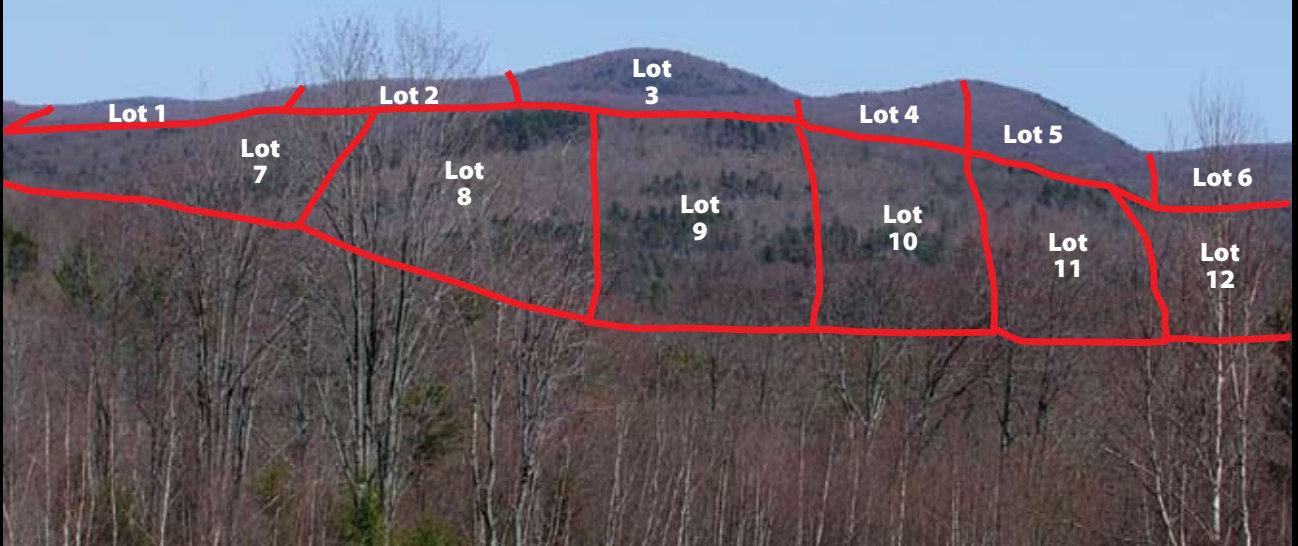


Vermont

Environmental Report

Published
by the
Vermont
Natural
Resources
Council, Inc.

Prime Vermont Forestland 12 Parcels



Own your piece of a pristine Vermont mountain.

Parcels consist of high elevation forest with building sites offering commanding views.

Timber already cleared for driveways, septic, and utilities.

20 minutes from great skiing and restaurants!

Price: \$Plenty



Blake Gardner

PHOTOGRAPHY

Location photography includes: interiors & exteriors, people, products, food, and scenics for business, education, publishing, the web, and nonprofit use. Over twenty years of award-winning photography with thousands of images published nationally and regionally.

website: ablakegardner.com

e-mail: abgphoto@sover.net

Vermont Butter & Cheese [COMPANY]

UNITING FAMILY FARMS WITH THE OLD-WORLD ART OF CHEESEMAKING

GOATS' MILK: BIJOU • BONNE-BOUCHE • CHÈVRE • COUPOLE
CREAMY GOAT CHEESE • FETA

COWS' MILK: CRÈME FRAÎCHE • CULTURED BUTTER
FROMAGE BLANC • MASCARPONE • QUARK

WEBSTERVILLE, VT • 800-884-6287
WWW.VTBUTTERANDCHEESECO.COM



VNRC BOARD OF DIRECTORS

Dale Gulbrandsen, *Chair*
 Stark Biddle, *Vice-Chair*
 Seward Weber, *Secretary*

Susan Cross
 Perez Ehrich
 Charles Fergus
 Robert Fiske, Jr.
 Jenna Guarino
 Pete Land
 Cathleen Miller
 Doug Racine
 Hub Vogelmann
 Julie Wolcott

Steve Wright, *NWF Affiliate*

VNRC STAFF

Elizabeth Courtney, *Executive Director*
 Patrick Berry, *Policy & Communications Director*
 Jamey Fidel, *Forest Program Director & Legal Counsel*
 Jimmy Fordham, *Office Manager & Administrative Assistant*
 Jon Groveman, *Water Program Director & Legal Counsel*
 Stephen Holmes, *Sustainable Communities Program Director*
 Kim Greenwood, *Staff Scientist*
 Johanna Miller, *Outreach Director*
 John Odum, *Membership & Development Coordinator*
 Stephanie Mueller, *Development Director*

PUBLICATIONS

Stephanie Mueller, *Editor*
 Tim Newcomb, *Design*



The Vermont Natural Resources Council, Inc., is a nonprofit environmental organization founded in 1963 to protect Vermont's natural resources and environment through research, education, and advocacy.

VNRC is the Vermont affiliate of the National Wildlife Federation.

VNRC membership includes a subscription to the *Bulletin* and the *Vermont Environmental Report* magazine (both published twice annually). Join VNRC in protecting Vermont with your membership of \$35.

Copyright © May 2006, VNRC

Vermont Environmental Report

Published by the Vermont Natural Resources Council, Inc.

Spring 2006

TABLE OF CONTENTS

THE INSIDE WORD

Art Gibb's *Living Legacy*, by Elizabeth Courtney Page 2

VERMONT PERSPECTIVE

Green Mountain National Forest Plan Unveiled, Protecting Bear Habitat, Groundwater Legislation Moves Forward, Protecting the White River Basin, Wal-Mart Legal Update, Growth Center Bill Advances, Community Impact Studies for Large-Scale Retail Uses. Page 6

FEATURE ARTICLE

Wood Carvings: The Fragmentation of Vermont's Forests, and VNRC's Efforts to Restore Them, by Will Lindner Page 10

Moving In; Fragmentation and Habitat, by Will Lindner Page 10

Forestland Owners Have A Million Stories, by Will Lindner Page 10

Take Action! Page 20

VNRC NEWS & NOTES

Meet VNRC's new staff and interns. Page 22



Credits: Cover photograph: Tim Newcomb; Page 1: Gustav Verderber; Page 2: Tino O'Brien; Pages 17, 19: Will Lindner; Page 4 black bear illustration: Bert Dodson; Pages 6, 7, 8, 11, 15, 16, back cover: A. Blake Gardner

The opinions expressed in the Vermont Environmental Report are not necessarily those of VNRC. VNRC reserves the right to refuse advertising that is not in keeping with the objectives of the organization.

The VER is printed on recycled paper with soy-based inks.

THE INSIDE WORD



The good news is that Vermont has something worth saving.

The bad news is that it's rapidly eroding.

ART GIBB'S LIVING LEGACY

By ELIZABETH COURTNEY, EXECUTIVE DIRECTOR

The past six months have held two particularly poignant moments for me, personally and professionally. One was a death, the other a kind of rebirth. Last November, our dear friend, mentor and colleague, Art Gibb died at the age of 97. As many of you know, Art was the Chair of the Senate Natural Resources and Energy Committee at the time Governor Deane Davis was advocating for land use protections that would become Act 250 under Art's leadership in the Senate in the late 60s. The rebirth came this May, when landmark legislation was signed into law that brings new life and meaning to Art's environmental legacy.

At the time of Art's death, VNRC and our partners in the Smart Growth Collaborative were working with members of the House and Senate Natural Resources and Energy Committees to construct a bill picking up where Act 250 left off. The "growth center bill," as it came to be known, has now been signed into law, giving Vermont the next generation of tools to help save the Vermont we love.

As Wallace Stegner once remarked, "People tend to destroy the things they covet." And in spite of decades of the best efforts by our

lawmakers, Vermont has the unfortunate distinction of having been designated as one of "America's Most Endangered Places" by the National Trust for Historic Preservation twice in the past 10 years. The good news is that we have something worth saving; the bad news is that it's rapidly eroding.

Art Gibb and the framers of Act 250 could not have imagined that only 40 percent of development in Vermont would trigger Act 250

jurisdiction. The remaining 60 percent has been generating the strip development and sprawl that is destroying and fragmenting our rural resources.

These losses can be so incremental that we

often do not notice the degree to which the fabric of our forests, farmlands, and quality of life are disappearing. But if we stop to look for a minute, it is clear that poorly managed and unplanned development is carving the Vermont landscape into smaller and smaller pieces. As civilization spills out of our town centers, wildlife habitat is fragmented into islands, working farm and forestland is converted to sprawling development, and long-distance commuters burn more energy.

So in spite of the accomplishments of Art Gibb and his colleagues, an increasing number of Vermonters sense that we're losing the Vermont we love.

We're waking up to find that we now have to sit through six long traffic lights just to get to work. We find that our best birding areas or secret hunting spots are paved over. We find we've become so suspicious about the water quality in our local swimming hole that we don't want to go there anymore. Or perhaps we've seen one too many farms disappear. Maybe we can no longer find or afford local meat and poultry. Possibly our century-old general store closed down.

Fortunately, the growth center legislation begins to address the slow, steady, persistent erosion of the Vermont we love. This law weds the good policies of our planning laws with those of Act 250, so that smart land use decisions can be made whether Act 250 is triggered or not. It provides meaningful incentives to concentrate needed development — especially housing and affordable housing — in city, town and village centers, while limiting sprawl in productive farm and forestland.

VNRC enjoyed collaborating with legislators, business leaders, conservation organizations, state agency officials, and town and regional planners across the state during the creation of the growth center legislation. While it has not been easy to bring together such a divergent group of Vermonters, it has been essential. And promisingly, it's working.

Vermont has been fortunate to be home to unique visionaries such as Art Gibb, who've helped to shape the landscape that we see today. And we are blessed with a new generation of stewards who remain vigilant in protecting Art's living, evolving legacy for a healthy Vermont.





STATE OF VERMONT
HOUSE OF REPRESENTATIVES
115 STATE STREET
MONTPELIER, VT
05633-5201

May 9, 2006

Ms. Elizabeth Courtney, Executive Director
Vermont Natural Resources Council
9 Bailey Avenue
Montpelier, VT 05602

Dear Elizabeth,

As the 2005 – 2006 Legislative session draws to a close I think it important to let you and other members know how invaluable I found VNRC's legislative team in helping craft legislation that protects Vermont's precious natural resources.

While VNRC has many staff members that frequent the State House, I am most familiar with the efforts of Pat Berry, Jon Groveman and Jamey Fidel. The committee that I chair, House Fish, Wildlife and Water Resources has worked on many bills during the biennium that have made it all the way through the legislative process due to the diligence and hard work they have done. Whether the issue has been protection of groundwater, banning MTBE from gasoline, river basin planning or Fish and Wildlife Department funding, VNRC has been right there.

I also found it most helpful that when I needed advice on an issue that Pat Berry is always somewhere to be found in the State House during the session. I don't need to go looking for him elsewhere. As VNRC's Policy Director Pat is always on the job.

Again, thank you for the assistance that your organization lends to the legislative process.

A handwritten signature in cursive script that reads "Steve".

Rep. Steve Adams, (R) Hartland, Chair
Fish, Wildlife & Water Resources

VERMONT PERSPECTIVE



GREEN MOUNTAIN NATIONAL FOREST PLAN UNVEILED

On March 22, 2006, the U.S. Forest Service released its final management plan for the 400,000-acre Green Mountain National Forest (GMNF). Located in southern and central Vermont, the national forest attracts thousands of visitors each year, providing exceptional recreational opportunities for hunting, fishing, skiing, hiking, camping, and wildlife watching. The GMNF is home to a variety of plants, animals and important natural communities and it provides Vermonters with clean water, timber resources, and the chance to experience quiet backcountry solitude.

The final management plan zones the GMNF into designated uses for the next 15 years. Over the past four years, VNRC has advocated for a final plan that balances the availability of land for wildlife management, diverse recreational opportunities, timber and wilderness designations.

Overall the Forest Service's final plan offers a strong opportunity for timber harvesting and wildlife habitat management on the GMNF. The final plan allocates 61 percent of the forest to areas where openings can be created to benefit species that are hunted, like deer and woodcock. The plan also calls for an annual harvest

rate of 16.4 million board feet of timber to be cut on the GMNF, which is higher than the 10.3 million board feet that has been cut on an average annual basis over the past 44 years. Furthermore, the Forest Service has suggested longer timber harvest rotations for certain management areas, which will allow for recreational settings with older and larger trees.

In a disappointing decision, the final plan allows ATV trail corridors to be considered on 45 percent of the GMNF. VNRC believes this is a misguided policy decision, which threatens to open the national forest to potentially damaging and intensive uses of the forest. The overwhelming majority of public comments submitted to the Forest Service — over 90 percent — did not support opening the forest to ATV use. Unfortunately, despite the best possible intentions of Forest Service employees, they will likely lack the resources they need to properly manage and enforce ATV use on the GMNF.

In a positive move, the plan provides numerous special area designations including the Moosalamoo Recreation and Education Area, the ecologically diverse Escarpment Management Area, and improved acreage for Ecological Special Areas and old-growth retention. The final plan, however, weakens the requirement to monitor and manage for viable populations of wildlife species, and it does not achieve the

right balance of lands to be designated in the more permanently protected status of wilderness.

The Forest Service found that 124,321 acres on the GMNF were available to be considered for wilderness designation, where nature primarily runs its course. VNRC has advocated for 79,200 of these acres to be designated as wilderness as part of a proposal from the Vermont Wilderness Association.

The final plan, however, only designates 27,473 of these acres as new wilderness, with a concentration in the Glazenbury Mountain area. The Forest Service does allocate another 30,930 acres as Remote Backcountry, a designation that promotes wilderness-like conditions. Unfortunately, this designation only receives temporary status under the life of the plan and does not achieve the permanent protection of congressionally designated wilderness. Promisingly, on April 8, 2006, Vermont's congressional delegation introduced the Vermont Wilderness Act of 2006 to permanently protect 48,161 acres on the GMNF as new wilderness (see article on back cover).

Overall, the final forest plan offers a mixed bag of management decisions. VNRC will continue to study the plan in depth this summer. Please visit www.vnrc.org for ongoing coverage of this issue.

PROTECTING BEAR HABITAT

Over the winter, VNRC successfully halted a plan by Central Vermont Public Service Corporation (CVPS) to build a new utility line through a regionally important black bear travel corridor known as the "Sage Hill Corridor" in Stratton and Jamaica. VNRC joined several other parties, including the Stratton Area Citizens Committee and the Windham Regional Planning Commission, to oppose the 4,800-foot utility line, which would have been built through the center of the bear travel corridor.

In the early 1990s, VNRC secured protection for the Sage Hill Corridor as mitigation for a major residential development by the Stratton Corporation called the Sun Bowl project. In the Act 250 proceeding for that project, both the Vermont Department of Fish and Wildlife and the District 2 Environmental Commission recognized



VNRC deserves credit for taking a leadership role in the State House by bringing this issue to our attention and helping to escort the groundwater protection bill out of the House.”

— Rep. Steve Adams (R-Hartland)

that the travel corridor is of statewide importance and is “distinctly decisive” to the survival of bears that use it.

CVPS attempted to argue that the line would not detrimentally impact critical bear habitat. CVPS relied on a controversial loophole passed by the Legislature in 2004 which limits the review of utility lines to the line extensions only, rather than the secondary impacts of housing and infrastructure that accompany them.

VNRC successfully argued that the utility line would not be in conformance with specific regional and town plan provisions. The bear corridor is designated as a fragile area and resource lands in the Windham Regional Plan and as a natural area and scenic ridgeline in the Jamaica Town Plan.

In an important decision, which makes a strong statement about the value of local planning, the District 2 Environmental Commission denied the utility line on the premise that both the Jamaica Town Plan and the Windham Regional Plan instruct against utility development in the Sage Hill Corridor.

VNRC is now participating in a legislative study committee aimed at evaluating the ramifications of exempting the secondary impacts of utility line extensions from Act 250 review. VNRC is advocating for a change in the exemption to allow for the appropriate review of the secondary impacts of utility

line extensions into areas that contain important natural resources.

GROUNDWATER LEGISLATION MOVES FORWARD

The Legislature delivered an important victory for Vermonters this year by passing a bill that will begin to address protection of the state’s groundwater — the fresh water flowing beneath our feet. Passage of H.294 represents over two years of planning, coordination, and hard work and provides a good example of the power of partnership. Collaboration among VNRC’s policy team, legislative leaders, and grassroots partners made this important step forward possible.

“VNRC appreciates the legislative leadership on this issue, especially that of Representatives Adams and Deen and Senator Lyons,” said Jon Groveman, VNRC’s Water Program Director. “Most of Vermont’s neighboring states have already taken action to safeguard their drinking water. Until Vermont takes similar comprehensive action, though, we remain vulnerable to overconsumption, depletion, and commodification of this irreplaceable resource.”

Representative Steve Adams (R-Hartland), Chair of the House Fish, Wildlife and Water Resources Committee, concurs. “The Legislature has a responsibility to be proactive,

rather than reactive, with regard to protecting Vermont’s drinking water supply,” he noted. “VNRC deserves credit for taking a leadership role in the State House by bringing this issue to our attention and helping to escort the groundwater protection bill out of the House.”

The bill requires water users withdrawing over 50,000 gallons per day — one of the lowest permitting thresholds in the country — to secure an interim groundwater permit. This interim program is designed to safeguard Vermont against groundwater depletion and contamination until a long-term, comprehensive program is put in place.

In addition to acquiring a permit, applicants in Vermont must map the aquifer in which the proposed groundwater withdrawal will take place. This is important since Vermont has little understanding of where and how much of this precious resource runs beneath our feet.

To address the long-term protections considered by the Legislature, the bill creates a task force charged with recommending a groundwater protection program for Vermont. The task force will look closely at several key water protection tools communities need to safeguard their drinking water supplies, including:

- The creation of comprehensive maps of the state’s groundwater resources and a schedule for completing groundwater mapping;
- The funding sources needed for groundwater mapping;
- The creation of a statewide program for addressing groundwater withdrawals;

- The adoption of the Public Trust Doctrine to declare that surface water and groundwater are held and managed in the public trust.

Now that the Legislature has passed the bill, some of the hardest work is slated to begin. Public involvement will be essential to ensure that the task force crafts the meaningful protections for drinking water aquifers, and that the Legislature adopts those recommendations. VNRC will remain at the forefront of this effort, and will count on the support of our members and activists to help develop a program that will protect Vermont’s groundwater for generations to come.

PROTECTING THE WHITE RIVER BASIN

Thanks to the efforts of VNRC and a coalition of other environmental, recreational and planning groups, the typing recommendations proposed by the Water Resources Board for the waters in the White River Basin were withdrawn (see article in Fall 2005 VER). VNRC worked through the fall and into the winter to argue for procedures and guidance from the Water Resources Board and new Water Resources Panel that will ensure that Vermont’s high quality waters are protected.

VNRC also helped craft legislation (H.554) that authorizes the Vermont Water Resources Panel to protect waters of the state by designating sub-classifications of waters by rule based on recommendations that result from the Basin Planning Process that provide greater protection for our high quality waters. Basin Planning

VERMONT PERSPECTIVE



is required through the federal Clean Water Act and is designed to protect and manage each of Vermont's 17 watersheds. This provision of the bill clarifies the authority to create sub-classifications of waters and clearly requires that such sub-classification be implemented through formal rulemaking.

H.554 also requires the Vermont Water Resources Panel to adopt anti-degradation implementation rules that would help maintain high quality waters of the state. The Panel's rule must be initiated by a proposal from the Vermont Agency of Natural Resources (ANR). However, the panel is not required to follow ANR's proposal. Prior to this bill, the Vermont Agency of Natural Resources intended to adopt an anti-degradation implementation procedure, not an official rule. The bill passed the House and moved to the Senate Natural Resources Committee. Time ran out, however, and the bill failed to pass. VNRC will continue to work on this issue before the Water Resources Board and, if necessary, in the Legislature next year.

WAL-MART LEGAL UPDATE

VNRC has been actively engaged in its legal battle to make Wal-Mart fit into Vermont if it is going to develop in the state. VNRC filed two motions to dismiss the local approval of the St. Albans Wal-Mart with the

Vermont Environmental Court. One motion argues that the local decision is invalid because of conflict of interests (one of the local Development Review Board members wore a hat with the inscription "St. Albans Needs Wal-Mart" to a hearing and another board member signed a pro Wal-Mart petition) and other procedural deficiencies. The second motion points to sections of state and local law that Wal-Mart clearly violates that warrant dismissal without a trial. Decisions on VNRC's motions to dismiss the DRB's approval of the St. Albans Wal-Mart are expected to be issued soon.

The Act 250 hearings on the St. Albans Wal-Mart commenced in January with a conference to determine who may be parties to the proceeding. Working with a local citizens group, Northwest Citizens for Responsible Growth, VNRC was granted what is known as "preliminary party status." This allows us to participate in the hearings as full parties and appeal the Act 250 permit, if it is granted. In May, VNRC and its experts in water quality, traffic, fiscal and economic impact, town and regional planning, and wildlife filed testimony challenging the application with the District Environmental Commission. The Act 250 hearings are scheduled to resume the last week in June.

VNRC also filed a motion to dismiss the Act 250 application in February. VNRC argues in the motion that Wal-Mart is precluded

from applying for a permit for the same project that was denied by the Environmental Board in 1994. The only difference between the 1994 Wal-Mart that was denied and the current Wal-Mart that is proposed is that the new Wal-Mart is at least 47,000 square feet larger. VNRC believes that the law precludes any applicant from applying over and over again for a project that was denied until it gets its way. The District Environmental Commission rejected the motion, but VNRC is considering appealing to Environmental Court.

Finally, VNRC is preparing to appeal the Vermont Agency of Natural Resources stormwater permit for the St. Albans Wal-Mart. VNRC believes there are several flaws in the permit, which were pointed out at a public hearing last August (see article in the Fall 2005 VER).

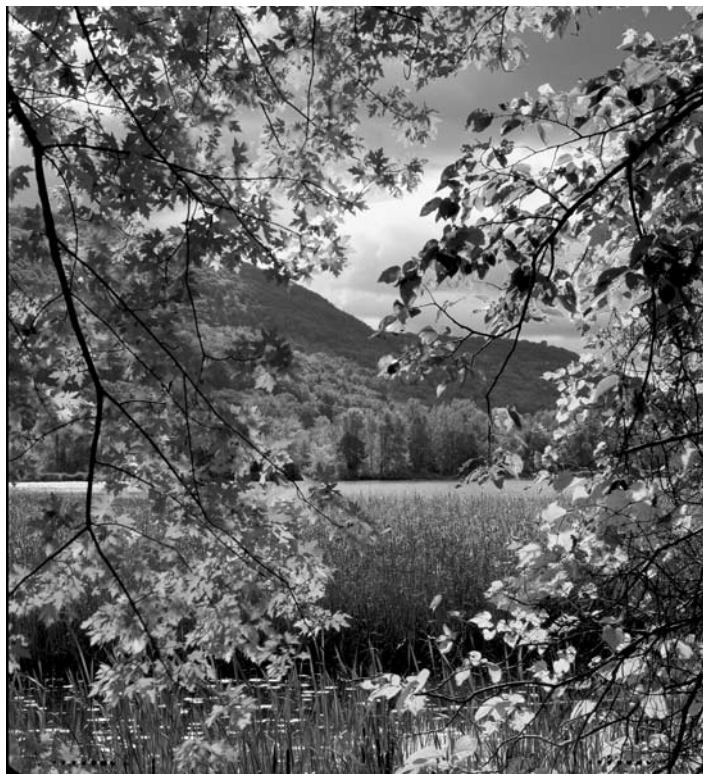
VNRC, working with the local group Citizens for a Greater Bennington, has

also appealed the decision of the Town of Bennington Development Review Board to grant Wal-Mart a permit to double the size of its Bennington store. That appeal has just gotten underway. The Environmental Court has ordered the parties to proceed with mediation to see if there is common ground, before going to trial.

Stay tuned for the results of VNRC's legal efforts to beat back Wal-Mart's plans for mega stores in Vermont that are out of scale with Vermont development and will impair our traditional downtown centers.

GROWTH CENTER BILL ADVANCES

By the time you read this, one of VNRC's top legislative priorities, the Growth Center Bill (S. 142) (see VNRC's January 2006 *Bulletin and Legislative Update*, as well as our Spring 2006 *Legislative Wrap-Up*, or go to www.vnrc.org for background) will have



We see the Growth Center Bill as the most promising opportunity in over a decade to focus new development in appropriate locations, to protect Vermont's magnificent landscapes, rural economies and healthy communities, and to help address the affordable housing crisis.

been signed into law. The bill passed both the Senate and House with strong majorities, clearing the latter body the day before the session ended.

VNRC played a pivotal role in moving the bill through the Legislature. Both Elizabeth Courtney and Stephen Holmes provided extensive testimony on the various drafts and worked with our partners to refine the bill. We see it as the most promising opportunity in over a decade to focus new development in appropriate locations, to protect Vermont's magnificent landscapes, rural economies and healthy communities, and to help address the affordable housing crisis.

Built on the existing "Downtown Law," the new "Growth Center" legislation provides incentives to development in and near downtowns while simultaneously conserving valuable rural resources.

The growth center legislation contains:

- A consistent definition of growth centers that recognizes development should occur in downtowns, villages, new town centers and areas adjacent to these three categories;
- A process for designation;
- Incentives for development within growth centers and enhancements to the tax credits for downtowns and village centers;
- Insurance that state infrastructure investment (e.g. sewer, water, roads,

schools etc.) will support growth centers and not lead to sprawl;

- Protections for valuable rural resource lands.

The legislation that spurred the growth center investigation was a bill introduced last year (S. 142) to allow for mitigation when developing primary agricultural land. These two issues — growth centers and agricultural lands mitigation — were merged in S. 142. In considering options for protecting prime agricultural lands VNRC urged the Legislature to ensure that:

- Act 250 criteria are not weakened;
- Protection for farmland is strengthened;
- Agricultural land mitigation (buying easements elsewhere in exchange for using prime farmland for development) is allowed only as a last resort;
- Innovative site planning continues to be required as a way to protect farmland;
- Agricultural land planning is carried out, as required by current law.

COMMUNITY IMPACT STUDIES FOR LARGE-SCALE RETAIL USES

When large-scale retail stores like Wal-Mart come to town they can drive out local businesses, spur sprawl, and drive up taxes. Taxpayers often bear the burden of increased

costs for health care, police, fire, emergency, roads, water, and other infrastructure needs. Communities can avoid paying these high prices by adequately preparing for large-scale retail development.

There is no doubt that many Vermonters have a need for access to affordable goods. That's why it is promising that there are solutions communities can embrace to welcome large-scale retailers without harming their downtowns, community character, and natural resources. Community-owned retail stores are one alternative.

The Legislature devoted a good part of the session on another important tool, supported by VNRC: A community impact study. An independent community impact study could help identify and quantify the impacts of large-scale retail stores on the local and regional economy. By building on existing tools, it would help towns get the community and

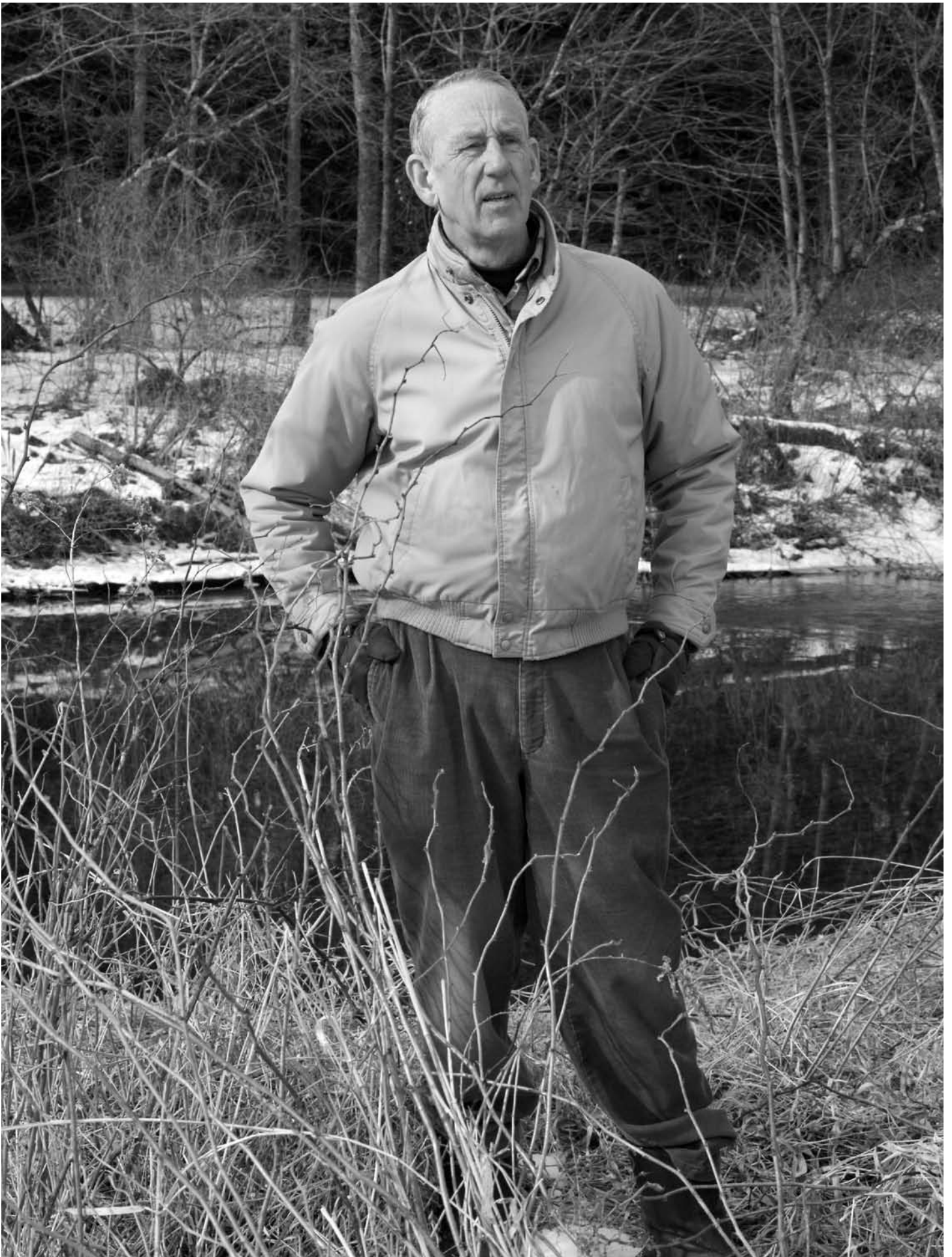
economic impact information they need to make the most informed, unbiased decisions for how and where new development occurs.

On March 17, the Senate passed the Community Impact Studies for Large Scale Retail Operations Bill that would:

1. Generate a community and regional impact study of the proposed costs and benefits associated with a project upon which the host community, neighboring towns, and other interested parties can make the most informed decisions;
2. Enable towns to ensure that large-scale retail uses are subject to conditional use review;
3. Direct the Legislative Council to conduct research on the fiscal impacts to state programs from large-scale retail stores. This research would provide clear numbers on the taxpayer dollars large-scale retailers are drawing from public coffers.

The bill was being reviewed by the House Natural Resources and Energy Committee when time ran out on the legislative session. VNRC will work with key legislators to pass the bill in 2007.







Wood Carvings

The Fragmentation of Vermont's Forests, and VNRC's Efforts to Restore Them

BY WILL LINDNER

Every year Peter Upton can see the changes in his forest. Some are changes he has wrought, selectively locating two-acre clearcuts in his 200 acres in Hubbardton to improve the woods habitat for deer, grouse and songbirds. Others the forest has accomplished itself, because under Upton's protection it has finally had a chance to recover.

"I bought the property in 1988," says the retired neurosurgeon. "Like almost all pieces of land like this, it had been high-graded [removing the most marketable timber without regard to proper forestry practices] for years and years. Do that for a few generations, and you don't have very good woodlands anymore."

Upton's ambition is to improve and restore the forest – not so that he might sell it at a profit at some opportune time, but because he has had an intimate, lifelong connection with Vermont's natural places and forest denizens. When he was a child in Burlington his family owned a camp on the eastern slope of Camel's Hump. His father sold that property when Upton was 10, but bought

another property in Stowe (which, in 1945, was a wilder place than today's destination resort). There was also a camp in South Hero, which remains in Upton's family to this day.

"I've been tied to the land here in Vermont all my life," says Upton (who lives in a two-century-old house in Wallingford, 30 minutes from his Hubbardton acreage). "I looked all over the place before I bought this, and it's a lot more [acreage] than I originally thought of buying."

But opportunities to immerse oneself in undisturbed forest have grown rare as Vermont's landscape – forested and clear – gets divided into smaller subsections. Upton is a hunter, but increasingly, the places he used to hunt are posted

Opposite: Peter Upton



I don't want to see my 200 acres chopped up. That's what's happening all over the state. I don't want to see Vermont become some other place I wouldn't want to live."

— Peter Upton

now.

"As parcels get smaller and smaller the incentives to manage them as woodlands get less and less," he says. "If what you have is 10 acres to put a house on, you don't think about habitat, logging, or forest management. Out of the 70,000 or 80,000 private non-industrial landowners in Vermont the average parcel size is way down – something like 19 acres. I don't want to see my 200 acres chopped up. That's what's happening all over the state. I don't want to see Vermont become some other place I wouldn't want to live."

The Vermont Upton is preserving is a Vermont where a woodsman can still pass countless hours with a chainsaw, selectively harvesting firewood; where he or she can watch the forest – safe from careless cutters intent only on maximum profit – return to life and provide diverse habitat as it passes through natural stages of development. It's a place where you can while away the hours just walking, as Upton did one brisk day in February.

"I'll often take lunch and find some sunny spot to sit and eat and thank the Good Lord I'm lucky enough to have this," he says.

But he knows that preserving "this" can't simply be left to luck. The odds are stacked like cordwood against landowners who want to keep their large property holdings intact and undeveloped. This has become ever-more apparent to Upton.

"It seems like every field has a house in it now, and in more and more places when you look up on the ridges you see these huge houses sticking out."

He pauses to consider that phenomenon, and the economic forces that drive it.

"We don't have any concept here in Vermont of what real money is."

IT'S CALLED 'PARCELIZATION'

To most Vermonters, "real money" is the amount they have to stockpile to pay their property taxes, and it's often out of balance with the returns they get, if any, from their farm and forestlands. It's a dilemma that Stephen Long, co-editor of

Northern Woodlands magazine, addressed in the Winter 2005-2006 issue of that publication.

"A person's house and land becomes the basis for determining his or her ability to contribute to the public treasury," Long wrote. "It's hard to image anything less equitable, because a mansion on the escarpment could be 1 percent of one person's wealth, while an 1850s farmhouse with rotting sills and a 150-acre woodlot could be 99 percent of another's wealth."

Long then described the all-too-common consequences of that inequity.

"The person with the rotting sills . . . can be hard-pressed to come up with cash to meet his annual obligation to the government. If he's forced to cash in, it won't be the house that goes first. If he's smart, he'll sell only a small parcel, knowing that land prices are skyrocketing and the value of what he holds onto can only go up – small comfort, indeed, when before long he's forced to sell another chunk. This process, played out in every town in the Northeast, keeps driving the suburbanization of our landscape."

While tax pressures are often determinative for people who split apart their holdings, taxes aren't the only reason land gets subdivided. Another is tradition: the division among heirs of a family's long-held land. Vermont Extension Forester Thomas McEvoy, who is based at the Rubenstein School of Natural Resources at UVM (and is the author of a book titled *Legal Aspects of Owning and Managing Woodland*), is a recognized expert on what is known as "parcelization."

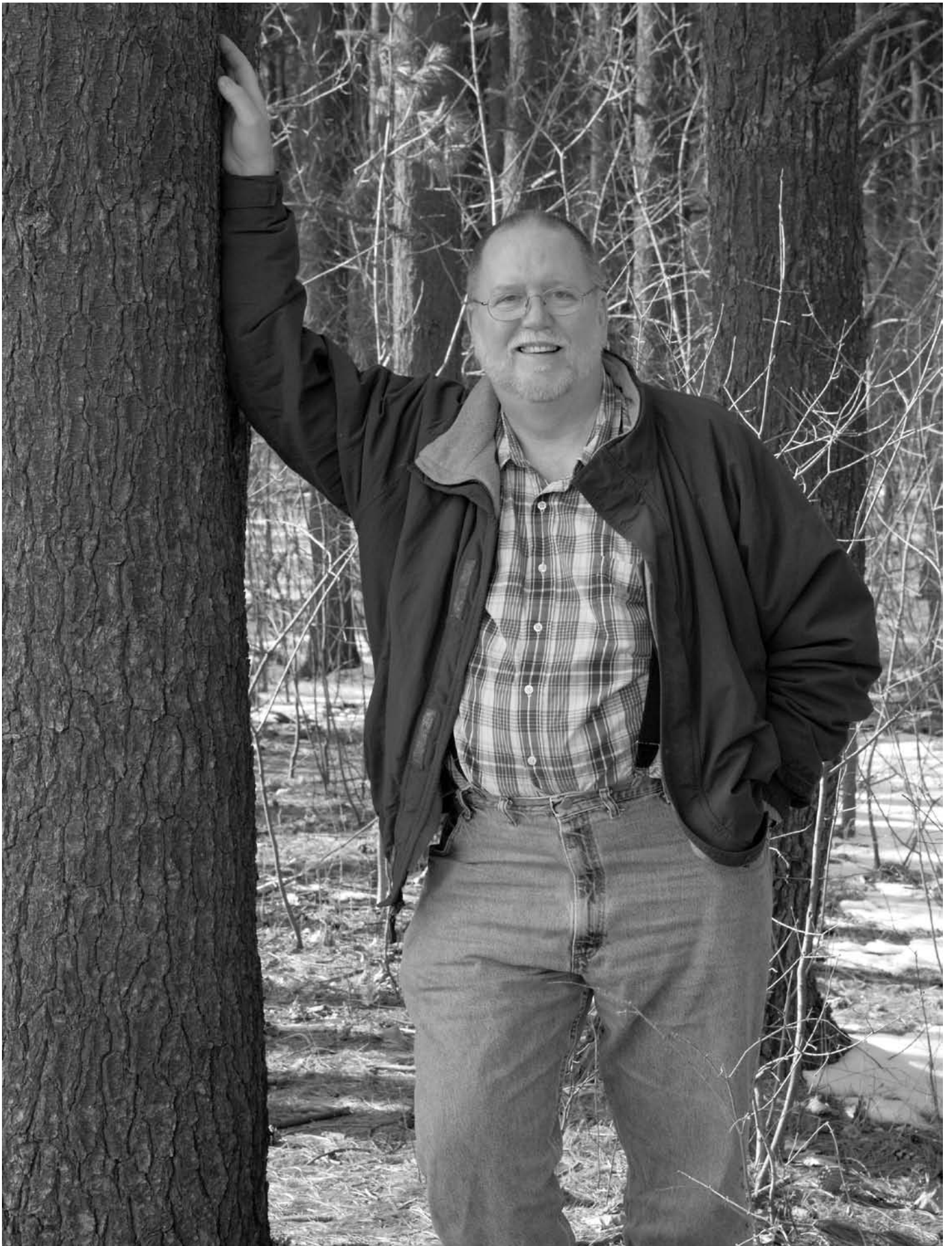
"A farm family with land and little other assets might be inclined to divide the land up among their five adult children," says McEvoy, "so where there was one parcel there are five. Or they might pass the biggest parcel to the eldest son and deed smaller lots for the other children, [which then sprout] trailers and houses."

And, of course, there are reasons beyond these. Telecommunications and modern septic technology now enable people to live and work where previously no one thought a house could or would be built. The unprecedented desirability of those locations drives up land values, which drives up taxes, which propels further parcelization.

Jamey Fidel, VNRC Director of Forest and Biodiversity Programs, has gathered statistics from an array of government and other sources.

"Between 1980 and 2005, approximately 23.8 million acres in the Northern Forest region [a broad swath from Maine to New York State that includes most of Vermont] changed hands," says Fidel. "That's almost equal to the entire acreage within the Northern Forest. Of course it includes

Opposite: Vermont Extension Forester Thomas McEvoy





“Our policy sets up a situation where people are looking at land as though they’re holding it in inventory for development,” says McEvoy. “Why? Because that’s how they’re being taxed.”

many repeat transactions for the same parcels, but it indicates a lot of activity. And nearly half – 45 percent – of all the forestland transactions completed in the last 25 years actually took place in the last five years.”

Since roughly 80 percent of Vermont’s landscape is privately owned, much of the state is potentially marketable. And Fidel confirms Peter Upton’s observation that parcels are getting smaller.

“In 1983, 19,000 individuals owned forest parcels one-to-nine acres in size,” he says. “By 1993 there were 40,900 owners of those smaller parcels. There are ecological ramifications for this divided ownership and management; there are public ramifications as well. Most of the focus on what’s happening to Vermont’s landscape has centered on farmland, and how it gets divided up and taken out of agriculture. Similar forces are at work on forestland.”

Deb Brighton, of Vermont Family Forests – a Bristol-based conservation group that promotes the community benefits of vital, healthy forests – suggests another reason for rampant land transactions.

“Developers develop because people want whatever they’re developing,” she says. (The enthusiasm in some quarters for new Wal-Marts comes to mind.) “But my feeling is that the biggest thing is that people want a piece of the earth. For the seller, that’s not pressure; it’s what someone – was it Pogo? – called ‘insurmountable opportunities.’ You’re sitting on this asset that’s worth a lot of money. If the price was lower than what you could get for responsibly managing the forest, maybe you’d hang onto it.”

All too often it’s not, leaving Vermont property owners susceptible to the shock-and-awe of what Peter Upton calls “real money.”

ASSESSING CURRENT USE

The gathering negative effects of forest

parcelization are the concerns behind VNRC’s Vermont Forest Conservation Campaign. The project has two components: research and reporting on incentives and planning strategies to promote forestland conservation on private lands (working with willing landowners); and interaction with other Vermont organizations doing valuable work to protect the viability of our forests. VNRC’s goal is to devise, test, and promote workable solutions that would slow the development of Vermont’s forests.

“There are options available to owners of large properties that protect the properties from development and at the same time provide the owners with economic relief from the tax costs of holding onto their land,” says Fidel.

One such avenue comes in the form of easements sold or donated to a land trust. The easement is a restriction on the deed that prohibits development of the property; when those rights are removed the owner pays property taxes based on the land’s reduced value. But while land trusts have conserved many thousands of acres of Vermont’s finest property, observers agree that they have had their greatest conservation impact on agricultural – not forested – land. (See “Forestland Owners Have a Million Stories,” page 18).

More pertinent to forest conversation, perhaps, is the state’s Use Value Appraisal Program, commonly known as Current Use.

Landowners enrolled in Current Use pay their property taxes based upon a “use value” set annually by Vermont’s Current Use Advisory Board. Compared to the town’s assessment, which is influenced by a property’s “fair market value,” the “use value” will be lower (assessing a forest as a forest, for example, not as the car dealership or shopping mall that could replace it). The state then reimburses the town for the lost revenue.

In exchange for this tax break, the state prohibits development as long as the property remains in Current Use. Forestland owners in Current Use must also enter into a forest-management plan approved by a county forester. Withdrawing from the program, developing the property, or violating the forest management plan all trigger a penalty: the owner must pay a “land-use change tax” equivalent to 20 percent of the property’s fair market value. (After 10 years of enrollment the penalty drops to 10 percent of fair market value.) Forestland owners must commit at least 25 forested acres to the program to qualify.

Some 11,000 Vermont taxpayers participate in Current Use. Peter Upton is one of them. Upton has had his 200 acres in Current Use since 1999.



“I think it’s a great program,” he says. “If we’re interested in maintaining the forest landscape there’s got to be incentives for the landowner not to start chopping up property and selling lots. Everyone benefits: the landowner benefits, the forest-products industry benefits because you have to have a management plan; you can’t sit there for 50 years and do nothing. One of my long-range goals is improving the quality of my forest, and Current Use helps me do that.”

Leo Laferriere is a consulting forester based in Waitsfield, who is convinced that landowners derive more from Current Use than just its tax advantages.

“It starts with the monetary motivation,” he concedes, “but once a forester shows them what’s going on in their forest and what can be done, a land-stewardship ethic kicks in. It opens their eyes and they develop a new sense of perception. It’s wonderful.”

Laferriere’s clients range from the crusty Vermonter down the road who parks his car at the start of winter and stays home until spring, to the urban refugees whose second properties in Vermont provide them a restorative contact with nature. Laferriere believes that ecological crises like global warming, rampant fires in the West, and endangered species have raised people’s awareness of the value of nature. And the burgeoning stewardship ethic he perceives often starts with the education landowners receive through their Current Use participation. In that, Laferriere sees hope for Vermont’s forests.

And yet land transactions and the loss and division of forest parcels continue apace.

“Current Use has been on the books for nearly 30 years,” says Fidel, “but we are still seeing troubling trends regarding parcelization, fragmentation, and loss of habitat. Only 30 percent of the available forestland in Vermont is enrolled in the program, so we need to understand if Current Use is working to its fullest potential.”

Why hasn’t Current Use been more effective in preventing parcelization? VNRC isn’t the only organization that wants to know. Vermont Family Forests conducted a Vermont Woodland Owner Survey in Addison and Essex Counties in 2005 in part to gauge attitudes toward the program by its target population.

“We found a bunch of people who didn’t want to participate [in Current Use] because they didn’t like the government having a say in the management of their land,” says Deb Brighton. Furthermore, Current Use ties the property up unless the owner is willing to suffer the

Since roughly 80 percent of Vermont’s landscape is privately owned, much of the state is potentially marketable.

consequences of breaking the contract, particularly in the first 10 years when the land-use change tax is highest. “People on the edge, who may be in a financially less-stable position, need the potential for liquidity,” says Brighton.

Ultimately, the program is not fortification enough against tsunamis of “real money” that can plant a costly home on a remote ridgeline, or a big-box store in a woodlot or cornfield. As State Forester McEvoy explains, “If you take property out of the program you pay a penalty. But developers would look upon it as chump change compared to what they’ll get in return.” Indeed, recent testimony on the Current Use program before the House Natural Resources Committee confirmed that penalties are not deterring people from withdrawing at a troubling pace.

This leads McEvoy to quote former Vermont Gov. Howard Dean, who said the program’s basic flaw is that it’s merely “a lease on development rights.” Indirectly, Current Use institutionalizes the concept that a property’s real value lies in its development potential.

“Our policy sets up a situation where people are looking at land as though they’re holding it in inventory for development,” says McEvoy. “Why? Because that’s how they’re being taxed.”

For all its virtues, as long as our collective mindset – expressed through tax policy – is that land’s highest use is to be altered from its natural state, the best analogy for Current Use as a hedge against parcelization is that of the boy with his finger in the dike.

LOOKING ANEW AT CURRENT USE

Yet there are legions of conservationists – VNRC members, Vermont Coverts “cooperators” engaged in habitat reclamation on their own properties, participants in VFF’s Community Forests Project, contributors to the Nature Conservancy, the Vermont Land Trust and others – who are not ready to accept forest parcelization as inevitable. The ideas and energies of all these players give VNRC a lot to work with in its Vermont Forest Conservation Campaign.

“Many factors seem to be driving parcelization,



and we need to look at them all,” says VNRC’s Jamey Fidel. “If rising property taxes and booming land prices are issues, how can we rectify their effect? It’s probably not practical for the state to reduce property taxes for everybody who owns forestland, but maybe we should focus programs on a broader range of forest values, such as providing tax relief for lands with wildlife habitat, watershed-protection areas, wetlands, and other functions.

“What we’re talking about is creating more incentives for willing landowners; and the right ideas, the right programs, ought to stimulate more people to be willing landowners.”

Steve Long of Northern Woodlands believes that all undeveloped land should be automatically

timber cutting in their “productive use” provisions. The Gund Institute contends that sustainable forest management (SFM) and a broader formal definition of “productive use” would stimulate conservation, forest ecology, and vital long-term forest and community economies.

Gund presents this analysis: “(E)xisting market forces . . . favor short-term gain over long-term sustainability. Thus, the invested profits from unsustainable harvests may actually provide higher financial returns than the sustained yields available from careful management. . . As a result, even when the value of ecosystem services (such as water regulation, habitat, biodiversity, climate regulation, and recreation) far outweighs the value of timber, it may still be rational for the landowner to harvest timber aggressively, thereby reducing ecosystem services and potentially even reducing future harvests.”

A 2001 survey of landowners enrolled in New Hampshire’s Current Use program – which does not require timber harvesting and allows wetlands and wildlife habitat to be enrolled – found that 91 percent held their lands for personal reasons related to enjoyment, family heritage and protection from development. Incorporating more ecological values into existing Current Use programs might stimulate environmentally sustainable forest management without having to start at the beginning and create new policies and programs.

“Expanding Current Use to include broader values should not be seen as a timber-versus-non-timber management debate,” Fidel stressed. “Protecting the core emphasis of the program is essential, but we also should be thinking about how to encourage as many landowners as possible to enroll, recognizing there is real value in keeping Vermont’s forestland intact for the long term.”

“Current Use has been on the books for nearly 30 years,” says Fidel, “but we are still seeing troubling trends regarding parcelization and loss of habitat. We need to understand if Current Use is working to its fullest potential.”



Jamey Fidel with his daughter Ayla

enrolled in Current Use or a program like it, because owning land is a public service; it provides us with clean water, wildlife habitat, recreation, scenery that attracts tourists, and raw materials that create jobs.

One of the most interesting approaches to policy reform is that taken by the Gund Institute for Ecological Economics at UVM. The Institute proposes broadening the “productive use” provision of the tax-incentive programs that exist in all the states of the Northern Forest. According to Vermont’s Current Use program description, “The main objective in requiring a management plan is to assure that the land is managed carefully. It is not intended to force a landowner into a particular type of management.” In practice, though, most management plans heavily emphasize

TOWNS AND HABITAT

Parcelization, then, is the ongoing process of subdividing Vermont’s landscape. From a habitat perspective, “fragmentation” is the result. Habitat can and does become so fragmented that it ceases to be habitat. Biologists with the Vermont Department of Fish & Wildlife (DFW) concur that, despite the significance of climate change and other factors, habitat fragmentation presents the most immediate threat to the state’s wildlife. (See “Moving In; Fragmentation and Habitat” on page 17.)

“Most [fragmentation] comes from conversion of undeveloped forest or open areas into houses, roads, shopping centers... all the things that come with development,” says Kim Royar, a wildlife biologist with the Department of Fish & Wildlife.



As a result, Vermont is losing a square mile of critical natural habitat to regulated development every year. Ten years, 10 square miles: a considerable chunk in a small state. This pattern, linked to the accelerating rate of land parcelization and the habitat fragmentation that results, is an ecological, ethical and economic concern. (Wildlife-associated tourism and recreation contribute \$400 million annually to Vermont's economy.)

Yet, as important as biodiversity is for Vermont ecosystems, there's more to the concept (and the reality) of fragmentation than its affect upon plants and animals. Fragmentation, says Extension Forester McEvoy, is also about people and communities.

"When you parcelize landscape you also fragment it for continued crops of timber; you fragment it for recreation, because the decisions about how or whether it gets used [for hunting, skiing, hiking, birdwatching, snowmobiling] become disjointed simply because more people are involved.

"Parcelization of land," he concludes, "leads to fragmentation of purpose."

And fragmentation of livelihoods – for a subdivided forest can never be a real working forest.

"With small lots it's not worth it for a guy to move his skidder there," says Northern Woodlands' Steve Long. "So you have fewer loggers, then fewer sawmills, then fewer truckers... fewer everything. There is some consolidation; some outfits get bigger and a lot of others go away. The erosion of rural people's capacity to work in their community is both an economic and a social issue."

It's logical, then, that municipalities can and should play a greater role in curbing parcelization and forest fragmentation.

"Every week town planning and zoning boards are making decisions about subdivision applications that have an enormous impact on how we parcel out our landscape," says Fidel. "These are citizens operating with the best of intentions, but often in a vacuum, without understanding the cumulative impact of the applications they approve."

Brian Shupe, a former municipal planning officer himself and now director of programs for the Vermont Forum on Sprawl, says, "This issue is similar to farmland loss caused by rural residential sprawl. And the solutions – the ways we can mitigate fragmentation – are similar."

Towns can formally identify forestlands that have high production value for wood products, or for recreation, or wildlife protection. These values can then be applied to zoning decisions. They can also create town forests, as several Vermont towns

have done.

"Elmore went through a FLESA process – a Forest Land Evaluation and Site Assessment procedure, which is a way to quantify values such as water quality, wildlife habitat, and soil productivity," he says. "Elmore took a further step and identified the northern extent of the Worcester Range as being an important community resource. They created a Forest District, limited to forestry and recreation, with no residential subdivision allowed except at lower elevations, and only a low density."

Such decisions can be controversial when they change the zoning status of existing private properties – as the Elmore plan did.

"Some private landowners objected," says Shupe, "but it was passed by [a vote of] 70-plus percent of the community." Stowe and Waitsfield are other towns that have set aside large forest tracts for protection from development.

Not surprisingly, though, forests often lose out to farms and scenery when towns make their zoning decisions. And when towns establish protected forest zones in an effort to protect habitat, they often overlook the wildlife corridors running between them (which are apt to be human corridors as well, such as roadways through valley floors). Each protected block then becomes an island, which is detrimental for species survival.

However, Fish & Wildlife has published a 135-page manual to educate citizens and municipal leaders and help them make appropriate, effective decisions about protecting natural resources and habitat. Titled *Conserving Vermont's Natural Heritage; A Guide to Community-Based Planning for the Conservation of Vermont's Fish, Wildlife, and Biological Diversity*, the manual has been well-received.

"We're making sure every town and regional planning commission got at least two copies, and the demand for additional copies has been very high," says Wildlife Biologist John Austin, one of its principle authors.

The manual includes three sections: "Laying the Groundwork for Conservation;" "Natural Heritage Elements" (with sections discussing "Contiguous Habitat" and "Connecting Habitat"); and "Bringing Vision and Reality Together," where the book gets into the nitty-gritty of planning, zoning, and non-regulatory tools. The Department plans to hire a field worker to help community boards apply the lessons and guidance contained in the book.

Importantly, Austin believes towns want to protect habitat.

"There was a survey of all the existing town plans with a look at the extent to which they





incorporate the interests and issues of Fish and Wildlife,” he said. “The vast majority did speak to conservation and the public’s interest in it. But the vast majority also fell far short of the mark when it came to implementing the plans’ goals and objectives.”

Through the Vermont Forest Conservation Campaign, VNRC hopes to work with the Fish & Wildlife Department and local and regional planning commissions to develop planning strategies for encouraging growth in the right locations. “We need to build new homes in Vermont, but there are ways we can do this and still be mindful of the impact to forest resources and wildlife habitat,” says VNRC’s Fidel.


AT STAKE

Fragmentation does not have to be the fate to which we sentence our forests and the species that depend on them, including ourselves. We know where the problems lie: in booming real estate

markets, tax policies, planning (or sometimes lack of planning) that promotes parcelization, lifestyle advances that accelerate human intrusion in remote wooded areas, limited incentives for private landowners, and the powerful “real money” that development offers.

But knowing the problems and surmounting them are not the same thing. Thom McEvoy, the state extension forester, is pessimistic that the ship of policy can be turned in time to save Vermont in its recognizable form.

“We’ve created a system that favors the highest bidder,” says McEvoy, who foresees gentrification of the state, with Vermont children either catering to the feudal lords or leaving. “I don’t know what the answer is, but I do know there needs to be major, major changes in the way we as a society think about our forests and land. Until that happens it’s going to be impossible to change anything.”

The time to start thinking, and averting that dim future, is now. 



MOVING IN; FRAGMENTATION AND HABITAT

Vermont's peculiar history with its forest habitat is by now well known. The settlers who moved here from southern New England in the mid-1700s spent more than a century chopping down trees to make room for farms and sheep, and to provide timber for the lumber, potash and charcoal industries. By the time the clearcutting frenzy had played out, 80 percent of Vermont's landscape was bare. Gone, along with the trees, were the plants and animals that thrived in a forest environment.

The recovery of the forest and the return of so many forest species during Vermont's second century was a testament to nature's resilience. Unfortunately, though, we have now embarked on a subtler assault on biodiversity: destroying habitat with deeds and driveways rather than sheep farms and industry. Habitat, it turns out, is delicate, and the "parcelization" of property and "fragmentation" of natural ranges are today's ecological concerns.

In November 2005 the state published an exhaustively researched Wildlife Action Plan (WAP). The Plan identified 144 vertebrate and 193 invertebrate Vermont species as Species of Greatest Conservation Need, a grouping that helps biologists focus their remedial efforts. Kim Royer, a wildlife biologist in the Springfield office of the Department of Fish & Wildlife, served on the mammals group for preparation of the WAP. Among the species addressed in the Plan, she says, were small mammals like lemmings, shrews, bats, rabbits (the Northeastern cottontail), and voles, up to mink, otter, bobcat and black bear. John Austin, a Fish & Wildlife biologist based in Barre, added songbirds to the list, from the hermit thrush (Vermont's state bird) to migratory species like the oven bird and the scarlet tanager.

The WAP describes the effects of fragmentation:

"The breaking up of habitats into smaller, non-contiguous patches . . . can 1) render important habitats inaccessible (such as isolating a den site from a feeding site); 2) isolate populations (for example grassland butterflies, spotted salamander, and tiger beetles); and 3) favor edge-tolerant species such as raccoons and crows, as well as invasive exotic

species that can out-compete native and rare species. The result is often increased predation, reduced mobility and changes in habitat micro-climates."

The breakup of home ranges for Vermont wildlife constitutes the biggest immediate risk to species viability.

"Amphibians are going to be affected by fragmentation at almost any level," says Royer. "If you fragment a vernal pool [seasonal wetlands that can be as small as a puddle] from their winter habitat that's going to mean those amphibians can't get back to their breeding pool. The wider-ranging species, like black bears and bobcats, we believe need

large blocks of habitat to do well. Undeveloped corridors allow them to move from one habitat type to another."

Bears, for example, need access to beech stands, and corridors – "the wider the better" – are their means of access.

"If there are barriers to those stands," said Royer, "they use up more of their fat reserves, and their reproductive rates go down. The effects can be drastic, as well as chronic and long-term."

It doesn't take much to disrupt a corridor. A few long driveways into the woods will suffice, or the grading and paving of back roads that once served tractors and hay wagons but now must be tailored

to the expectations of commuters who live where, just a generation ago, no one imagined building a house.

And as people clear woodlands for manicured yards and move, with all the accoutrements of 21st-century civilization, into the once-silent forest, the hubbub of municipal services – snow plows, utility poles, school buses – extends its tentacles into other creatures' habitat. Until it is habitat no more.

The ultimate solutions to reduce forest fragmentation are varied, but one important recommendation imbedded in the State's Wildlife Action Plan is to provide financial incentives for private landowners to reduce problems and fragmentation to habitats. VNRC couldn't agree more.

To read the Wildlife Action Plan, go to http://www.vtfishandwildlife.com/swg_cwcs_report.cfm



Fish & Wildlife biologist John Austin



FORESTLAND OWNERS HAVE A MILLION STORIES

Hugo Liepmann, resident of Randolph, has news for Vermont policy makers. “If they think that Vermont’s large pieces of land are going to stay large by the actions of private landowners, they’re badly mistaken,” says Liepmann, 71, who, with his wife Cynthia, owns 150 acres of largely wooded, mountainous land outside Randolph Center. “Our tax policy, in my view, pushes parcelization.”

It’s a personal matter for the Liepmanns. “I’m mulling over how to keep our property intact and undeveloped,” says Hugo. “But what’s the mechanism for doing it? If you have the money you can set up a trust or an L.L.C. [limited liability corporation]. You can set up all kinds of things. But even if I were to donate [a conservation easement], the town is going to tax it. And then there’s the maintenance. Where is the money going to come from?”

“Vermont is definitely going to lose its large parcels of land,” he concludes. “There are tremendous pressures to carve it up.”

Primarily, those pressures are economic, but taxes are only part of the story. Land in Vermont has become a commodity. The quickening pace of land transactions in the 1990s and early 2000s, and the division of land into smaller marketable parcels, is a hard trend for landowners to resist; especially as people retire and get on in years, it becomes an increasingly attractive proposition.

“They still need money,” says Liepmann, “and those who have large holdings of land... well, some of them see their land as their retirement. They think, ‘That’s my IRA.’”

Hey, it’s free enterprise! But it’s costly free enterprise – ecologically, as forests are fragmented and habitat compromised; economically, as forest industries thin out and employment dries up; and culturally, as posted property becomes off-limits for traditional Vermont enjoyments. That’s why it’s crucial that Vermont find more ways to support forestland owners like the Liepmanns, Peter Upton of Hubbardton (see “Wood Carvings,” page 9),

James Bruce Engle of Peacham, and others who want to resist the trend and keep their holdings intact.

Yet these conservers are not a monolithic cohort of people with identical values, agreeable to identical solutions. Says Farley Brown, executive director of Vermont Coverts, “the non-industrial private landowner community in Vermont is fascinating. It’s amazing to see how differently landowners feel.”

Vermont Coverts is a 20-year-old, statewide nonprofit that educates landowners in forest stewardship, with an emphasis on preserving habitat. (“Coverts,” explains Brown, “is an Old English word that refers to a place wildlife can go for protection.”) More than 300 people have attended its seminars, becoming “Coverts Co-operators,” and then gone back to their towns to create networks of citizens to advocate for habitat management, particularly on contiguous properties.

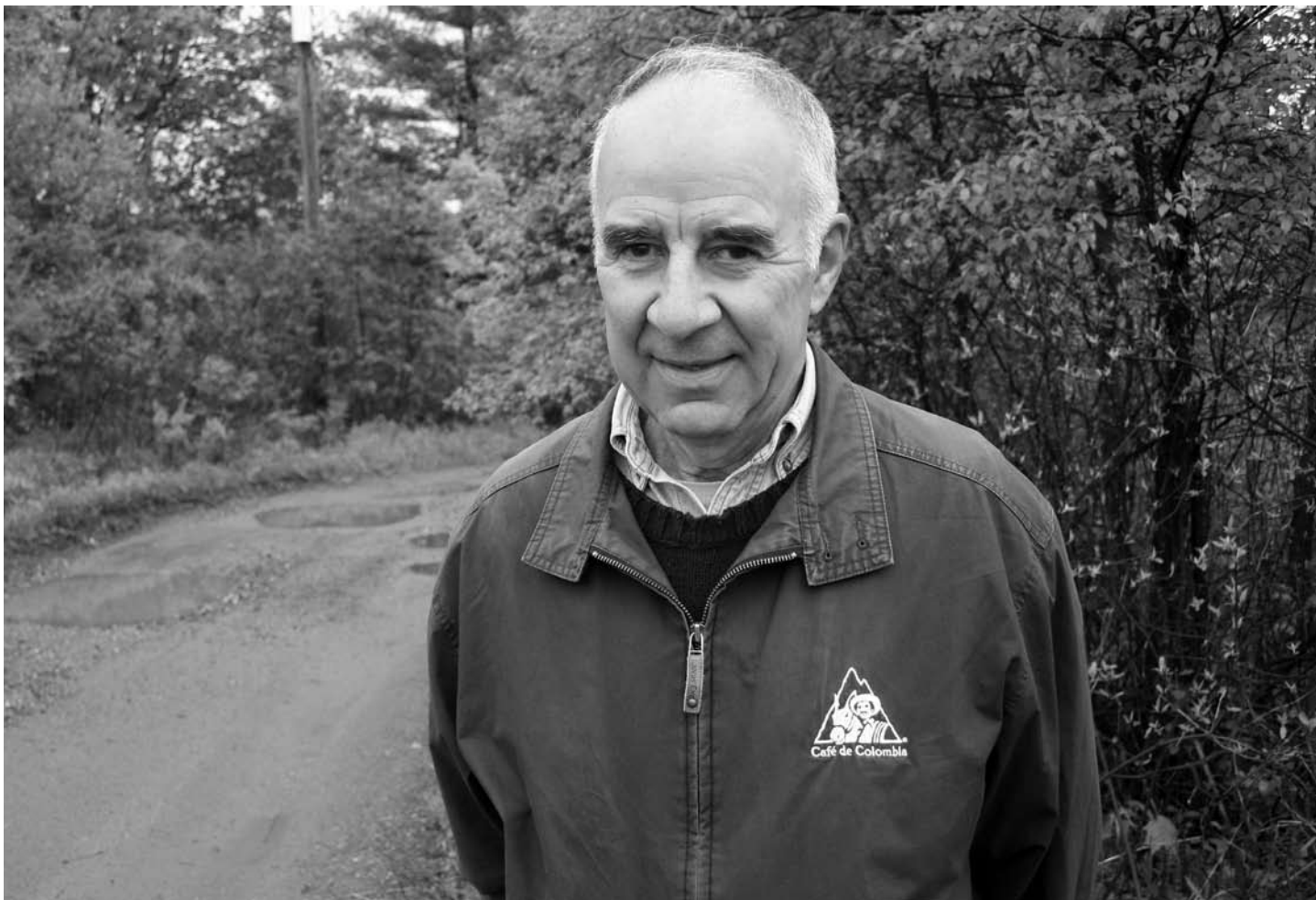
“The larger the block of forest, the larger the potential for viable wildlife habitat,” says Brown.

Her work brings her into contact with hundreds of forestland owners. Many are enrolled in Current Use, which at least for the short term provides tax relief and forestalls development.

“Some landowners see value in managing their forests [through Current Use] for forest products,” says Brown, “but there are definitely some with knee-jerk reactions that it’s not fair to the towns to deprive them of tax income!”

(This is more myth than reality, because the state reimburses towns for revenues lost on Current Use properties.)

Conservation values sometimes butt up against family values. “I come across landowners who don’t want to lock up their land. They want their kids to have the freedom to sell the property someday or put up a house. At the other end of the spectrum are folks who don’t trust what their family members’ decisions could be down the road. Their children have different things going on in their lives and are not committed to stewardship.”



For them, conservation easements, sold or donated to land trust organizations, may offer a special appeal, because the land trust holds those easements – essentially a deed restriction that prevents development – in perpetuity. Theoretically, this arrangement decreases the value of the property and thus reduces the landowner’s taxes. However, towns are not compelled to reassess the property, and there are indications that some assessors are reaching a different conclusion: that conservation easements actually increase the market value of real estate.

There are many land trusts in Vermont, and they have had an impact. The Vermont Land Trust (VLT) operates statewide, often in partnership with local or regional land trusts. The VLT was founded in 1977, and in the January 2006 issue of its newsletter reported that it had completed 1,314 projects, conserving a total of 449,970 acres in Vermont. Those numbers are bolstered by properties conserved by local trusts, so the amount of land kept intact and undeveloped through conservation easements is significant.

But observers agree that land trusts have their biggest effect on agricultural lands. They’ll buy easements from farm families, who not uncommonly sell their development rights to gain capital they can use to keep farming or invest in

new agricultural pursuits. By contrast, forest tracts that enter into easement agreements with land trusts are more apt to be donated by their owners. Those tracts are precious from a conservation/habitat perspective, but the fact that they are donated indicates that the easement system, as applied to forests, speaks to a certain clientele.

“The people that I am concerned about are people who can’t afford to do that,” says Deb Brighton of Vermont Family Forests. “If they can’t afford to give their land away, and can’t afford to keep it, parcelization, and perhaps development, are nearly inevitable.”

Furthermore, Brighton believes that land trusts are missing the boat by not more actively recruiting, and paying for, forestland easements.

“My bias is that forestland is a greater contributor from an ecological viewpoint,” she says. “Agricultural land is not storing up carbon, is not providing the same sort of habitat. We haven’t made enough money available to owners of forestlands to sell their development rights and conserve those properties.”

FINDING THEIR PATHS

James Bruce Engle of Peacham is a retired diplomat nearing his 87th birthday. Engle owns 945 acres in West Groton (all but 70-some acres

Consulting forester Leo Laferriere of Waitsfield sees a burgeoning stewardship ethic among his forestry clients.



forested), and his wife and two of their sons own approximately 390 acres on Mack's Mountain in Peacham. All the forestlands are in Current Use.

"I was overseas and didn't understand Current Use, so we didn't get in until 1989," he says. "But it has saved us a lot of money, and we've purchased more property since then."

Engle hires a consulting forester to develop his forest management plan for the state, but he writes the narrative himself. His objectives include improving the quality of the forest through selective cutting; improving his lands aesthetically ("There are ugly forests in Vermont, spoiled by people dumping cars and cutting down trees and leaving the stumps," he points out); and providing recreation (Engle hosts some of the most extensive snowmobile trails in the state).

As important as any of these goals, he says, is providing wildlife habitat. His West Groton property includes seven wildlife "plots," where he sows corn, rye, oats and clover in open areas but allows the animals to do the harvesting (by grazing). Engle knows that the species diversity Vermont enjoys wasn't always here; unsustainable land-use practices in the 19th century drove species away, and they have only returned as the forest has recovered. A co-founder of Vermont Coverts, he is proud of the organization's success and has provided his West Groton property as a virtual laboratory for the habitat-development practices that Coverts teaches.

Yet as dedicated as he is to the intact protection of land, Engle is vague about what will become of his forest holdings. He envisions it becoming a wildlife preserve of some sort.

"But I don't have enough money to establish a forest and wildlife reserve into the distant future," he says. "I'm looking for an institution or organization that would take over the financing for that... someone looking to do things for the public good."

Meanwhile, Engle is among several Coverts members who are studying "estate planning" as a way that landowners might protect their lands after they have died. But such planning is no silver bullet, not without long-term funding mechanisms. The problem comes back, again, to money.

In Tinmouth, Bob and Sue Lloyd hit upon an unusual approach to retaining undeveloped lands. In 1963, Bob and two former college roommates bought 450 acres there for \$8,000. The group was later joined by one of Sue's brothers. All were part-time Vermonters, most of them teachers in other states. The Lloyds, who worked in Massachusetts, spent more time on the land, which had no permanent structures, than the others.

Over the years a complicated history of

ownership unfolded, involving many more than the original four partners. People had diverse interests and levels of commitment; decision-making structures demanded constant tinkering.

"There was a strong feeling among us, from the very beginning, that we should not be using the land just for recreation," says Bob, "but that we should be thinking about the future of the forest and farmland [an adjacent dairy had been added], and that it should be kept whole, undivided, and working."

The first real breakthrough occurred in the late 1970s when the Lloyds approached a fledgling organization called the Ottauquechee Land Trust with vague thoughts about finding a way to keep the lands intact and safe from development.

"And this fit precisely with Rick Carbin's vision," Bob marvels, even today, as he thinks back upon it. Carbin was the driving force behind the Ottauquechee Land Trust, which grew to become the Vermont Land Trust. With the evolution of the easement concept, and the help of a Rutland attorney, things fell into place. Over the years the ownership structure has shifted as the group worked out agreements that met various people's needs and philosophies. A simplified version is that each of the current eight parties owns a 10-acre lot for a home, while the rest of the 1,300 acres is held in common. The structure, says Lloyd, "gives each owner something they can sell so they can leave the group without destroying the group." The VLT conservation easement and Current Use also fit into this amalgam of responsibilities and opportunities, which has worked effectively to preserve these Tinmouth lands.

The Lloyds retired to Tinmouth in 1997, and Bob now sits on the town planning commission and board of adjustment. He tries to use his position and experience to get people thinking about ownership structures somewhat similar to his own, including Planned Residential Development to consolidate housing and thereby conserve land and forests. However, few if any are following in his footsteps.

"This whole idea of condominium ownership, where you own something in fee simple and own a larger portion jointly, which we have done for 26 years, is unfamiliar to many people," he admits. "You don't sell the idea by beating a drum. You sell the idea by letting people see that it works."

PONDERING THE FUTURE

The quest for what works is the common denominator among conservation-minded people who see fragmentation happening around them and don't want that fate to befall their property. Hugo Liepmann believes that bringing




conservation within the reach of landowners who are not wealthy will require the development of a partnership among municipalities (to promote local conservation), land trusts (to offer a mechanism), and a generous financial community to provide needed resources. Liepmann says this kind of partnership has stimulated land conservation in Lincoln, Massachusetts, where he and Cynthia once lived, and could be replicated in Vermont. The state should play a role, too, but Liepmann is not optimistic about Vermont changing its tax laws in a way that would reduce revenues.

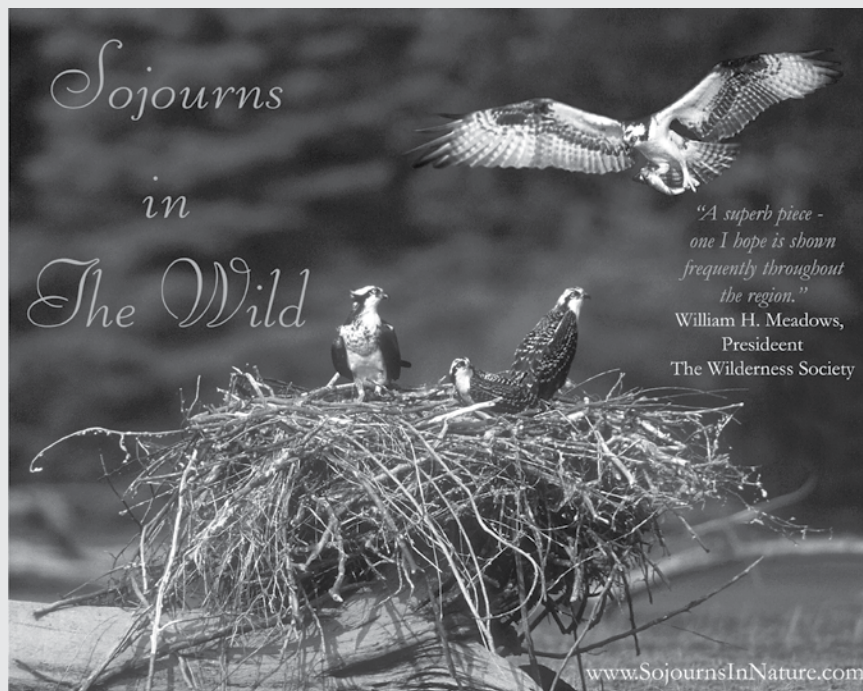
Meanwhile, in Hubbardton, the future of his 200 forested acres plays upon Peter Upton's mind. One thing he is certain of: "It's not there to get rich off of. It's not a commodity, or an investment like the stock market. That's not the way I see land."

His property is in Current Use, and he supports the program. "But you can get out of it. And they may decide not to fund it anymore, and the program may die."

He's considering donating a conservation easement to a land trust. "That would keep the forest wild... well, you can't say forever, but for the foreseeable future, and my family and other people would be able to enjoy it."

In any case, this isn't a responsibility he's going to duck.

"I'm the guy who owns it right now, and it's my decision," says Upton. "I can't protect the whole state, but I can protect a little bit. We tend to think what little we can do doesn't count, but it definitely does." 



Today's Environmental Learners...



Tomorrow's Environmental Leaders...

Sterling College

WORKING HANDS ♦ WORKING MINDS

Craftsbury Common, Vermont

Mission The Sterling College Community combines structured academic study with experiential challenges and plain hard work to build responsible problem solvers and stewards of the environment as they pursue productive lives.

Majors

- Conservation Ecology
- Northern Studies
- Sustainable Agriculture
- Self-Designed Studies
- Outdoor Education and Leadership

www.sterlingcollege.edu • (800) 648-3591

TAKE ACTION!



TAKE ACTION ON YOUR LAND

Vermont Coverts, an organization comprised of forestland owners and other concerned Vermonters, advocates for well-planned forest management which enhances wildlife habitat and provides timber benefits too. Learn about creative strategies landowners are embracing to help to keep Vermont's magnificent forest lands working and free from pavement by attending an upcoming technical assistance workshop. Learn more about Vermont Coverts and the important work they are doing by visiting their web site — www.vtcoverts.com.

Vermont Family Forests is a nonprofit family forest conservation organization that promotes the conservation of forest community health, and when appropriate, promotes careful cultivation of local forests for community benefits. Landowners can enroll their forests with Vermont Family Forests and learn how to manage their land in an ecologically sustainable manner. For more information, visit www.familyforests.com.

TAKE ACTION IN YOUR COMMUNITY

Planning at the local level is vital to ensure the long-term health and viability of Vermont's forests, wildlife and important natural habitats. A 'how-to' manual for concerned Vermonters

interested in protecting valuable natural resources was made available in 2004 by the Vermont Department of Fish and Wildlife. The manual, titled *Conserving Vermont's Natural Heritage – A Guide to Community-Based Planning for the Conservation of Vermont's Fish, Wildlife, and Biological Diversity* is a great take-action tool. Go to your planning commission or town Selectboard with this book in hand.

It makes a powerful case for why conservation is important. To receive a copy of *Conserving Vermont's Natural Heritage* call 802-241-3700 or download a copy of the report at: www.vtfishandwildlife.com/library.cfm?libbase_=Reports_and_Documents.

Another community initiative is the Vermont Town Forest Project being spearheaded by the Northern Forest Alliance. This project is working on ways in which communities can better manage and celebrate municipally owned forests and establish and expand new town forests. Please visit www.northernforestalliance.org/townforest.htm to learn more.

TAKE ACTION IN YOUR LIFE

Keeping Vermont's forestlands viable will rely in part on maintaining a viable forest products industry. Everyday Vermonters have an ability to help strengthen the state's forest products industry by spending their dollars locally. The creativity and ingenuity of Vermonters is making it easier for the state, public institutions, businesses and residents to purchase sustainably

harvested Vermont wood products. Vermont WoodNet works to strengthen the "Vermont Made" wood products industry by creating opportunities for joint manufacturing, joint marketing and increasing access to materials and services. Through independent auditing, certification and the promotion of certified forest products, SmartWood works to improve forest management by providing economic incentives to businesses that practice responsible forestry. The Cornerstone Project — an initiative of the Vermont Sustainable Jobs Fund — is an initiative aimed at exploring opportunities for large

institutions — universities, public offices, and businesses — to purchase Vermont wood products from sustainably harvested forests for their construction projects.

Learn more about these great efforts by visiting:

Vermont WoodNet:
www.vtwoodnet.org

SmartWood:
www.smartwood.org

The Cornerstone Project:
www.vsjf.org/sd-projects/default.CP.shtml

TAKE ACTION IN YOUR STATE HOUSE

The Legislature has an important role in creating incentives for landowners to conserve forestland. Several important legislative initiatives that safeguard Vermont's forests are the Current Use Program and the Vermont Housing and Conservation Board. VHCB helps protect the state's forests and farmland by purchasing conservation easements and getting involved in supporting critical conservation initiatives. Ask your legislators to support full funding for VHCB's efforts. Also let them know that you support increased incentives for landowners to keep their valuable lands intact rather than selling them off for development. Learn more about VHCB by visiting www.vhcb.org and stay tuned to VNRC's web site for our ideas on the best tax-relief and incentive-based strategies to help Vermonters hold onto their land.

There are many ways — and reasons — to get involved. To ensure that our forests, wildlife and habitat are healthy and prosperous, please join VNRC and TAKE ACTION!

NEWS & NOTES



NEW STAFF

VNRC is lucky to have **Kim Greenwood** on board as our staff scientist. Kim joins us from the Agency of Natural Resources, where she worked extensively on soil erosion and riparian buffer issues as a Water Quality Engineer. She holds degrees in Aquatic Resources and Mechanical Engineering from the University of Vermont and Vermont Technical College. She recently accepted an invitation to attend the Changing Faces Women's Environmental Leadership program at the East-West Center in Hawaii with a small group of women from the Asia-Pacific region and U.S. She lives and keeps bees in the foothills of Camel's Hump in Duxbury.

Please welcome VNRC's newest hire, **John Odum**, Associate Membership and Development Coordinator. John is a longtime political activist. A Kentucky native, John has been an organizer for the Oregon League of Conservation Voters, Oregon Fair Share and the "No On 13" Campaign (Save Our



Kim Biedermann

Communities PAC), and did membership and development work for organizations such as the Oregon Health Action Campaign. Since moving to Vermont, John has been an organizer for Bernie Sanders' congressional campaign and field director for the Clavelle for Governor campaign. He has also been an IT administrator for Planned Parenthood of Northern New England and the Vermont Democratic Party. He is a former Chair of the Washington County Democratic Party and is active in affordable housing issues. John lives in Montpelier with his wife, Cary Brown, and his sons Tucker, 6, and Zane, 2.

INTERNS

Kim Biedermann is originally from Wisconsin, where she received her undergraduate degree at the University of Wisconsin-Green Bay in Environmental Science and Environmental Policy & Planning. Currently, she is attending Vermont Law School working towards a Masters of Studies in Environmental Law. Upon the completion of her degree, she hopes to work at an environmental non-profit organization. Kim is currently working on the forest fragmentation issue for VNRC.

Doug Hayes is from Lebanon, NH, and has spent much of his life enjoying the outdoors of the Northeast. After high school, he moved to Colorado and earned a bachelor's degree in

Environmental Studies from the University of Colorado, Boulder, in 2001. He then moved to Jackson Hole, WY, and spent three years living and working in Grand Teton



Doug Hayes

National Park and working in the skiing industry. He is now a second-year law student at Vermont Law School focusing on environmental law. Doug enjoys working at VNRC and contributing to the anti-sprawl and water quality issues.

Katie Manaras joined VNRC this spring as our Mollie Beattie intern and will be working on the forest fragmentation issue. Katie studied Biology and Environmental Policy at Dartmouth College and recently completed her Masters of Forestry at the University of Vermont. Between these educational pursuits, she worked as a field ecologist in the Central Cascades of Oregon and Washington. She now lives in Middlebury, Vermont. The next step for her is to work towards strengthening the connections between science, policy and education, as they apply to forest management and conservation. She is delighted to work with VNRC, and



Katie Manaras

especially to work in the tradition of Mollie Beattie, a woman who she admires deeply.

Jill Reymore was a spring '05 VNRC intern. She worked on several Clean Water Act issues, including the proposed rules for CAFO discharges, the White River Basin Plan stream classifications and Peterson Dam removal. Jill also had several occasions to observe and interact with legislators and lobbyists in the State House.

Jill graduated from the Vermont Law School with J.D. and M.S.E.L. degrees in 2005. Previously, she interned with the VT Office of the Attorney General in Environmental Enforcement and, as a law student, was a student clinician in the Environmental and Natural Resources Law Clinic. She also holds a B.S. degree in Environmental Studies. Currently, Jill is Vice President of the Water 1st! Steering Committee and Secretary of the White River Partnership Board of Directors. She resides in Randolph with her husband, Gerry, and two children.

Carolyn Buckingham is in her last semester at Vermont Law School and is excited to be spending it part-time at VNRC. Her love for the environment brought her to Vermont to pursue a joint-degree at VLS and she has devoted her studies to Land Use and Natural Resource law. Carolyn was born and raised on the South Side of Chicago and is ecstatic that her White Sox finally won the World Series, especially after getting a lot of guff from all of the Boston Red Sox fans. She attended Northwestern University in Evanston, Illinois and graduated with a History major and Political Science minor. Her work experiences

include clerkships at the United States Department of Justice, Environmental Enforcement Section in Washington, D.C. and the Southeast Alaska Conservation Council in Juneau, Alaska. This summer, Carolyn will be moving to Fairbanks, Alaska to work as a judicial clerk for the State Superior Court.



VNRC PUBLISHES OLD-GROWTH LITERATURE REVIEW

VNRC has published an extensive report on the ecological values of old-growth forests in eastern North America. The report, written by Marc Lapin — a respected ecologist and Middlebury professor — covers a range of topics about old-growth forests including forest vegetation, soils and nutrients and the animals found within old-growth ecosystems. The report was developed to help explain the ecological role of old-growth forests and their representation on our landscape. To read a copy of the report please visit www.vnrc.org/article/view/9069/1/646 or call VNRC at 802-223-2328 to receive a copy.

2006 VNRC SPECIAL EVENTS

Maude Barlow in Vermont!

The internationally acclaimed activist and best-selling author of *Blue Gold: The Fight to Stop Corporate Theft of the World's Water* and *Too Close for Comfort: Canada's Future within Fortress North America* will be making several VNRC-sponsored appearances in the state:

July 12th, Maude Barlow speaking at UVM.

Please join us at the CC Theater from 6:00-7:00 PM

July 13th VNRC Annual Meeting with Keynote Speaker Maude Barlow, Hildene (Manchester, VT) 3:00 - 6:00 PM (tentative). Non-members and prospective members encouraged to attend.

Visit our web site for information on book-signings and other appearances by Ms. Barlow on July 12th and 13th.

SolarFest 2006

July 15 & 16, Tinmouth

Look for VNRC at the 12th annual celebration of music, renewable energy systems, community empowerment and

organizing, sustainable living, organic agriculture, medicinal herbs, and more.

Vermont Candidates Debate September 28, Montpelier

VNRC will sponsor a debate between several of the candidates for statewide office in Vermont, at the Capitol Plaza in Montpelier. Tentative time is 7:00PM

Terry Ehrich Film Festival November (tentative)

A tribute to the beloved Vermont activist and business leader. Films may include:

- The End of Suburbia
- Thirst
- Save Our Lands, Save Our Towns
- Wal-Mart: The High Cost of Low Prices
- The Red Wagon: Facing Hunger

Environmental Action 2005, November 11, Vermont Technical College, Randolph VT

VNRC will be participating in this annual conference of Toxics Action Center and the New England Grassroots Environment Fund.

For more information on these events, contact VNRC at (802) 223-2328.

Support VNRC and clean energy

and you may WIN a new

eGO® Cycle II LX

"COMMUTER"

- Zero emissions
- 25-mile range
- Up to 24 mph
- A \$1,499 value

Buy tickets online or at any VNRC event before July 16

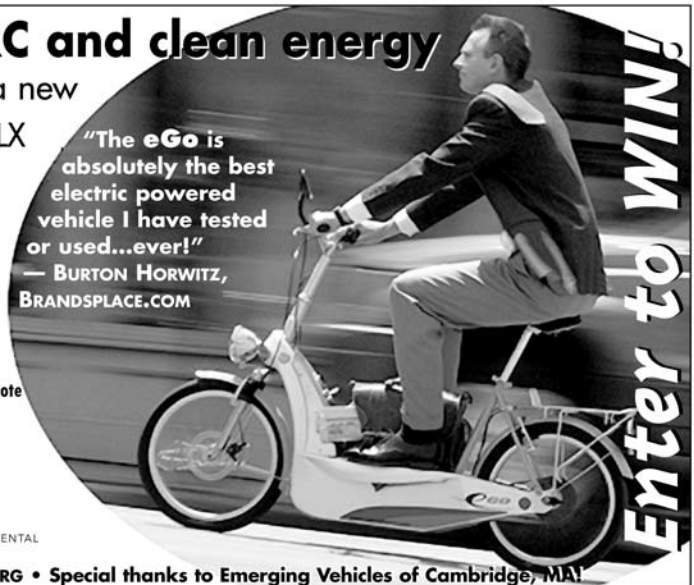
All proceeds support VNRC's work to promote clean energy and combat climate change.



VERMONT
NATURAL
RESOURCES
COUNCIL

VERMONT'S ENVIRONMENTAL
GUARDIAN SINCE 1963

802-223-2328 • WWW.VNRC.ORG • Special thanks to Emerging Vehicles of Cambridge, MA!



"The eGo is absolutely the best electric powered vehicle I have tested or used...ever!"

— BURTON HORWITZ,
BRANDSPACE.COM

GREENSBORO GARAGE



Main Street
Greensboro, VT 05841
533-2221 533-7110

Route 15
Hardwick, VT 05843
472-6555

"Imported Cars Are Not Foreign To Us"

open 7 days
8am to 8pm

stop
in
Today!



café open
8am to 7:30pm

Vermont's largest selection
of locally baked breads, artisan cheeses,
specialty beer & wine, natural & organic specialties

Delicious soups & hearty entrées
Freshly prepared sandwiches & salads
Coffee bar & baked goods



623 Stone Cutters Way, Montpelier

802.223.8000

MediaRoom-Productions

Video taping your special events
is what we love to do!



Duplication services available

802-251-1054 / 802-380-8381 mediaroom@surglobal.net



VERMONT NATURAL RESOURCES COUNCIL

VERMONT'S ENVIRONMENTAL
GUARDIAN SINCE 1963

Non-Profit Org.
U.S. Postage
PAID
Burlington, VT
Permit No. 478

9 BAILEY AVENUE
MONTPELIER VT 05602

E-mail: info@vnrc.org
Web: www.vnrc.org

The *Vermont Environmental Report* is printed on recycled paper with soy-based ink.
Please recycle this issue by sharing it with your family and friends!

VERMONT WILDERNESS BILL INTRODUCED!

On April 8, 2006, Vermont's congressional delegation to the U.S. Congress introduced the Vermont Wilderness Act of 2006 to permanently protect 48,161 acres as new wilderness on the Green Mountain National Forest (GMNF). The bill closely tracks the Forest Service's recommendations for areas to be managed for wilderness conditions in the final forest plan released earlier this year – see article on page 4.


Additional wilderness designations were strongly supported by over 90 percent of the 10,000 comments received by the Forest Service during the planning process. Polls have also consistently shown that Vermonters overwhelmingly support more wilderness areas on our public lands.

The delegation is to be commended for following through with new wilderness designations for important areas like Glastenbury Mountain and the Romance/Monastery Mountain area, which will be called the Joseph Battell Wilderness. Battell historically owned much of the land on the northern half of the GMNF and intended it to be managed as wild forest. The bill also adds acreage to several existing wilderness areas and designates a

new Moosalamoo National Recreational Area. However, the bill falls short in protecting several ecologically important areas.

The Vermont Wilderness Act should now be strengthened to include: (1) a 40,000 acre Glastenbury Mountain Wilderness, which protects the Deer Lick Brook watershed, (2) a larger Lye Brook Wilderness expansion, which includes more of the headwaters south of Stratton Pond, and (3) the Lamb Brook basin which includes important black bear habitat.

These wilderness additions can be accomplished while still supporting a strong timber management program and diverse management activities on the GMNF (read more about this on our web site). Please contact members of the Vermont Delegation and thank them for introducing the Vermont Wilderness Act of 2006 and ask them to strengthen it with the recommendations above.

Please go to www.vnrc.org for more information on how to support the passage of the Vermont Wilderness Act of 2006 and read about how wilderness is part of a balanced forest plan. 



Proposed Joseph Battell Wilderness