves to Vermont will follow the path of California and most other states, or create an alternative to the short-term valuation

The highest priority calling to build a Vermont we all will still love in 40 years is all about controlling short-term economic thinking and actions. California (and most every other state) has few such controls. As Southern California sucks the north dry and as the Central Valley loses its farming communities and as the Sacramento River delta silts over and loses its capacity to be the "lungs" for the San Francisco Bay, California will become a lesser place. I believe Vermont should neither play the globalization game nor accept becoming a lesser place. We need new long-term oriented economic principles to help us avoid short-term thinking.

Here are some possible principles that I believe can show Vermont the way to a new inclusive "alternative American dream" in the next 40 years:

- Measure economic development in terms of traditional return on investment as well as in terms of the cost/benefit to communities and the natural environment. "Internalizing" the effects of economic progress through "triple bottom line account-



ing" (adding social and environmental considerations) will help us see the long term more clearly, and it will give Vermont sustainable competitive advantage compared to other "feast and famine" economies. New economic development disciplines and approaches are emerging like "ecological economics" and "restorative economic development" to help us embrace triple bottom line thinking. The collaborative work VNRC and Vermont Forum on Sprawl is doing with Vermont Business Roundtable and Lake Champlain Chamber of Commerce to resolve the stalemate around development that might further harm Potash Brook and Shelburne Bay in South Burlington is an indication that a new form of accounting for economic development can work. What if Vermont instituted a new development analysis methodology, perhaps developed by the UVM Gund Institute for Ecological Economics and approved by business, environmental and community organizations, to report on triple bottom line impacts of development? Not only would Vermont benefit, but our economy might have a new service to export!


- Choose and invest in strategic industries that allow Vermont to continue to be Vermont. What industries can help Vermont sustain what Mollie Beattie called "an alternative American dream" for the next 40 years? Surely a strong and coordinated focus on our natural resource-based industries like forestry, farming and tourism is smart. Even smarter is investing to assure we gain the highest value-added goods and services from our natural resources. Our economy wins double when milk becomes premium cheese and ice cream, hardwood trees produce maple syrup and fine furniture, and our water is bottled for export benefiting from Vermont's reputation for a pristine environment. But what if we revived our grain industry in the Lake Champlain Basin and Connecticut River Valley, made it organic and grew barley and added a quality malting facility so Vermont could supply the growing microbrewing industry here and around New England? And what

if Vermont rallied around the growing interest in "eco-tourism" and developed/promoted eco-tourism resources combined with parallel educational programs (eg. the history of lake sturgeon and restoring their habitat)? What if Vermont developed a series of Green Maps for visitors and residents alike (see [www.greenmap.org](http://www.greenmap.org)) to build awareness of our eco-assets and celebrate our "alternative American dream"?

- Support and invest in locally owned businesses because local ownership encourages long-term relationships between businesses and communities and keeps profits re-circulating here in our economy. When Ethan Allen Furniture company shut down it's Island Pond facility for cheaper production elsewhere and the employees chose to start it up again as an employee owned business with the help of State and non-profit organizations, another experiment in "localization" replacing "globalization" was launched. Why not use more Vermont economic development funding, some State pension funds, and incentives to banks and investors to significantly increase financial support for locally owned businesses. Our long-term economic strength will be the winner. And let's focus on supporting traditional strategic industries like forestry and tourism, but let's also support emerging industries like e-commerce, software, financial services and specialty manufacturing that can advance our decentralized economy.
- Focus on import-replacing rather than mostly export-led economic development. There is huge economic advantage whenever we can supply our basic needs like food, energy, key natural resources (wood, water), basic materials (glass metal, paper) in our own economy instead of importing them from outside. The dollars from these purchases re-circulate many times over within our economy instead of flowing out of state. The Intervale Foundation in Burlington is committed to grow 10% of Burlington's fresh food on dozens of private farms incubated on restored land, process 10% of Chittenden County's solid waste into

valuable compost, and use the process waste heat from the McNeil electrical generating plant to help produce value-added agricultural products. What if similar commitments were made for the whole State by a consortium of businesses, government and non-profit organizations?

- Integrate the needs and missions of business, government, academic and non-profit sectors for the competitive advantage that can result from broad policy alignment and a common purpose. The work mentioned above to achieve a collaborative resolution of the Potash Brook controversy is one such example of strategic integration of business, government and non-profit needs. Creating a new model of educational eco-tourism, and a broader funding of locally owned businesses, and providing more of our own food and materials also could be quickly advanced with cross-sector partnerships. What if our best thinkers from all sectors signed up to help solve our housing shortage with fairly-priced, environmentally-smart, well-designed developments that use local materials, restore degraded lands and watersheds, include transportation, energy and waste-processing solutions, and link with local farms to provide fresh food for the residents? Rallying around the creation of such developments could provide the housing we need while avoiding Mollie Beattie's warning against "the myopia of short term economics".

Together, all Vermonters can help create a better Vermont in the next 40 years. But progress is only possible if we achieve a new understanding of our "alternative American dream" and if we consciously and aggressively embrace guiding principles that help us avoid zero-sum short-term economic decisions. 

*Will started Gardener's Supply Company in 1983. Will currently serves on the board of VNRC, the Vermont Sustainable Jobs Fund, Vermont Partnership of Environmental Technology & Science, Vermont Sustainable Agriculture Advisory Council, and the Vermont Businesses for Social Responsibility Policy Committee, and is the Chairman of the Board for the Intervale Foundation.*



## VERMONT PERSPECTIVE

### THE BATTLE OVER THE CLYDE RIVER

There has been abundant action in the continuing battle to restore and protect the Clyde River. As many of you will recall, VNRC and Trout Unlimited fought hard in the mid-1990s to have the Clyde #11 dam removed. The negative affects on the fisheries and water quality of the Clyde River were indisputable, and the utility's push to obtain a new license for this dam and the four dams above it presented the perfect opportunity. The dam was removed in 1996, and the Agency of Natural Resources issued a water quality certificate for the remaining four dams last summer.

Unfortunately, the secretary of the agency issued a certificate with terms and conditions that, in the opinion of his own staff expert fish biologists and water quality experts, would not meet the Vermont Water Quality Standards. In particular, the certificate failed to include provisions for an adequate supply of water to the bypassed reach of the Clyde River below the Clyde Pond dam. As a result, the fish and other wildlife will not be able to utilize this reach of river, and our hopes for a natural, self-sustaining run of Atlantic salmon were dashed.

VNRC, the Northeast Kingdom Chapter of Trout Unlimited (NEKTU), and Public Employees for Environmental Responsibility (PEER) appealed the certifi-

cate to the Water Resources Board. VNRC and NEKTU presented expert testimony from a world-renowned expert in salmon fisheries, from our own staff scientist, and from the president of NEKTU (PEER was eliminated from the case on a technicality). Our contention before the Board was, and still is, that the certificate as issued violates the

Vermont Water Quality Standards because it fails to provide high quality habitat for aquatic biota, and because it violates the state's hydrology policy. The Clyde River is a river, after all, and we believe that rivers should have water in them. Unfortunately, the agency did not agree. We shall learn whether the Water Resources Board agrees within a couple of months.

### STORMWATER ISSUES STRIKE AGAIN

Stormwater has been a hot topic for several years now, and VNRC has been a con-

stant presence throughout the debate. At the close of last year's legislative session, VNRC helped to broker a deal between the business community, the state, and environmental interests regarding the issuance of stormwater permits under Vermont law. One primary component of that deal included a provision for the agency of natural resources to issue "Watershed Improvement Permits (WIPs)," permits designed to address stormwater discharges on a watershed scale. This approach has many beneficial qualities, not the least of which is a legislative endorsement of water quality analysis at the watershed level.

However, the statute also provides that such permits can only be issued if they will result in attainment of the Vermont Water Quality Standards within a five-year period. The agency reads the statute differently, and issued the permits despite the fact that, in their own opinion, the permits will not result in attainment of the water quality standards within any discernable time period, much less five years.

After carefully considering the language in the statute, and reviewing the permit with experts in the field, VNRC and the Conservation Law Foundation (CLF) appealed the WIPs to the Water Resources Board. All of the experts agreed on most of the facts of the case, including the fact that nobody could say for certain when the water quality standards would be met under the WIPs, if ever. VNRC and CLF believe that this admission all by itself renders the WIPs flawed, and have asked the Board to send the permits back to the agency for further proceedings.



*The Clyde River is a river, after all,  
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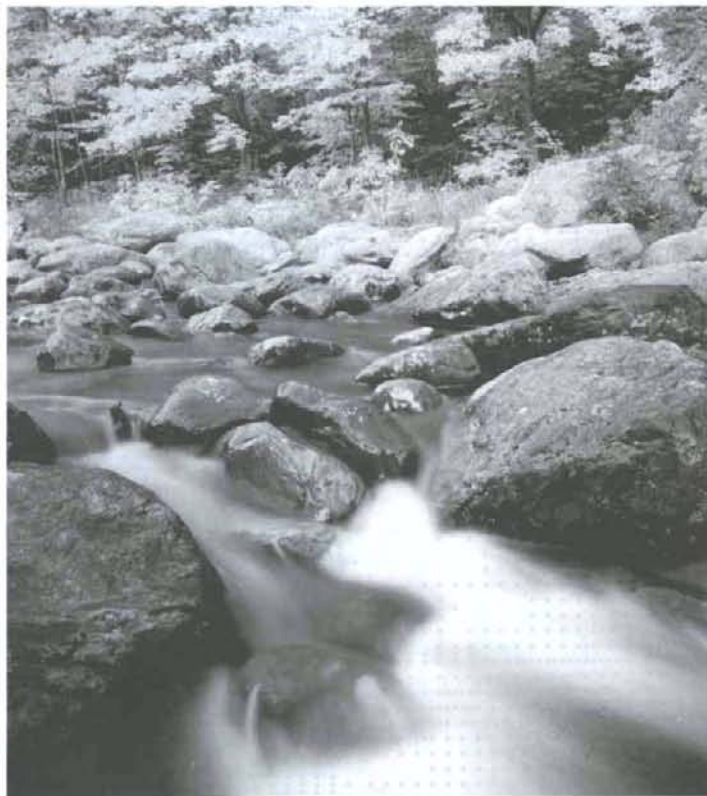


## GREEN MOUNTAIN NATIONAL FOREST PLANNING

VNRC has been active in tracking multiple planning initiatives and rulemakings regarding national forest management. The Bush Administration recently unfurled a number of complicated rulemakings targeting the manner in which national forests are managed, including the degree to which the public will be able to comment on planning and management activities.

With assistance from Vermont Law School's Environmental Law Clinic, VNRC filed extensive comments regarding the proposed rulemakings. Several of the proposed rulemakings would allow the Forest Service to categorically exclude from environmental review many forms of timber harvesting including fuel reduction, disease, and insect management. While these timber treatments may have merit on the forest if planned well, when a project is categorically excluded, meaningful environmental review is eliminated, and the public has a decreased ability to comment on the environmental impacts of planned decisions. At the heart of VNRC's concern is that the public will have a limited ability to understand the possible impacts of proposed management on national forests.

Beyond these proposed policies, the Forest Service is proposing to weaken the public's ability to appeal management decisions. The Forest Service is also proposing to revamp the manner in which long-term management plans are drafted and implemented. This last effort will have the most impact on the future direction of the Green



*At the heart of VNRC's concern is that the public will have a limited ability to understand the possible impacts of proposed management on national forests.*

Mountain National Forest. The proposed rulemaking suggests that the Forest Service will no longer be required to perform an environmental impact statement when it writes a new management plan. Furthermore, important wildlife monitoring requirements will be made discretionary, and the public's ability to appeal final management plans will be eliminated.

The cumulative impact of these proposed rulemakings is the public's ability to understand the environmental impacts of proposed management decisions will be curtailed, as will opportunities for redressing problematic issues

with proposed activities. In light of these concerns, VNRC will continue to advocate with the Green Mountain National Forest for meaningful environmental review and sound wildlife management on Vermont's national forest.

On a related front, VNRC has been actively participating in several planning initiatives regarding the Green Mountain National Forest. We have been attending "Blueberry Hill Gang" discussions which are coordinated to bring diverse interest groups together to discuss issues such as wilderness designation, timber harvesting, and recreation on the Green Mountain National

Forest. Furthermore, we have been participating in a planning process discussing a proposed land swap and expansion of wind towers onto national forest at the Searsburg location. VNRC will keep you updated on the progress of these planning discussions.

## STATE LANDS PLANNING

With a new Forest Program Director on board, VNRC has been actively engaged in commenting on new management plans being developed for state forests and wildlife management areas. VNRC has been busy tracking planning efforts on both the Willoughby and Coolidge State Forests. Our consistent message so far is that we support the Department of Forests, Parks, and Recreation taking a balanced approach to land management planning; one which carefully considers both active management including timber harvesting and passive management including ecological protection of biological resources.

On the Willoughby State Forest management plan, VNRC supported the Department's recommendation to create a Special Recreation Area to provide a unique backcountry camping and recreation experience around several remote and ecologically significant ponds in mature hardwood forest. Overall, the proposed final plan for the Willoughby Forest would protect the Willoughby Cliffs Natural Area and create several highly sensitive and unique and special use areas. The plan would still leave a majority of the overall forest classified as general use, which promotes both timber and wildlife habitat management, along with dispersed



## VERMONT PERSPECTIVE

recreational activities. This balanced approach to management makes sense, and VNRC will continue to advocate for proper resource protection and sustainable forestry practices as more state lands move through the planning stages. Camel's Hump State Park and Groton State Forest are on our radar screen.

An additional state lands issue that garnered our attention was a proposal to amend the long-range management plan at Victory State Forest to allow for the temporary installation of wind measurement towers on Kirby and Umpire Mountains. Our official response to the Agency of Natural Resources was that the state should begin a long-term planning initiative that determines appropriate locations and environmental guidelines

for wind power development on state lands. We are pleased that the Agency of Natural Resources will in fact be developing a policy on the use of state lands for wind energy development this year. The proposed wind measurement towers will be put on hold until this policy is in place.

On a separate note, VNRC is about to launch an intensive push for improved funding and staffing for the Vermont Nongame and Heritage Program. We are finishing a white paper on strategies for strengthening habitat conservation in Vermont. We hope this will be a springboard for demonstrating that there are varied approaches to species management in Vermont, including funding species recovery and planning efforts using creative funding mecha-

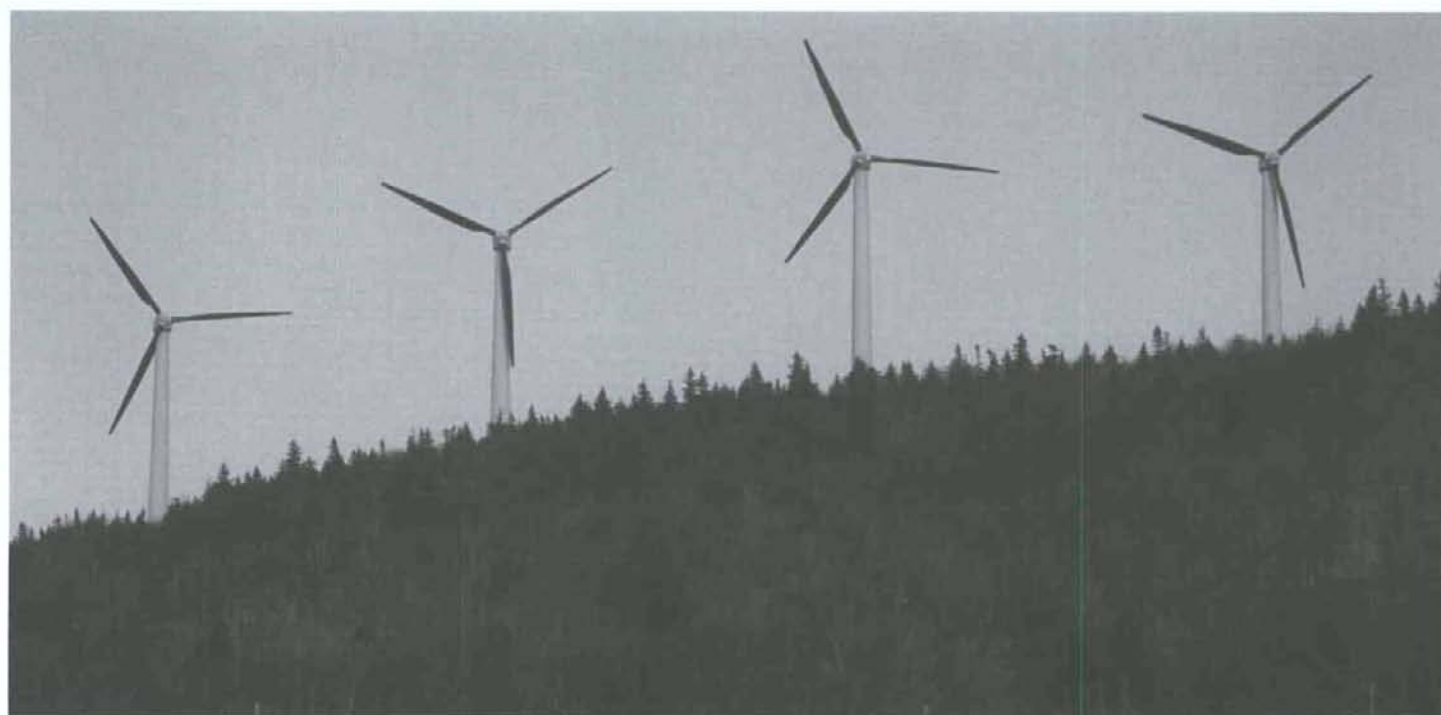
### PROPOSED WIND ENERGY PROJECTS

- An expansion of the Searsburg site, from 6 MW to 40 MW with up to 30 new towers providing power for 15,000 homes.
- Glebe Mountain/Magic Mountain Ski Area in Londonderry with 27 towers providing power for 18,000 homes (50 MW).
- Little Equinox Mountain, Manchester with 5 turbines providing power for 3,400 homes (9MW).
- East Mountain in East Haven with 10 towers providing power for up to 5,700 homes (15MW).
- Kirby and Umpire Mountains in Victory State Forest—the current proposal is only for temporary wind measurement towers to study how much wind energy would be available.
- Lowell Mountain in Lowell with up to 30 turbines providing power for 15,000 homes (40MW).

nisms. With an overwhelming majority of Vermonters supporting the recovery of threatened and endangered species in Vermont, we plan to work with the legislature next session to find a better solution for funding nongame species work in the state.

### WIND ENERGY AND RIDGETOP DEVELOPMENT

Within the last year, Vermont has seen an unprecedented interest in developing wind farms on some of our mountaintops. Vermont has





only one commercial wind farm, the Searsburg Wind Project, a six-megawatt (MW) project that generates enough power for 2,000 Vermont families. There are currently proposals to develop six more wind farms that could provide up to 150 MW of power for over 50,000 families. If constructed, the combined output from clean, local wind projects would represent 10-15% of Vermont's total power supply.

Modern day commercial wind towers stand 200 feet tall, and the blades can extend the total height another 150 feet. Given this height, the FAA requires that the turbines have lights on them to warn aircraft of their presence. In Vermont, the only place where commercial wind energy is economically feasible is on ridgetops between 2,200 and 3,500 feet. Many residents have expressed concern that the development of wind farms in Vermont could scar the aesthetic beauty of our rural landscape that we cherish. There are environmental issues such as the impacts on wildlife habitat that need to be addressed as well.

As an advocate for the protection of our natural resources and development of new renewable energy sources, VNRC has had to make some hard choices. Likewise, the state, regions and communities will also have to make some difficult decisions in the next few years. However, we believe that wind energy facilities can be developed in Vermont in a way that fits the Vermont landscape and enhances our quality of life.


Over the next several months VNRC intends to undertake an initiative with the key stakeholders to identify the issues and seek consensus on solutions that will foster renewable energy production

while enhancing Vermont's quality of life.

We will include the Regional Planning Commissions, the Vermont Department of Public Service, wind energy developers and businesses, community leaders, other

conservation organizations and concerned citizens. VNRC has already met with representatives from each of these groups of stakeholders to lay the groundwork.

Working together, we will initiate an on-going process

that will identify wind energy siting guidelines and suitable areas for wind energy developments that are technologically feasible and that meet community and regional aesthetic, environmental and social concerns. 



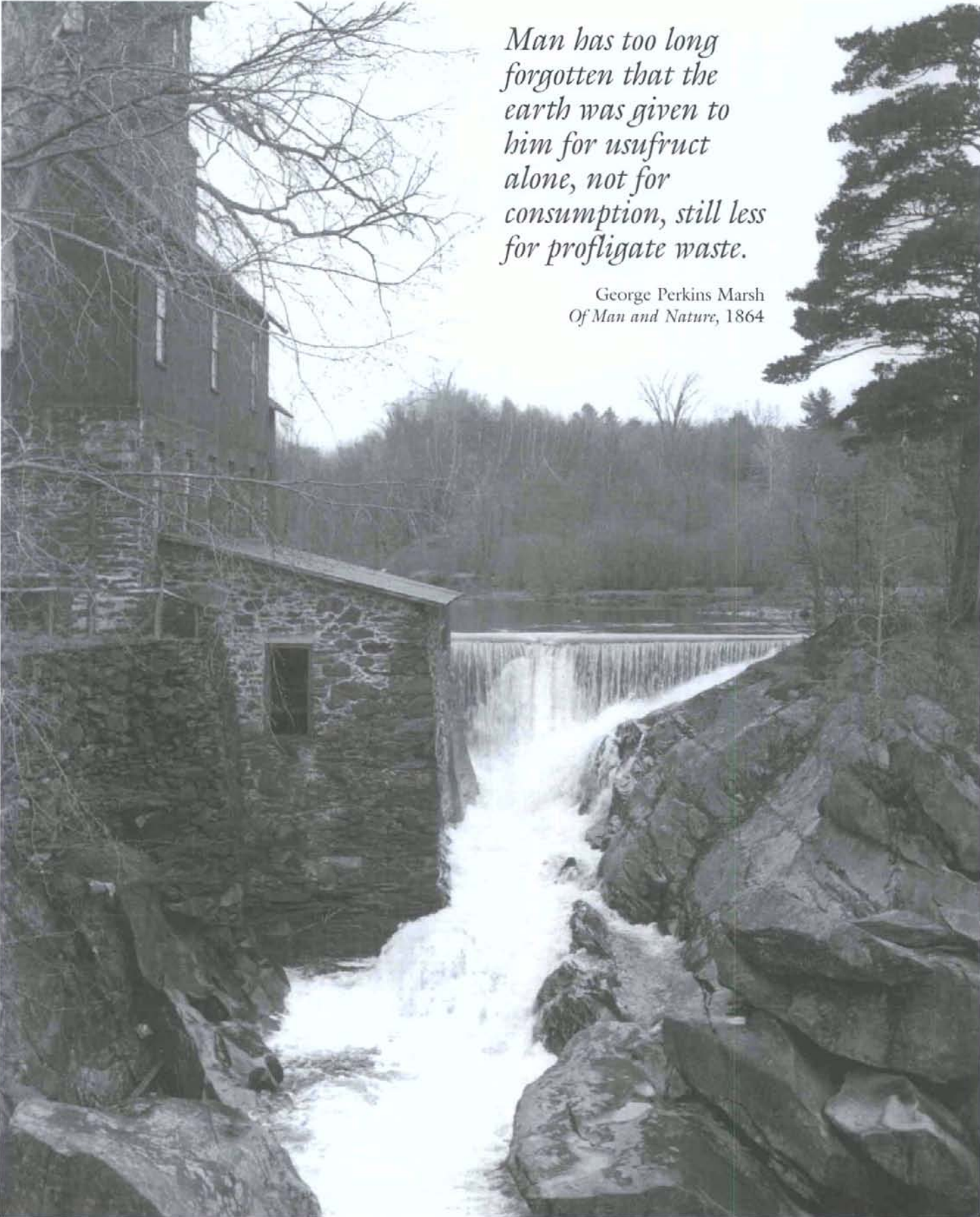
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*Man has too long  
forgotten that the  
earth was given to  
him for usufruct  
alone, not for  
consumption, still less  
for profligate waste.*

George Perkins Marsh  
*Of Man and Nature*, 1864



# Choices, Chances and Close Calls

## HOW VERMONT GREW TO VALUE ITS NATURAL ENVIRONMENT



BY WILL LINDNER

Vermont has always resisted the pressure to become just like everywhere else,” said *Vermont Life* Editor Tom Slayton. He swiveled in his chair amid teetering piles of books and papers, as outside Montpelier hunkered down in sub-zero temperatures. “I hope we are able to continue that noble tradition of resistance,” he added, “but we’re at the mercy of huge economic forces.”

Those forces were evident not far from his desk: in the strip-development on Route 302 that has already rendered a corner of Berlin indistinguishable from “everywhere else”; in the housing subdivisions devouring open land in Barre Town; in the interstate highway almost audible from Slayton’s office, which has become a thoroughfare for commuters to Chittenden County; and close by in the Vermont Statehouse, scene of a steady drum-beat that encourages more roads and sprawl, weakened citizen review, dependence on fossil energy, and development that remains unplanned and uncoordinated 33 years after Act 250 was passed.

They are powerful forces, with the weight of convention behind them. However, for 40 years VNRC has championed alternatives. It has defend-

ed citizens’ rights to retain the character of their communities in the face of corporate onslaught, insisted that government agencies protect our commonly held resources, and sought to persuade business and political leaders of the value and economic potential of environmental conservation.

But as VNRC looks back to June 29, 1963, when a group of prominent educators, naturalists, farm and forestry advocates and government leaders founded the Vermont Natural Resources Council – and farther back, still, through long years of Vermont history that predated the organization – recurring patterns can be discerned. The forces Slayton warns of are not new; in one form or another they have lurked on Vermont’s doorstep and intruded over the threshold for 250 years.



Farm auction, Cabot



*...in the relative  
blink of an eye  
they stripped  
the state of  
its forests,  
exterminated  
its wolves,  
bears, beavers,  
catamounts,  
deer, moose  
and passenger  
pigeons, silted  
and polluted  
its waterways,  
and in many  
places depleted  
the soils.*

### 'SO GOES VERMONT'

In 1971 VNRC and the Environmental Planning Information Center (EPIC) sponsored a 23-minute slidefilm funded by the Ford Foundation and produced by filmmaker John Karol. In 2003, *So Goes Vermont* is painful to watch. It documents a farm auction, with still photos and voice-over from local folks gathered for the event. They are watching one of their own go under, bidding on his cows and equipment even though they realize it is their demise they are witnessing.

These Vermonters felt they were being invaded. Urban America was being mainlined straight into their villages by the new interstate highway system, overwhelming the residents of Quechee, Wilmington, Dover and other towns, who could only watch as property values vaulted beyond their grasp and Main Street went from hardware and dry goods to ladies wear and watering holes. No less than today, this earlier Vermont faced, in Slayton's words, enormous pressure to "become just like everywhere else."

It was a losing proposition, because the pressure for expanded municipal services outstripped the tax revenues from development. An elderly former selectman laments, "If we want to go back to the old days we just must erase all this and move out."

"But there's another point," he adds soberly. "Our cemeteries are here, our lots are here . . . our families."

Soon after this film was made Vermont's

Abenakis petitioned the state to regain control of ancient burial sites from which their forebears were forcibly separated. In other words, the pattern has been going on for centuries. Settlers from down-country assumed title to the wilderness between Lake Champlain and the Connecticut River in the 18th century, and in the relative blink of an eye they stripped the state of its forests, exterminated its wolves, bears, beavers, catamounts, deer, moose and passenger pigeons, silted and polluted its waterways, and in many places depleted the soils. They pushed Vermont's natural resources nearly beyond their capacity to recover.

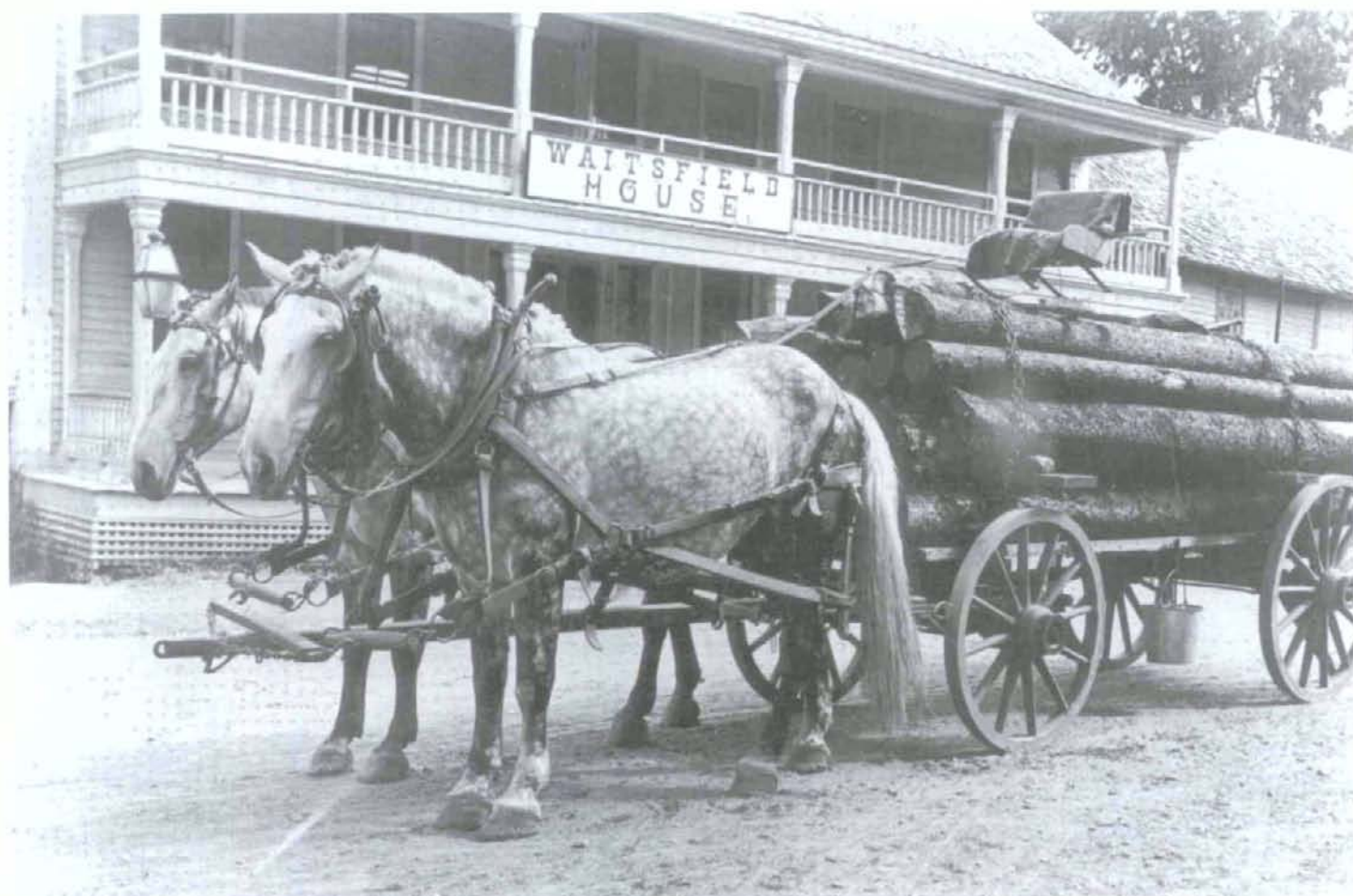
And they displaced the people who were there when they came. Now, ironically, the descendants of those settlers were gathered at a farm auction in 1971, wondering if the same thing would happen to them.

### ROUND ONE: DEFORESTATION

The northern tribes – Abenakis, Iroquois and Algonquians – did not pad through the forests like spirits, without rustling the leaves or leaving a mark. Jan Albers, in *Hands On The Land* (MIT Press, 2000), writes, "Native Americans had been shaping the landscape . . . for thousands of years. Long before the colonists came the Natives of New England had cleared great tracts of trees through burning. They preferred that the forest be park-like . . . for this made moving through the forest much easier."

While they migrated seasonally through





Vermont's landscape to camp at propitious times in high- or low-elevation forests or near rivers and lakes, they stayed rooted enough to develop agriculture. State Archeologist Giovanna Peebles says the earliest Native agricultural sites date back to 1100 B.C. They grew maize, beans and squash by the Connecticut River in Springfield, at a site in Alburg and in what is now Burlington's Intervale.

Peebles characterizes the Natives' relationship to the land as one of "intimacy." They had had 12,000 years – six times our span since the birth of Christ – to perfect it.

"Intimacy with the landscape and environment enabled them to predict over the four seasons when and where they would find animals for food and clothing, birch for their canoes and baskets, and good stones for toolmaking," says Peebles. "Without that intimacy they couldn't have sustained themselves in this climate."

The white settlers who trickled into Vermont in the mid-1700s from southern New England – many lured by land speculators like Ira Allen – had no such history of intimacy. The dense virgin forests terrified them. They cleared their plots urgently, out of a sense of survival. Later, European

traditions of orderly homesteading would influence private and community landscape decisions and bequeath us the lovely farm-and-village vistas we cherish today, but the pioneers' first motivation was to put clear spaces between themselves and the human and animal predators lurking in the wilderness.

With the felled trees log homes were constructed. Plots were stumped and plowed for farming. Vermont's soils, enriched by eons of naturally occurring decomposition, responded quickly to cultivation (though in many higher-elevation settings the thin soils soon played out). Subsistence remained agriculture's purpose for several decades following statehood in 1791, but logging immediately became intertwined with (dare we say it?) growth. Milled lumber was necessary for any construction more sophisticated than log cabins, and settlements grew up around the sawmills and gristmills that began to serve communal needs.

Hydromechanics entered the equation, and significantly prescribed our map today.

"People needed water to power mills," says Peebles. "To harness the waters you have to have dams. Chelsea, Vergennes, Winooski, Warren,

*Horse logging,  
Waitsfield VT*

*The northern  
tribes did not  
pad through  
the forests like  
spirits, without  
rustling the  
leaves or  
leaving a  
mark.*



Log drive near Sharon,  
Vermont circa 1910.



*"Many of the  
small streams  
and brooks are  
dried up. Mills,  
which at the  
first settlement  
of the country  
were plentifully  
supplied with  
water . . .  
have ceased to  
be useful."*

— Samuel Williams,  
1794

Windsor, Middlebury, Proctor, Gilman, Tunbridge, Post Mills... There are very few towns in Vermont not predicated on those mills."

The legacy of all those mills is some 2000 dams in this small state, hundreds of which ought no longer to be there. VNRC is engaged in a long-term effort to have the state remove dams with little historical value because of their complex, destructive impacts on stream ecology.

The pace of development quickened. Our forebears had no regard for forests, even after the threatening wilderness had been tamed, but the discerning few noticed the consequences. In his *Natural and Civil History of Vermont*, published in 1794, Samuel Williams observed: "The earth is no sooner laid open to the influence of the sun and winds than the effects of cultivation appear. The surface becomes more warm and dry. As the settlements increase, these effects become more extensive."

In a surprisingly short period, the waterways themselves were affected. "Many of the small streams and brooks are dried up," Williams wrote. "Mills, which at the first settlement of the country were plentifully supplied with water . . . have ceased to be useful."

The early naturalist also noticed that "miry places" (wetlands) were drying out. Not yet appreciative of their ecological value for cleansing surface and ground water, controlling floods and providing habitat, Williams considered this advantageous because the former swamps and bogs provided new arable land.

Deforestation was driven by commercial factors:

- A lumber industry which, Albers relates, made Burlington the nation's third-largest lumber port by the mid-1800s;
- The nation's appetite for potash, which was derived from treating wood ashes to make soap, gunpowder, dyes, fertilizer and other products;
- A huge charcoal market for the Northeast's rudimentary blast furnaces. "There were entire settlements, with 30 or 40 large kilns for making charcoal," says Peebles. "Picture some mining ghost-town in Colorado, with crumbling, overgrown old rails and platforms. We had that here in Vermont!" You can still find remnants in the woods.
- Grazing land for sheep – more than 1.6 million of the animals in 1840 as Vermont, for a brief period, led the country in wool production.

By the time the 100-year frenzy of clearcutting had played out, 80 percent of the land was devoid of trees. Deer and other forest denizens disappeared (deer were reintroduced to Vermont in 1878). Without root systems to hold soils in place Vermont's hills were beginning to slide into its streams and rivers. Writer, naturalist and statesman George Perkins Marsh (1801-1882) noticed the effects as a youngster in Woodstock.

"He could see the shape of Mount Tom change after a heavy rainfall," says *Vermont Life's* Tom Slayton.



Then came the floods. A deluge in 1828 was followed by more floods claiming lives, farmland, houses and bridges in 1830, 1858 and 1869.

Thanks in part to Marsh's celebrated volume, *Man and Nature* (1864), Vermonters began to understand the havoc their "profligate waste" of the environment had caused. By the early 1900s the slow process of reforestation had begun – not in time, however, to avert the infamous flood of 1927 that wiped out much of the state's manmade infrastructure and killed more than 80 people.

Vermont paid dearly for its century of unbridled environmental abuse and destruction.

### 'ONE IF BY LAND...'

For a variety of reasons, benign neglect among them, the environment began to recover as the 19th century eased into the 20th. Particularly, trees – planted in some cases, but more generally of their own accord – staged a comeback. Albers relates that Vermont had hit upon hard times, leading to the abandonment of many marginal farms; the lumber industry faltered, having stripped itself of raw material; and cows, too clumsy for much of Vermont's terrain, replaced sheep in lowland pastures. For these reasons and others, wilderness was able to reassert itself.

In *The Nature of Vermont* (University Press of New England, 1980), former state naturalist and VNRC board member Charles Johnson describes how the forests recovered:

"White pine... grew in profusion in the fields and logged-over areas. For many years they prevailed, until they were tall enough, and had thinned themselves enough, to offer growing space and light below for other trees. Since white pine is intolerant of shade, it did not seed or sprout under itself; instead, more shade-tolerant hardwoods... grew in the understory. The white pine had sealed its fate. Hardwoods would be the future generation."

Eventually the pines were cut, providing air, sunlight and space in which young red and sugar maples, beech, oak and hickory thrived. In an era influenced by the conservationist president Theodore Roosevelt and his Chief Forester Gifford Pinchot, some people had wised up. "With the lesson of indiscriminate logging still strong in memory, twentieth-century professionals selected the trees they wanted and left the rest of the forest to grow and supply trees for the future," wrote Johnson. "These were the beginnings of forest management."

Yet the reforested hills, providing panoramas of summer greens and autumn reds and golds, brought new exploitative temptations. The state had a close call in 1936 when a proposal to blaze a highway atop the very spine of the Green

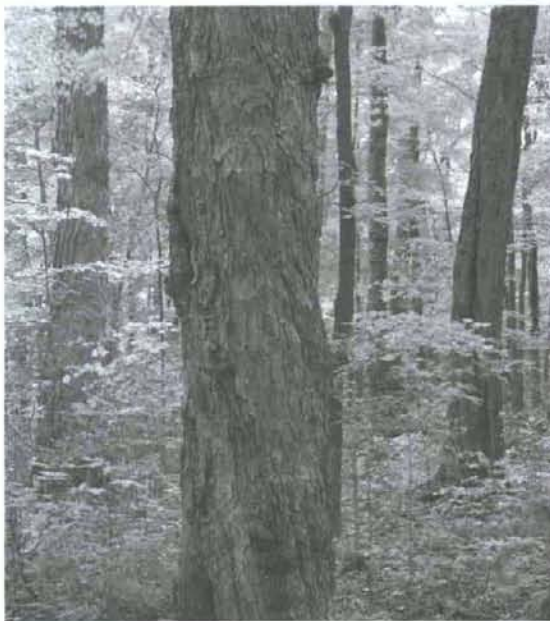


*Fellows Gear Shaper Co.,  
Springfield VT*

Mountains nearly came to pass. The proponents were Vermonters; Albers writes that they perceived social benefits from a road that would expose the provincial citizenry to the wider world. Certainly the times – the Depression, America's growing infatuation with the automobile – were a factor as well. The Green Mountain Parkway would be a massive New Deal-style public-works project, and when it was complete would become a major tourist attraction.

If the environmental costs seem catastrophic in hindsight (today, guardians at the summits of Camel's Hump and Mount Mansfield usher hikers and dogs away from the delicate alpine grasses), they apparently figured little in the debate. Rather, opponents seemed not to like change and were distrustful of city folks. The project went to a vote in the Legislature, where it lost, 126-111. Unwilling to give up, proponents forced a Town Meeting Day

*The state had a close call in 1936 when a proposal to blaze a highway atop the very spine of the Green Mountains nearly came to pass.*







*Hotel Champlain, Lake Champlain, 1907*

*Turn-of-the century Vermont farm*



vote. The public ratified the Legislature's verdict, defeating the Parkway, 42,318 to 30,897.

### 'TWO IF BY SEA...'

Still, an environmental ethic was maturing, and it came to embrace Vermont's waterways.

A comprehensive *Guide Plan and Report*, prepared in 1974 for the state Agency of Environmental Resources by former VNRC board member and executive director Montgomery Fischer, traced the development of water-resource law and regulation. Fischer, now of the National Wildlife Federation, described how in the first half of the 20th century state and federal agencies gradually asserted a role for government in pollution prevention and abatement.

"Contributing factors were beginning to compound a minor problem which existed in several parts of the state – a decreasing water quality," Fischer wrote. "Creamery discharges, manufacturing plant debris, sawmill wastes, agricultural runoff and increasing domestic wastes all contributed to an awareness that what was once (believed to be) an unlimited and unspoiled natural resource was now steadily deteriorating."

The first generation of laws prohibiting the discharge of sewage, debris and other contaminants pertained to specific impaired bodies of water, leaving others unprotected. Something of a breakthrough occurred in the 1930s when Vermont officials started viewing water-resource management from a broader, basin-wide perspective.

George Perkins Marsh had beaten them by 100 years. When still a boy, he accompanied his father on a drive in the family chaise outside Woodstock.

"He stopped his horse on top of a steep hill," Marsh wrote in his 1864 book, "bade me notice how the water there flowed in different directions, and told me such a point was called a watershed... I never forgot that word."

It would be decades before watersheds and basins became organizing concepts for surface-water reclamation and conservation. In fact, 30 years after the passage of the 1972 Clean Water Act, state officials have not effectively applied its watershed provisions. Vermont benefits from the labors of several community-based basin-protection groups, but the Agency of Natural Resources has failed to meet a series of deadlines – imposed by the Legislature with VNRC's encouragement – for drafting Water Quality Management Plans for Vermont's 17 basins. (The current deadline is 2006, and it is a sign of some progress that plans are coming together for the Lamoille, the Poultney/Metawee, and White River basins.)

The Clean Water Act's signature triumph is that it provided funding and guidance that enabled Vermont to effectively terminate the most obvious abuses cited in Fischer's report: creamery discharges, manufacturing plant debris, sawmill wastes and domestic sewage from farmsteads and municipalities. These were vestiges of Vermonters' historical carelessness about their environment.

Many people have forgotten, however, how near



we came to losing our most famous water resource, Lake Champlain, to the political, financial and cultural pressures of greater America. Had the state caved in to a series of proposals in the 1960s and '70s, the lake today would be a thoroughfare for ocean vessels, a nuclear power plant would be cycling water through Champlain's hypolimnion (cold, lower reaches), and its surface level would be controlled by a huge dam in Quebec. In cumulative effect, it would have become a mall of a lake, virtually an artificial environment in the service of capital.

The onslaught began with a proposal in the early 1960s to make Lake Champlain a seaway, dredging and widening its shallower passages to create navigable channels for connecting to the St. Lawrence and Hudson rivers.

"The construction and shipping interests were very much in favor of it, and it was pushed by Sen. (George) Aiken for getting low-cost grain to Vermont dairy farms by barge or large vessel," recalls Peter Paine, a New York State attorney who helped organize the opposition. "Basically, it was an engineers' boondoggle."

As Paine says, "The environmental movement virtually didn't exist then." So they invented it. Environmental concerns about the plan included wetlands destruction and ships and barges dumping their bilge into the lake's waters. But it was on economic, rather than environmental, grounds that the proposal eventually met defeat before the International Joint Commission, which regulates boundary issues between the U.S. and Canada. A beneficial result of the five-year dispute was that the seaway opposition coalesced into the Lake Champlain Committee.

The Committee – and Paine, now the group's attorney – took the lead in another battle a few years later when Central Vermont Public Service Corp. proposed to build a nuclear power plant on lakeside property in Charlotte. In those days the nuclear power industry had a green light to develop almost wherever it wanted. Nuclear-generated electricity was promoted as "too cheap to meter," and the Chernobyl and Three Mile Island accidents were still in the future.

But as a result of the seaway debate there was now a functioning environmental movement on the shore, and advocates were concerned about the accumulation of radionuclides and water-temperature changes wrought by discharges of cooling-tower water into the lake. Buoyed by factual evidence from Cornell University professors, the Committee was ready when Gov. Deane Davis convinced the secretive Atomic Energy Commission to attend a "town meeting" at UVM's Patrick Gymnasium.

"They weren't prepared for a bunch of

Vermonters, who are used to standing on their hind legs and asking questions and having answers," Paine recalls with glee. "The AEC representatives' arrogant attitude . . . blew up in their faces." When Davis came out against the plan the utility backed off, handing the AEC an extremely rare defeat.

"That was a considerable accomplishment," says Paine. "We got a lot of support from VNRC and other organizations. I guess everyone is happy today that there isn't one of those things sitting by the lake."

It cannot be said that our lake has escaped degradation. Phosphorous and mercury deposits and e-coli bacteria are all-too present and destructive, seeping into Champlain from non-point sources. But when well-healed forces tried their approach on Vermont from the great lake, they were rebuffed. Those are victories worth remembering.

## MARSH'S LEGACY

More than he could have known, Vermont George Perkins Marsh – who presciently asserted that "human improvidence" in the care of life-sustaining resources could eventually "threaten the extinction of the species" – reshaped people's thinking concerning their relationship to the natural world. Previously, few if any had conceived of an ethical obligation to the environment.

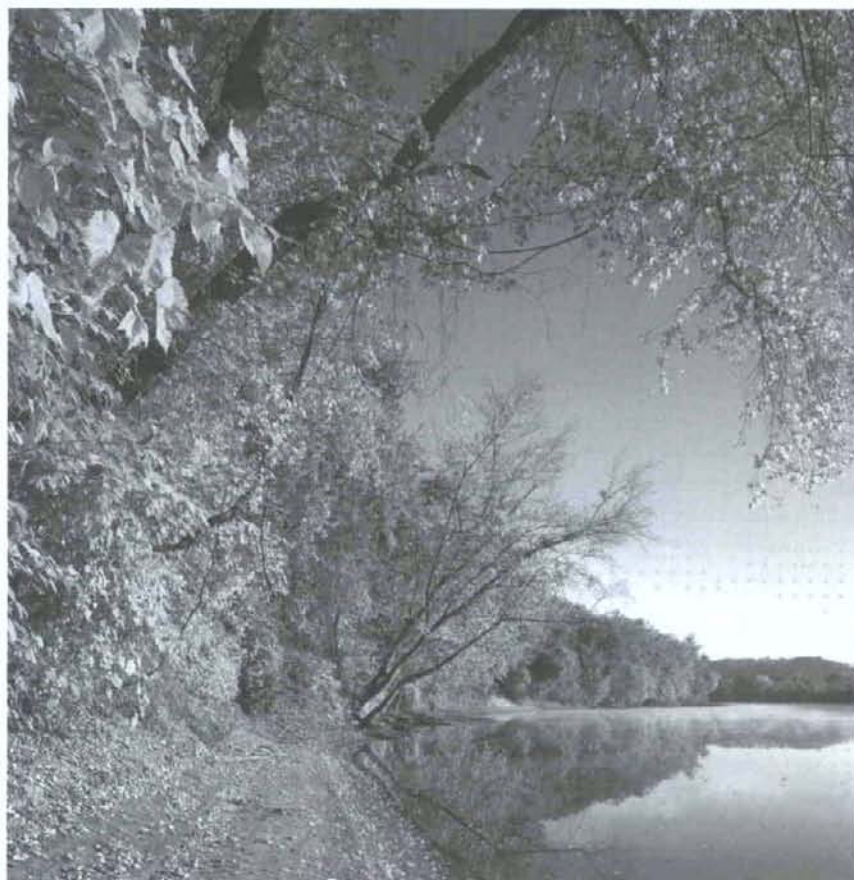
"What Marsh initiated was the idea of people

*Many people  
have forgotten  
how near we  
came to losing  
our most  
famous water  
resource, Lake  
Champlain.*

*George Perkins Marsh  
in his study*







*"It was common practice in the wintertime to take trash out to the middle of the ice in the Connecticut River and pile it up until it formed a mound a couple stories high."*

—Brendan Whittaker

serving as caretakers of the land," says Tom Slayton, "of their being responsible to convey it, in whole form, to the next generation."

This was a revelation, and is a concept still struggling for acceptance.

"The other position is of land as property, land you can use entirely as you please and that can make you rich," Slayton observes. "That conception starts with the Allen brothers and comes down to today."

"VNRC is in the camp of land-as-responsibility. So, basically, is the entire environmental movement."

The Vermont Natural Resources Council arose in 1963 out of an almost intuitive need, shared among its founding members, to promote the public's consciousness of Vermont's bounteous but vulnerable ecology. This was seven years before the first Earth Day (1970), considered the catalyst of the modern environmental movement. It was six years before cries of alarm reached Gov. Deane Davis from Wilmington, where blueprints for second-home development forecast almost 2,000 new residences in a town with a population of 1,586; and Winhall, where the subsidiary of a paper company was planning to subdivide 23,000 acres in fragile, high-elevation terrain. Those concerns would lead to the inception of Act 250, which itself became a *cause celebre* for VNRC.

But 1963 predated those concerns. Yet early

environmentalists recognized that Vermont needed a dose of consciousness-raising.

"The Vermont of the 1930s, '40s and '50s was a place where honest, hardworking people straight-piped their sewage into the streams behind their farms and that's just simply what they did," says former VNRC board member and former state Environmental Secretary Brendan Whittaker. "It was common practice in the wintertime to take trash out to the middle of the ice in the Connecticut River and pile it up until it formed a mound a couple stories high. When the ice went out it took the light bulbs and mayonnaise jars and everything else away with it."

The fledgling organization issued a short list of objectives. They were:

1. "To educate the public in regard to the interrelationship of our soils, waters, plants and animals, their effect on man and man's effect on them;
2. To promote wise use and preservation of natural resources to the benefit of Vermont citizens;
3. To provide means for representing all interested individuals and organizations, and to present their representations to the public."

Under the guidance of generations of board members, and a staff that has included some of the most respected names in Vermont conservation, VNRC through these 40 years has pursued those goals of public education and resource protection, and represented Vermonters' environmental concerns in meeting rooms, court rooms and committee rooms. The environmental agenda has mushroomed from such early issues as the billboard ban (1968) and the bottle-return law (1972) to defending pasture lands against WalMart, participating in coalitions to protect the Northern Forest and remove the Newport No. 11 dam on the Clyde River, defending citizens' access to Act 250, their right to clean air and water, and the black bear's right simply to exist (in terrain dominated by ski resorts), and advocating for sustainable family farms, vital downtowns, and development-control laws without self-defeating loopholes.

## TO SCRATCH THE SURFACE

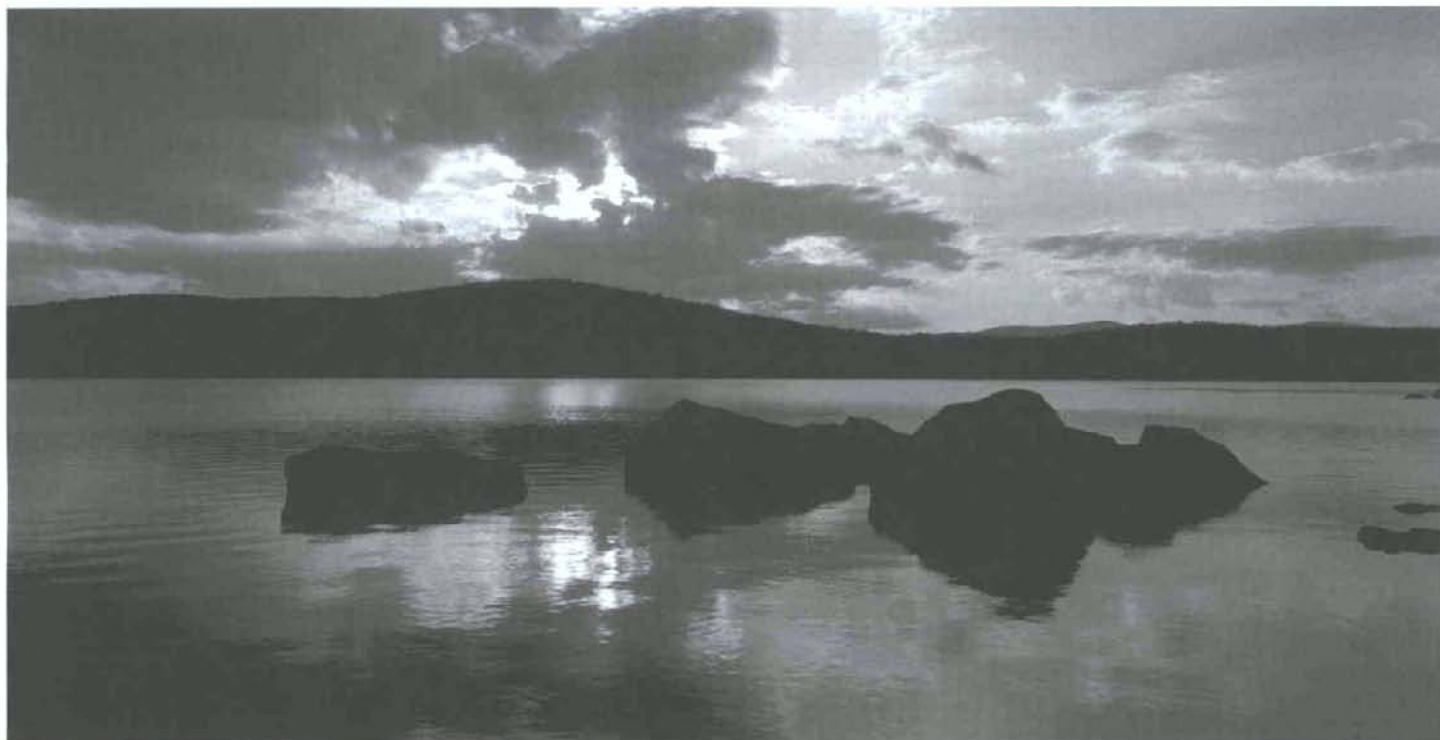
Today's conservationists know that Vermonters of an earlier age pushed the state's natural resources practically to the point of no return. Fortunately, the forests recovered. Fortunately, the 1972 Clean Water Act virtually eliminated point-source pollution in our surface waters. Fortunately, Vermonters now recycle and contaminated town dumps have been closed.

But VNRC Executive Director Elizabeth Courtney takes small comfort in Vermont's



*"But when the farmland gives way to development, when you've paved the land and put buildings on it, how do you recover from that?"*

— Elizabeth Courtney



recovery from a profligate past.

"It's one thing to have forests give way to farmland," Courtney says. "The forests can return again. But when the farmland gives way to development, when you've paved the land and put buildings on it, how do you recover from that?"

Our doorstep isn't darkened only by settlers and developers anymore. People with little awareness of Vermont are trashing our environment almost inadvertently.

"The airborne impacts of pollution from the West could have a devastating effect on everything, from our maple industry to public health," says Courtney. "Acid rain and mercury deposition are damaging our mountain, surface-water and lake ecologies. Climate change and the erratic nature of the weather are wild cards in their potential for environmental impact."

"We can not afford to simply focus on resource-use consequences from within the boundaries of the state. We must be focused outside our boundaries, too. We're not an island on this planet Earth."

*The author gratefully acknowledges the assistance of several individuals in the preparation of this report. In addition to VNRC staff members Kim Kendall and Stephen Holmes and author Jan Albers, whose*

*book, "Hands On The Land," was invaluable, others gave generously of the time; they include Seward Weber, Hub Vogelmann, Charles Johnson, Brendan Whittaker, Montgomery Fischer, Tom Slayton, Giovanna Peebles, Lori Fisher, Anne Baker Platt and Peter Paine.*

## Congratulations, VNRC



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# STICKING IT OUT

*Dogged Effort Wins New Life for the Lower Lamoille*

BY DOUG WILHELM

*"This one was painful; but getting good results on complex cases is never going to be painless. It requires people of good faith, who feel strongly about their issues, to work on them, and to work hard."*

— John Kassel

It took almost 10 years and hundreds of hours of hard effort by a succession of VNRC staffers, working and negotiating with volunteers from Trout Unlimited, state and local officials, and representatives of Central Vermont Public Service. But at last, early this year, the struggle over the Peterson Dam on the lower Lamoille River achieved a settlement.

Standing across the river in Milton, close to Lake Champlain, the dam is a working hydropower facility that for 55 years has periodically throttled downstream water flows and blocked upstream passage for a variety of fish, including salmon and sturgeon, that once spawned in great numbers on the Lamoille. The Peterson was the fulcrum of VNRC's campaign to force CVPS to abide by state water quality standards on the lower river — something the utility had not been required to do in the dam's whole history.

"This was a situation where the parties are pretty polarized on their issues when you go into it," says Jeffrey Cueto, chief of hydrology in the Vermont Water Quality Division. Among several recent negotiations and court battles that have centered on hydropower dams, seeking to balance

ecological and power-generating interests, the Peterson issue "was one of the harder nuts to crack," Cueto says.

"It was a tremendous amount of work," says Braden Fleming of Trout Unlimited, about the efforts that produced the settlement. "Right up until the end, I still thought something would go wrong."

"All sorts of questions could have kept us wrapped up in litigation for another 15 years," adds Kelly Lowry, VNRC's General Counsel and Water Program Director. "For every day that ticked by, there were insults to the resource. All that contributed to us wanting to bring this to a final resolution."

VNRC's leverage in the case was the U.S. Clean Water Act, which requires that when a federal license to operate a dam expires, the utility must get state certification that it is meeting water-quality standards before the license is renewed.

In 1994, VNRC appealed state certification of the Peterson Dam, whose federal license had expired in '87. That began the long struggle, both in court and at the negotiating table, which ended with the settlement this year. In it, CVPS agreed to



Chris Kilian, former VNRC General Counsel, and Mark Naud, former VNRC law clerk and current board member, worked on the Peterson Dam case in the mid-1990s.



Lisa Smith, left, former VNRC Outreach Coordinator, and Kim Kendall, current VNRC Staff Scientist, outside enjoying the Lamoille River.



guarantee higher-volume "conservation flows" of water below the dam; to provide young stocked salmon with downstream passage to Lake Champlain; to put half a million dollars into a new Lamoille River restoration fund; and, in about 20 years, to finally remove the Peterson Dam.

"We've got to wait years until the dam will come down," says Fleming of Trout Unlimited — "but I think the bottom line is that the river's a lot better off than it was. And when the dam does come down, we're going to improve it even more."

"I look at this as an example of the way public policy is implemented for environmental issues," reflects John Kassel, a Burlington attorney who served the Vermont Agency of Natural Resources from 1994-2000 as its general counsel, deputy secretary and secretary. "It's an attempt to apply the rule of law, and a regulatory system based on the rule of law, to a very complex public policy issue."

"Could this have gone more smoothly? Possibly," Kassel adds. "We might have had clearer guidance in the water quality standards ... but that would not have eliminated all the arguments. It takes people on all sides of an issue like this to hang in there and study the project in detail — because the skirmishes are always about the details."

### "FROM THE STURGEON TO THE BUGS"

The first few springs after the Peterson Dam was completed in 1948, walleye, sturgeon and a variety of other Lake Champlain fish swam upstream in multitudes, says a historical record of the lower Lamoille published by VNRC in 2000.

The fish were doing what they had done for centuries: seeking to spawn in clear, gravelly sections upriver. Instead, when a power-generating cycle would end on the dam and its water flow below the dam was shut off, "all kinds of fish were trapped and left to die," writes author Jeff Fellingner. "By the early 1950s ... fish no longer mobbed the base of the dam in springtime."

In the years to come, the impacts of the Peterson Dam settlement on the river and its aquatic life should be dramatic, says Lowry of VNRC.

"This will improve habitat for all species, from salmon and sturgeon to the bugs that live on the bottom of the rocks," he says. "It really was a win-win solution for us."

When the Peterson Dam finally comes down, it won't be the first one removed for ecological reasons. A much smaller, washed-out dam on Vermont's Clyde River was demolished in 1996. But, notes state fisheries biologist Rod Wentworth, "Most of the dam removals taking place across the country [involve] old, abandoned dams that are


not really serving any purpose. The distinction here is that this dam was put in a location that makes it very significant in terms of the environmental effects."

### "TO REALLY STICK TO IT"

The settlement isn't perfect. Though conservation water flows are guaranteed, spawning fish will still be unable to get upstream past the dam until it is removed.

"I think that's the nature of a settlement: everybody gains something, and everybody has given up something," says Fleming of Trout Unlimited. "The bottom line is, we have to do what's best for the river."

"If we had litigated the case, I don't think we would have gotten conditions that were any better than what we got," says Lowry, who succeeded former staff counsel Chris Kilian in leading VNRC's work on the case.

"I think the lesson to be drawn from this is that in order for well-balanced public policy to be implemented, it requires people to really stick to it," Kassel concludes. "This one was painful; but getting good results on complex cases is never going to be painless. It requires people of good faith, who feel strongly about their issues, to work on them, and to work hard." 

*Editor's Note: In reflecting on VNRC's history for the past 40 years, it's interesting to note the length of time devoted by a myriad of staff, volunteers and others to one specific project. VNRC would like to thank all of the individuals and organizations who helped with the Peterson Dam project, and would also like to thank the Orchard Foundation, Ward M. and Mariam C. Canaday Educational and Charitable Trust, Jessie B. Cox Charitable Trust, Patagonia Foundation, Vermont Community Foundation, and the Waterwheel Foundation for their support.*



Kelly Lowry, VNRC  
Water Program  
Director.



Jeff Fellingner, VNRC's Mollie Beattie Intern, wrote the Lamoille River History in 2000.



# VNRC ACROSS VERMONT

One way to inspire conservation is to increase appreciation for what we are working together to protect: a healthy, sustainable Vermont. Join VNRC this summer for some fun, outdoor events, and get a hands on look at some of the places we are working hard to protect. Take this opportunity to meet new people with similar interests, and pick a new place in Vermont for you to learn about and explore with our knowledgeable trip leaders!

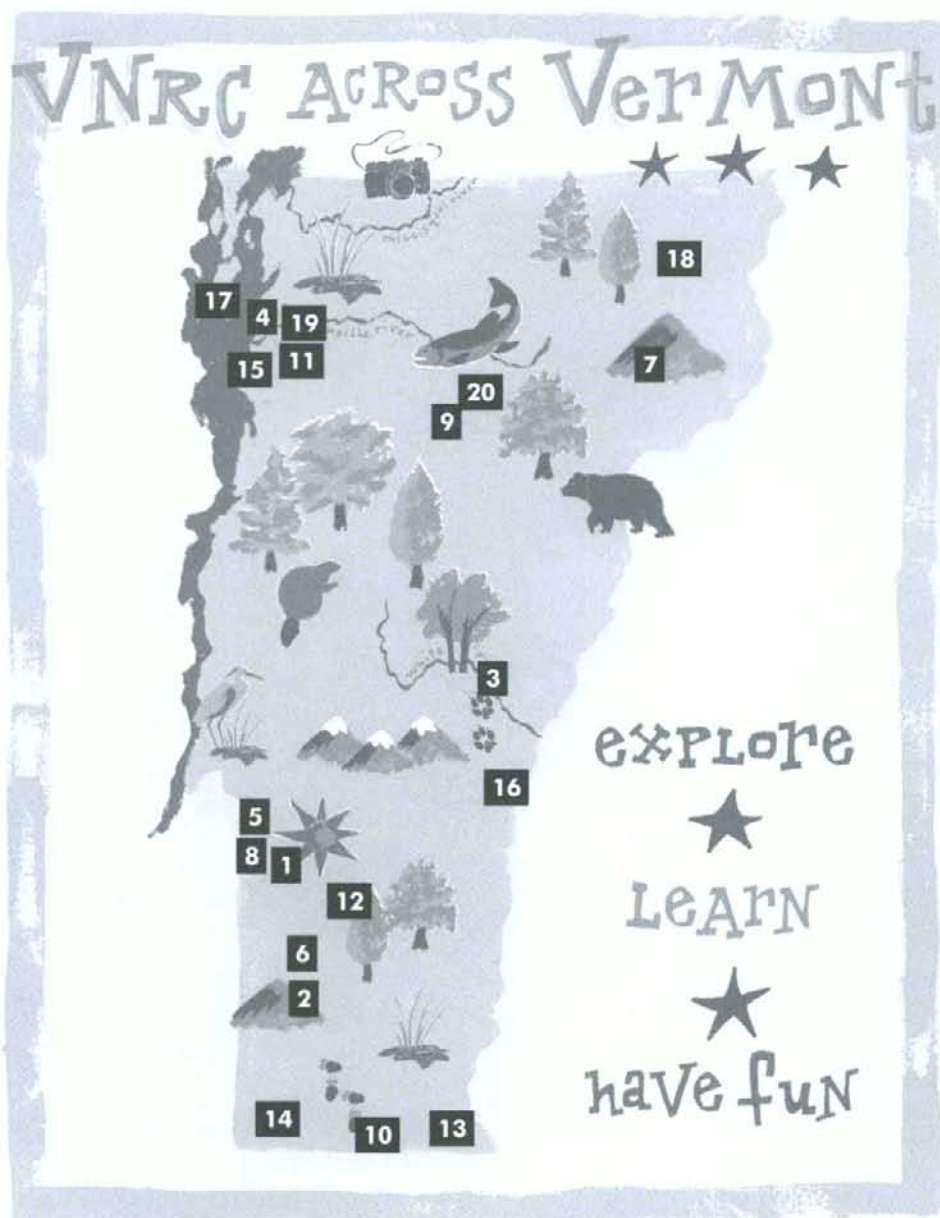
## 1 Tinmouth Channel Naturalist

**Canoe Trip:** The Tinmouth Channel is one of Vermont's most incredible, and beautiful, wetland complexes. Join VNRC Staff Scientist Kim Kendall on a trip through this Class One Wetland complex. Tinmouth, VT. June 19, 3:30- 7:30. Pre-register. ☺

**2 Battenkill Naturalist Paddle:** The Battenkill is one of the world's most legendary rivers and has been an economic engine of the Northshire region of Vermont. Paddle with naturalist Elizabeth Cooper and learn more about the ecological attributes of the Battenkill. Manchester, VT. June 24. 3:30- 7:30. Suggested donation of \$10 members, \$15 for non-members. Pre-register. ☺

## 3 Bird, Bug and Botany Walk:

Explore a pond and managed woodlands during this far-ranging nature walk, with a particular focus on bright flying and flowering objects. Bring binoculars, a magnifying lens (if you have one), and your youthful interest in Vermont's wildlife and wild places. Trip led by Bryan Pfeiffer. Sharon. 11AM- 4PM. June 25. Suggested donation of \$10 for members, \$15 for non-members. Pre-register. ☺





**4 Colchester Wetlands Naturalist and Birdwatch Trip:** Join VNRC Staff Scientist Kim Kendall for a trip through some of Colchester's Wetlands. Learn about the birds, plants, natural communities and animals that live in these wetlands. Bring your binoculars to do some early morning birding. June 28. 8am to 1pm. Pre-register. ☺

**5 Woods and Wetlands:** Learn about the biodiversity of an ecologically rich area of Vermont. Anything's fair game on this walk—from frogs to ferns, ospreys to orchids. Trip led by Bryan Pfeiffer. Poultney. July 1. 11:00am-4:00pm. Suggested donation of \$10 for members and \$15 for non-members. Pre-register.

**6, 7 Vermont's Energy Future Panel Discussions:** Vermont is at a crossroads in our energy future. Find out about current energy sources and different ideas for fueling 21st century Vermont. Lyndon State College. July 9, 6-8pm. Manchester Town Hall. July 21, 6-8pm.

**8 SolarFest:** Join VNRC at what the Vermont Chamber of Commerce (and VNRC staff) call "one of Vermont's 10 best events." SolarFest is a fun family event that incorporates music, performance and art into an educational opportunity about renewable energy and sustainable living. July 12 & 13, Green Mountain College, Poultney, VT. Find out more at [www.solarfest.org](http://www.solarfest.org). ☺

**9 JH Lumber and Mill:** John Hurley is a horse logger and biodiesel manufacturer. Learn more about bio-diesel and how John uses this vegetable oil to power his mill. We'll also take a walk through John's woodlot and learn about sustainable forestry. Berlin. July 15, 5:00- 8:00pm. Pre-register.

**10 Searsburg Wind Turbines:** There currently is only one wind farm in Vermont, the Searsburg Wind Farm, but several more are proposed. See for yourself what these wind farms look like, what they sound like and what kind of impacts they have on the

ridges. Searsburg, VT. July 23, 11:30am- 1:00. Pre-register.

**11 Chittenden County Uplands Naturalist Field Trip and Barbeque:** Join Sue Morse of Keeping Track, Inc. as she takes us through some proposed conservation lands of the Chittenden County Uplands and learn how conservation improves wildlife habitat and community. The evening will end with a barbeque and discussion hosted by Sue Morse. Jericho, VT. July 25. 3:30- 7:30 with a Keeping Track BBQ provided afterwards. \$30 members, \$40 non-members (includes dinner) Pre-register.

**12 Big Branch Wilderness Naturalist Field Trip:** The Green Mountains provide some of Vermont's cleanest and coldest water for drinking, recreation and wildlife habitat. Explore remote ponds, streams and wetlands in the Big Branch Wilderness with naturalist Elizabeth Cooper. Mt. Tabor. July 26, 10:00am to 5pm. Suggested donation of \$10 for members, \$15 for non-members. Pre-register.

**13, 14, 15 Renewable Energy Workshops:** To learn more about home renewable energy systems, join VNRC and Global Resource Options for a presentation on how you can bring renewable power into your home, how much it will cost, how you can tap into incentives and more. Brattleboro, St. Michael's Episcopal Church, July 23. Bennington, St. Peters Episcopal Church, July 30. Burlington College. Aug 6

**16 Cobb Hill Tour:** Cobb Hill in Hartland is a development focused on sustainable living. Join VNRC as we tour this development and learn about how they use green building design, the highest level of energy efficiency and a strong belief in sustainability to make this environmentally friendly community a reality. Hartland. July 28. 5:30-7:30pm. Pre-register.

**17 Lake Champlain Boat Ride:** Join Lake Champlain's Lakekeeper Rob Moore as we take a sunset boat trip on Vermont's largest lake. Along the way we'll learn about the ecological properties that make Lake Champlain a world class destination as well as the current threats facing the Lake. South Hero. August 13th, 3:30- 7:30pm. Pre-register.

**18 Clyde River Canoe Trip:** The headwaters of the Clyde River is one of the most hauntingly beautiful places in Vermont. As we snake our way through the river's marshes we'll get a firsthand look at the outstanding wildlife habitat and water quality that these important wetlands provide. East Charleston, VT. August 16, 11:00- 5:00. Suggested donation of \$10 members, \$15 non-members. Pre-register.

**19 10% Challenge Workshop:** Reducing your greenhouse gas emissions will not only help the environment, but it will save you money as well. Join us as we give you some helpful hints on how you can reduce your greenhouse gas emissions, reduce your energy use and lower your bills. 6pm- 7:30pm.  
June 5: Underhill, Deborah Rawson Library.  
June 12: S. Burlington City Hall.  
June 19: Richmond Free Library.  
June 26: Williston. Old Brick Church.  
July 10: Charlotte Town Hall.

**20 Mallory Brook Naturalist Field Trip:** Join trip leaders Charles Johnson and Nona Estrin for a visit to the Mallory Brook watershed, a proposed conservation area in East Montpelier. E. Montpelier. June 21. 9:00- 12:00. Pre-register.

☺ – Kid-friendly event

To pre-register for the events call us at 223-2328.

More information about the events will be posted at [www.vnrc.org](http://www.vnrc.org)





## NEWS & NOTES

### WELCOME JAMEY

Please come by our office and meet VNRC's Director of Forest Program and Biodiversity Project. Jamey has a Bachelor of Science in Environmental Studies and a Minor in Wildlife Biology from University of Vermont's School of Natural Resources. Jamey also has a Juris Doctor and Masters in Environmental Law from Vermont Law School.

Jamey spent six years in western Colorado as Conservation Director of the Aspen Wilderness Workshop and Project Director of Public Counsel of the Rockies, two nonprofit environmental organizations focusing on forest, water, and land use issues. Jamey also served as a Board Member of the Pitkin County Open Space and Trails Program for several years in Aspen, Colorado. In his free time, Jamey enjoys hiking, backpacking, biking, and ski-



Jamey Fidel

ing. He lives in Waitsfield with his wife Rachel and daughter Ayla.

### OUTSTANDING VOLUNTEER

VNRC is lucky to occasionally be blessed by an angel who stops on our door filled with enthusiasm and energy. This past winter another such blessing was bestowed upon us in the form of a University of Montana graduate student who wanted some time away from school. Angie Barger came from Missoula to Montpelier to help promote renewable energy in Vermont.

It wasn't long before Angie was seen standing on town greens, businesses and shopping centers throughout Vermont gathering signatures for the Climate Action Town Meeting Petitions. When she wasn't hitting the streets, Angie was on the phone finding people who would help recruit other petition signature



Angie Barger



Alec More

gatherers. If that wasn't enough, Angie did extensive research on Renewable Portfolio Standards that helped VNRC advocate for mandating renewable energy in electric company portfolios to help kick-start a thriving renewable energy business in Vermont. A big thanks goes to Angie for all her help.

### THANKS SVFEED

The name Southern Vermonters for a Fair Economy and Environmental Protection might be long, but it clearly states what SVFEED is advocating for. A fair economy needs environmental protection and vice versa. While SVFEED's geographic focus is on southern Vermont, they are demonstrating the important balance between the environment and the economy on a statewide level.

SVFEED is a relatively new group, yet has managed to accomplish much. SVFEED recently sponsored a speaking series in southern Vermont with global climate change expert, Pulitzer Prize winning journalist and author of *The Heat Is On*, Ross Gelbspan.

They've brought the President of the Worldwatch Institute, Christopher Flavin, to Vermont to talk about ways Vermonters can become more energy independent. SVFEED also led the effort in southern Vermont to pass the energy town meeting resolutions.

VNRC would like to extend a special thanks to John Berkowitz and the Board of SVFEED for providing a much needed, organized voice speaking up for southern Vermont environmentalists.

### THANK YOU ALEC

If you walked the halls of the State House recently, you may have met VNRC's 2003 Red Arnold Intern, Alec More. Alec, originally from South Burlington, is a recent graduate of the College of Wooster in Wooster, Ohio. He graduated with a degree in Political Science, specializing in comparative politics and environmental issues. During his years at Wooster, Alec interned with Senator Jim Jefford's offices both in Vermont and in Washington, D.C., where he worked on the Senate Environment and



Public Works committee.

Following his graduation, Alec moved back to Vermont and quickly became involved in recent political campaigns. During the 2003 legislative session, Alec worked closely with Pat Berry and Steve Holmes at the State House, tracking legislation important to VNRC's legislative agenda on such issues as permit reform, chapter 117 and stormwater/sewer runoff. Alec has recently taken a position with Senator Jim Jefford's office in Burlington, where he will work with staff members on a range of issues including health care, natural resources, transportation, and economic development. Alec currently lives in South Burlington with his family and their large dog.

## LESSONS FOR VERMONT

Please join VNRC and other groups who together form the Vermont Smart Growth Collaborative as they host speaker Robert Liberty from the Oregon Planning Program. Join us Friday, June 13, from 1-4 p.m. at the State House in Montpelier and learn more about the successes Oregon's program has had for statewide land and resource planning.

"Bold, new, controversial" are a few words recently used to describe Oregon's planning. Since the early 1970s the program has drawn considerable attention and is hailed by many as the leading model in the nation for "smart growth".

Robert Liberty will speak to Vermonters on how the Oregon Program has affected job creation, economic development, the environment, community revitalization, affordable housing, and trans-

portation. He will also cover ways in which the Oregon Program may benefit Vermont as it addresses "permit reform".

Please call Steve Holmes, VNRC Sustainable Communities Director, 223-2328, ext. 120, or email [sholmes@vnrc.org](mailto:sholmes@vnrc.org) for more information.

## VNRC's LEGISLATIVE BULLETIN COMING SOON

Once the legislative session ends this spring, VNRC will be publishing our bi-annual *2003 Legislative Bulletin*. One fact, which causes VNRC to stand apart from other Vermont conservation groups, is that we have a constant presence at the State House during the legislative session. We are there to speak out on issues that concern our members, and work to encourage legislators and lobbyists to continue to protect Vermont's environment. During this past session VNRC staff has provided input on such issues as defending and strengthening Act 250, improving local planning and zoning legislation, protecting our groundwater resources, funding the Agency of Natural Resources and the Vermont Housing and Conservation Fund, encouraging the state purchasing of forest products, and creating renewable portfolio standards.

VNRC works hard to promote a long-range vision of Vermont that is healthy and sustainable. Our work at the State House also encourages our members to take action when the voice of concerned citizens is needed to make a difference. Look for the upcoming *Bulletin* to find out

more about VNRC's 2003 Legislative efforts.

## THANKS KEN

Ken Smith is a graduate of Vermont Law School in South Royalton. Originally from Maine, Ken is an aspiring young environmental attorney who had the unenviable job of choosing between the law and his former duties as a fly-fishing guide in Alaska. He chose to stay in Vermont and was excited to be able to fulfill his Vermont bar clerkship requirement with VNRC.

As a law clerk Ken has worked with both Kelly Lowry and Jamey Fidel on several water and forestry issues. Ken has assisted Kelly with litigation in front of the Vermont Water Resources Board involving certification of the Clyde River hydropower project. He has helped Jamey develop comments on different proposed rules from the Forest Service that threaten to reduce NEPA protections.



Ken Smith and friend

When not demonstrating his prowess at lobster bakes, Ken can be found telemarking the Green Mountains, or sore-lipping the local trout populations.

## THE VERMONT SMART GROWTH COLLABORATIVE

Nine organizations have joined together to launch a collaborative effort to advance policy, education and community strategies to reduce sprawl and achieve smart growth in Vermont. The goal of the Vermont Smart Growth Collaborative is to foster a vision of growth and decision making that supports smart growth principles – encouraging growth that creates economic vitality in community centers while maintaining the rural working landscape and protecting Vermont's environmental quality. The collaborative includes:

- Association of Vermont Conservation Commissions
- Conservation Law Foundation
- Friends of the Earth
- Housing Vermont, Inc.
- Preservation Trust of Vermont
- Vermont Businesses for Social Responsibility
- Vermont Forum on Sprawl
- Vermont Natural Resources Council
- Vermont Public Interest Research Group

The Collaborative is pleased to offer workshops and technical assistance on smart growth planning tools and strategies for communities and citizens. The Collaborative's members have a wide range of





## NEWS & NOTES

experience in community and regional planning, legal assistance, environmental science, housing, community development, landscape architecture,



historic preservation and other fields. Its members are available to help communities and citizens with a wide range of issues such as incorporating smart growth planning in town plans and bylaws, developing your community based on smart growth principles, and helping to understand the tax implications of growth, to name a few.

If you are interested in organizing an educational workshop or technical assistance please call Vermont Smart Growth Collaborative Hot Line: 866-764-7984 or call 802-223-2328, ext. 120, or e-mail [sholmes@vnrc.org](mailto:sholmes@vnrc.org). Check out our web site: [www.vtsmartgrowth.org](http://www.vtsmartgrowth.org)

### CLEAN WATER ACT'S 30TH ANNIVERSARY

Representatives of VNRC's board and staff were on hand in Washington, DC on March 27-29 to help celebrate the 30th anniversary of the Clean Water Act. VNRC Staff member Steve Holmes and Board Member John Nutting attended the opening reception and

awards ceremony in the Hart Senate Office Building to celebrate the 30th Anniversary of the Clean Water Act. Both Senators Patrick Leahy and Jim Jeffords were recognized and honored for their efforts.

While in D.C., Steve and John also attended the National Wildlife Federation's Annual Meeting with some 45 other state affiliate representatives.

### CLIMATE ACTION RESOLUTIONS

Even though President George Bush refuses to believe that global climate change is a reality and Legislators in Montpelier have refused to pass renewable energy legislation, the citizens of Vermont think differently. Town Meeting Day 2003 was proof that Vermonters are concerned about Global Climate Change and want to take action. 79 towns passed climate action resolutions that asked state, local and federal leaders to promote policies of renewable energy and energy efficiency as a way of combating global warming and making Vermont more energy

independent. In addition, the towns of Charlotte, Underhill, Williston and Huntington made a further commitment of joining the 10% Challenge ([www.10percentchallenge.org](http://www.10percentchallenge.org)) and agreed to reduce their own greenhouse gas emissions by 10%.

Joining VNRC in this statewide effort was the Southern Vermonters for a Fair Economy and Environmental Protection. For more information about ways that you can get involved, go to VNRC's website at [www.vnrc.org](http://www.vnrc.org).

### HOUSING ENDORSEMENT PROGRAM

The Housing Endorsement Program is a Vermont Smart Growth Collaborative initiative to actively encourage smart growth development that provides housing for all Vermonters. Since December 2001, the Vermont Natural Resources Council and the other Collaborative members have been working with the Vermont Housing and Conservation Board, Housing Vermont, and other housing organizations to create a voluntary housing endorsement program, which uses criteria to evaluate new housing projects based on smart growth principles. Guidance for the criteria came from a

project of the Vermont Forum on Sprawl and an advisory group, including architects, landscape architects, preservationists, planners, home-builders, environmentalists, community developers, realtors and government representatives. VNRC served on the advisory group. Projects that effectively demonstrate smart growth principles during their planning stages will earn a VSGC endorsement or "stamp of approval." This endorsement could be submitted with other project materials during the planning and permitting stages.

In December, 2002, the Collaborative put out an invitation to developers to submit their housing projects for endorsement. The Collaborative has currently endorsed seven projects, which were showcased at the Housing Endorsement Conference on February 20th. VNRC's Steve Holmes gave the presentation of the Housing Endorsement Program goals, process and criteria at the Conference.

### The Housing Endorsement Criteria


The VSGC will endorse housing and mixed-use development when it meets the specific smart growth principles and criteria of the VSGC and adds value to the community. Smart growth in Vermont is that which:

- Maintains the historic development pattern of compact village and urban centers separated by rural countryside.
- Develops compact, mixed-use centers at a scale appropriate for the community and the region.

From left: John Nutting, VNRC Board Member; Mark Van Putten, President & CEO, NWE; Senator Jeffords; and Steve Holmes, Director, Sustainable Communities Program, VNRC.





- Enables choice in modes of transportation.
  - Protects important state environmental, natural and historic features, including natural areas, water quality, scenic resources, and historic sites and districts.
  - Serves to strengthen agricultural and forest industries and minimizes conflicts of development with these industries.
  - Balances growth and the availability of economic and efficient public utilities and services.
  - Supports a diversity of viable businesses in downtowns and villages, including locally owned businesses.
  - Provides for housing that meets the needs of a diversity of social and income groups in each community.
- Any developer of housing that includes 10 units or more that exemplifies the principles above may submit a request for endorsement. A request for endorsement should be received at least six weeks before the action for support is needed. We encourage developers to contact VSGC at the earliest possible date, preferably at the design development stage. For more information call Steve Holmes at 223-2328, ext. 120. 

# TAKE ACTION!

As VNRC looks at some of the greatest long-term threats to Vermont's environment, we find so many of them are related to how we use and create energy. For example, in *Preparing for A Changing Climate: The Potential Consequences of Climate Variability and Change*, a report of the New England Regional Assessment Group for the U.S. Global Change Research Program, many startling projections are made. Among them are continued concerns that global climate change is causing a shift in the maple syrup belt further north, that cold-water fish like brook, brown and rainbow trout could face a 50 – 100% loss of habitat and that projected temperature increases for summer months is likely to lead to increased air pollution. The Hubbard Brook Research Foundation reports that acid deposition caused from electric production has reduced the diversity and abundance of aquatic organisms in many Northeastern lakes and streams.

In this *VER Take Action!* section, VNRC will help our members take action in their own lives to reduce their energy use. A simple step like changing your lightbulbs or driving less can have a big impact on the world. Please don't forget to keep writing those letters to the editors: let your elected officials know that you are concerned about protecting Vermont's environment. Those tools remain crucial to success.



## VNRC'S FAB 4 EASY ENERGY SAVING TIPS FOR VERMONTERS:

### 1) Switch to Compact

**Flourescents:** If you're going to do one thing—do this! Lighting accounts for 20% to 25% of all electricity consumed in the United States. It also is the one sector of American electrical use that we have the greatest potential to drastically reduce our electrical

need for. Compact fluorescent lightbulbs operate using about 75% less energy than a standard incandescent lightbulb—and they last ten times longer. Replacing three incandescent bulbs will result in annual savings of \$20 and reduce your household emissions of carbon dioxide by 280 pounds per year. If Vermonters replaced 20,000 incandescent lightbulbs a year for five years, the cumulative carbon dioxide emissions would be reduced by 25,000 tons!

Compact Flourescents are now available in most hardware stores, but if your hardware store doesn't carry them you can find out where to buy them at [www.efficiencyvermont.org](http://www.efficiencyvermont.org) or stop by the VNRC office and we'll sell you one. There is a \$5 rebate for the lightbulbs, so you won't be spending a lot of money to retrofit your home.

**2) Consider Renewable Energy:** the price of renewable energy is coming down almost every day. Demand is greatly increasing throughout the world for clean energy that's free from the



economic and political instability of fossil fuels. Renewable energy is also the cleanest way to produce electrical power because it emits no greenhouse gasses or other air pollutants.

In Vermont, we currently don't have the option to purchase "green power" from electric companies (unless the Renewable Energy bill passes between now and when you read this), but options for home renewable systems range from small scale wind turbines, to solar hot water heaters and solar panels. Renewable energy is no longer just for "off-gridders". Existing homes connected to the grid can sell their excess power to electric utilities on days when the sun is bright or the wind is howling and you can use the electric grid as a backup for cloudy or windless days.

To find out more about using renewable energy in your home come to one of the VNRC Across Vermont Renewable Energy Workshops in Brattleboro, Bennington or Burlington or contact Renewable Energy Vermont at REVermont.org or (802) 229-0099 to find out what different renewable energy installers can meet your needs.

**3) Visit Efficiency Vermont:** Efficiency Vermont is the nation's first energy efficiency utility. While many people are focused on creating new power sources, Efficiency Vermont is focused on decreasing the demand for electricity. In less than two years of service, Efficiency Vermont has been directly responsible for saving over 60,000 megawatt-hours of electricity each year. Not only is Efficiency Vermont helping Vermont businesses and consumers reduce their energy use, but they're helping them

save lots of money as well. While the average price of the electricity purchased by Vermont's electric utilities is \$0.045 kWh (that's the price they pay but not the price you pay), Efficiency Vermont is delivering energy efficiency measures at \$0.027 kWh.

You can find out how Efficiency Vermont can help save you money by visiting them online at [www.efficiencyvermont.org](http://www.efficiencyvermont.org) or contacting them at 1-888-921-5990. Among the hand tools that they offer is an ENERGYsmart CD-ROM which can help you analyze your home's energy use, generate energy savings recommendations and help you reduce your energy bill and greenhouse gas emissions.


**4) Take the 10% Challenge:** The 10% Challenge is a voluntary program for households and businesses to raise public awareness about global climate change and to encourage households and businesses to reduce their greenhouse gas emissions by at least ten percent. The 10% Challenge provides the tools and the information necessary to conserve energy at home and at work. Follow these (3) easy steps:

**A. Sign Up:** You can sign up online at [www.10percentchallenge.org](http://www.10percentchallenge.org) or call (802) 865-7375. Signing up for the 10% Challenge enables you to store your greenhouse gas emissions and to record your progress as you reduce them.

**B. Calculate Emissions:** The 10% Challenge Calculator will help you define your current annual greenhouse gas emissions.

**C. Pledge to Take Action:** As you calculate your greenhouse gas emissions you'll also be able to find some easy tips on how to reduce your greenhouse gas emissions and just how much less pollution your action will be causing. Pledge to take any action you want and then see how close you come to reducing your own greenhouse gas emissions. Can you reach 10% reductions? 20%?

VNRC will be hosting five 10% Challenge workshops during our VNRC Across Vermont events this summer to help people reduce their greenhouse gas emissions.

Of course, there is so much more you can do to reduce greenhouse gas emissions- drive your car less, buy Energy Star appliances that are more energy efficient, buy local produce that hasn't traveled thousands of mile across the globe to reach your table and a whole lot more, but we believe that these are four east steps that every environmentally concerned (not to mention frugal) Vermonter, should consider. 

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*The Oregon Planning Program:*

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Friday, June 13, 2003

1:00-4:00 PM

Vermont Statehouse

Room 11

Montpelier, Vermont

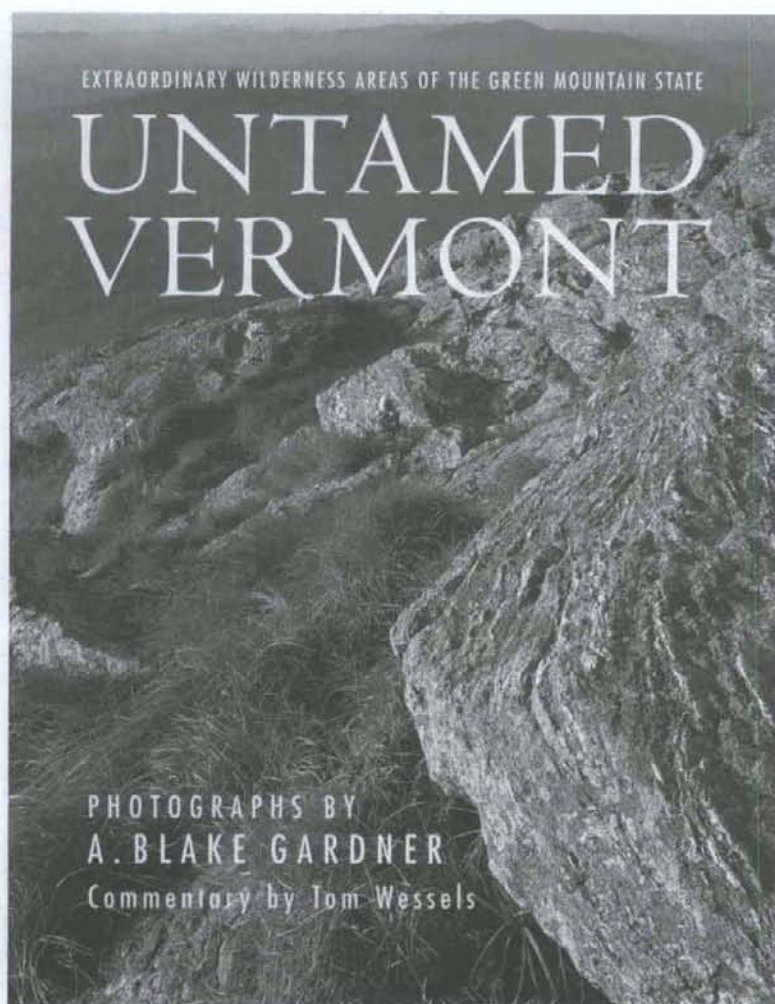
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A NEW BOOK FROM THISTLE HILL PUBLICATIONS

If you are familiar with VNRC's publications, brochures, and other printed materials, you probably are also familiar with Blake Gardner's beautiful photographs. For over six years, Blake has been providing VNRC with incredible photos of Vermont's special places. Blake's generosity has been invaluable as we work to educate people about the importance of protecting Vermont's natural resources.

In July, 2003, Blake and Thistle Hill Publications are presenting a new book, *Untamed Vermont*. The book is comprised of Blake's award-winning photographs of Vermont's wild places. It also includes forwards by Senator Patrick Leahy and Tom Wessels, a professor of Ecology at Antioch New England Graduate School and author of *Reading the Forested Landscape: A Natural History of New England*.

Get your copy today and help support VNRC's work at the same time! VNRC is selling copies of *Untamed Vermont* for \$40 apiece. Share the beauty of Vermont with your friends and family and help protect Vermont's natural resources. Call Jimmy at the VNRC office at 802-223-2328 or email him at [jfordham@vnrc.org](mailto:jfordham@vnrc.org) for your copy.



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## HELP US CELEBRATE VNRC'S 40TH BIRTHDAY!

Founded in 1963 by farmers and foresters, VNRC has been working for the past four decades to protect Vermont's natural resources. Throughout the years, VNRC staff, board, and thousands of members and volunteers have donated their time, money and efforts to restore and preserve Vermont's environment for present and future generations.

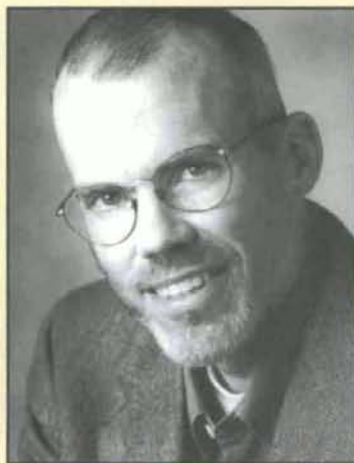
Our first anniversary celebration on April 19th with Amory Lovins was a great success. Over 250 people joined us at Landmark College in Putney, Vermont. Amory Lovins, co-author of *Natural Capitalism, Creating the Next Industrial Revolution* was on hand to give a presentation and take questions from the audience. VNRC also presented Governor Douglas with energy resolutions from 79 Vermont towns that are working to reduce consumption and looking at alternative energy sources.

Join us again on August 14th in Manchester, Vermont with Bill McKibben and Frances Moore Lappé.

McKibben, author of *Enough, Staying Human in an Engineered Age*, will be discussing the slippery slope of the ability to re-engineer ourselves and therefore the very meaning of human identity. Lappé's book, *Hope's Edge: The Next Diet for a Small Planet*, demonstrates solutions to environmental crises and social inequalities. Jay Parini, poet, will also be there.

On October 11th we will host our final celebration at Shelburne Farms' Coach Barn with the author of *The Restoration Economy*, Storm Cunningham. Cunningham will speak about his theory, which is that the Restoration Economy is the environmentally responsible economic engine of the future. Poets Grace Paley, Galway Kinnell and Ellen Bryant Voigt will also give readings.

Join us for food, fun, music and more! Go to our website at [www.vnrc.org](http://www.vnrc.org) for more details!



Bill McKibben