

# Vermont Environmental Report

July/August 1981

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## The Sugarbush Exp-a-n-s-i-o-n



Sugarbush Valley, Inc., has big plans for Vermont's third highest mountain, and many valley residents aren't too happy about them. They're concerned about the impact of the ski area expansion on agriculture, business, government and the "rural character" of Fayston, Waitsfield and Warren, and they're not sure that local zoning and planning can protect their way of life.

Sugarbush Valley would like to more than double its skier capacity from 5400 to 11,650, and become a major "destination resort" in 15-20 years. Doubling the skier capacity involves widening existing trails, replacing several lifts and building an "intertie" including several new trails and lifts at Slide Brook between Sugarbush North and Sugarbush South.

It's a lot harder to describe what will happen if Sugarbush becomes a "destination resort." The ski area wants to attract more long-term visitors to the valley. As Sugarbush General Manager Jack Murphy says, "We're a long way from civilization. When people have to come a long way, they better stay a long time." But no one is saying what Sugarbush will do to catch and keep more skiers.

The Sugarbush Master Plan talks about "self-contained villages" which would "minimize dependence on automobile travel." That worries Waitsfield businessmen, who wonder

if the ski villages will take business away from the valley's commercial center. Town planners wonder what will happen to traffic in the valley if the villages *don't* have their own stores and restaurants. Everyone wonders if the Sugarbush expansion will trigger another bout with condo-mania and second-home fever.

Jack Murphy says that Sugarbush has "no plans for additional recreational facilities on their property at present" and that he doesn't foresee "a lot more stores and services than there are at present." But not everyone is convinced. "The ski area needs beds, and it is going to encourage construction," says Judd Babcock, a Waitsfield developer. "Even if it doesn't build the units itself, it will control what kind of construction occurs and where it occurs."

**Who's Who in the Act 250 Review:** Because part of the new ski area will be built on U.S. Forest Service land and because Sugarbush wants to increase the skier capacity on its current leasehold, it must obtain a new permit from the Forest Service. The Forest Service will prepare an Environmental Impact Statement before ruling on the permit application. Since Sugarbush must also file for an Act 250 permit as well as various other State

and local permits, it appears that the environmental consequences of the development will receive the most careful consideration.

But hold on, this gets complicated. In order to reduce costs and eliminate duplication of effort, the State Planning Office and the Agency of Environmental Conservation have agreed that for Act 250 purposes, the State will rely on U.S. Forest Service studies. But the Forest Service studies are being prepared by a consulting firm hired and paid for by Sugarbush Valley, Inc. In effect, Act 250 review will be based on an environmental assessment prepared by the permit applicant.

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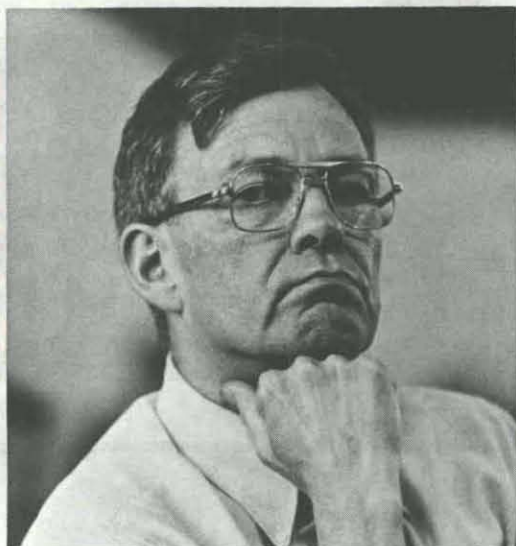
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VNRC's Seward Weber waits to testify at Clean Air Hearings. Photo by D. Light.

The battle in Congress to reauthorize the Clean Air Act will continue to be a major struggle. The Reagan Administration, supported by industry, is pushing for drastically reduced standards and enforcement; environmental and public health communities, aided by some labor unions, are striving to extend and strengthen the Act.

Vermonters have a great deal at stake, and a fine opportunity to influence the outcome because of Senator Stafford's Chairmanship of the Senate Committee on Environment and Public Works. Please write him or call his Burlington office (call collect: 951-6707) and express your support for continuing the fight against air pollution and acid rain.

## Clean Air Hearings at VTC

Vermont Technical College in Randolph was the site of a major hearing before the U.S. Senate Committee on the Environment and Public Works on June 30th. The meeting was one in a series of "field hearings" on reauthorization of the Clean Air Act.

Committee Chairman Robert Stafford said Vermonters' concern with the acid rain issue was "the main reason his committee came to Randolph Center." The two-part hearing included an afternoon of testimony by Federal and State environmental officials, university professors and attorneys general from several eastern states on long-range transport of sulfur dioxide and other pollutants. The experts agreed that current controls are inadequate, but said it is extremely difficult to identify and regulate the sources of acid rain. Dr. Richard Klein of the University of Vermont estimated that it will be three to four years before a University team of researchers completes its analysis of the effects of acid rain on mountain vegetation on Camel's Hump.

Several witnesses agreed with Vermont Attorney General John Easton, that until we have more hard data on acid rain and associated problems, stricter controls would be an "ineffective investment." Others sided with New Jersey's Deputy Attorney General Richard Hluchan who said that, "those who argue that we should do our research now and postpone action until our research is complete are arguing that we should experiment with our lungs and lakes rather than risking any additional cost to industry."

About 120 people filled the hall for an evening session of public testimony on Clean Air Act revisions. The 30-some wit-

nesses who came forward included Peter Grassio, a private pilot who attributed the disappearance of a "brown haze" over New England to the Clean Air Act, and Constance Silver, a historic preservationist who was concerned that acid rain could damage Vermont's historic buildings and monuments.

A representative of the Connecticut River Watershed Council said that if sulfur-laden rain and snow poisoned Vermont's lakes, the Green Mountain State could lose a fishing industry worth \$84 million a year. Dr. William Ballard, a biology professor emeritus from Dartmouth College, claimed that the perch population in the Norwich area had declined by one-third to one-half in the last decade. He pointed out the irony of investing heavily in the Atlantic salmon restoration effort only to have the perch population destroyed by acid rain.

Angel Jean Chiara of the New Hampshire Lung Association discussed the health effects of air pollution and suggested that a true cost-benefit analysis of clean air regulations must include the added costs of work-hours lost because of ill health as well as higher health care costs, higher health insurance premiums and higher employee benefit packages. Anne Baker of the Lake Champlain Committee sited a study by UVM Professor Hubert Vogelmann of high mortality among red spruce in Vermont's Green Mountains. There are indications that acid rain may be killing off the mountain trees, which Baker said may be "Vermont's canaries."

All 30 witnesses called for a strong Clean Air Act, and their testimony was punctuated by frequent bursts of applause. MM

## Calendar

Wednesday, August 26th

**VNRC Brown Bag Lunch.** Paul Nergaard of the U.S. Forest Service and Beth Humstone of the Mad River Valley Growth Management Program will discuss the proposed expansion of Sugarbush Valley ski resort from 12:15 to 1:30 in VNRC's Conference Room.

Thursday, August 27th

**Seminar for Commercial Greenhouse Operators,** co-sponsored by the Energy Office and the Agriculture Department, from 8:30 a.m. to 4:30 p.m. at the Tavern Motor Inn in Montpelier. Seminar participants will learn how to cut fuel bills by using renewable energy and conservation. A \$10.00 registration fee includes lunch. Call 828-2413 for information.

Saturday, August 29th

**Traditional Heritage Festival** on the Common at Historic Bent Hill Settlement in Waitsfield. A benefit for VNRC co-sponsored by Weather Hill Restoration and Vermont Castings. See the Council Page for details.

Saturday, August 29th

**"Does Champ Exist? A Scientific Seminar,"** sponsored by the Lake Champlain Committee and others, at Shelburne Farms. Admission \$4.00 in advance, \$5.00 at the door. Bring a picnic lunch. Special speaker Dr. Roy Mackal of the University of Chicago, co-founder of the Society of Cryptozoology. Call the Lake Champlain Committee at 658-1414.

Saturday, September 12th

**VNRC's Annual Meeting.** Morning field trips throughout the Northeast Kingdom, afternoon lunch and a business meeting at the Burke Mountain Base Lodge. See the Council Page for details.

Friday, September 18th

**Annual Meeting, Champlain Maritime Society,** at 6:30 p.m. on board the S.S. Ticonderoga at the Shelburne Museum. Open to the public. Call Monty Fischer, 862-8270 for more information.

Saturday, September 19th

**Shelburne Farms Harvest Festival,** a day of agricultural events, demonstrations and educational offerings at Shelburne Farms. Please call 985-3222 for more information.

Tuesday, September 22nd

The Vermont Institute of Natural Science and the Vermont Clean Air Coalition will present a program called "To Breathe Clean Air in Vermont" at 7:30 at VINS in Woodstock. The program will include a movie and a panel discussion with Dr. Carl Pagan, Brian Kooiker and Tim Scherbatskoy. \$1.00 donation. Call 457-2779 for details.

**Environmental Education School Programs at Shelburne Farms.** Course offerings include agriculture, forest resources, winter ecology, geology and harvesting as well as individually-designed programs. Curriculum loans and planning available. Call 985-3222.

### STORM BUILDING OVER LINCOLN RIDGE MET TOWER

The Save Lincoln Mountain Committee has announced that it will appeal if the U.S. Forest Service permits Green Mountain Power to erect a 50-foot meteorological tower on Lincoln Ridge. The Lincoln-based citizens' group objects to wind-measuring devices on the mountain because it believes that environmental and aesthetic considerations rule out Lincoln Ridge as a potential site for a large wind turbine generator.

Green Mountain Power originally proposed a 160-foot tower for the Ridge as part of the Department of Energy's wind site measurement program, but the DOE program was dropped from the Reagan Administration's budget. On May 8th, Green Mountain Power applied for Forest Service permission to construct a 50-foot met tower on Lincoln Mountain and to study the wind power potential of several sites on Forest Service land in southern Vermont including the installation of two 50-100 foot towers at Mt. Snow and in Searsburg.

### VERMONT ENVIRONMENTAL REPORT

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# NH/VT Towns Look at Regional Solutions to Solid Waste Disposal Problems

Ted Siegler

Municipalities in New Hampshire and Vermont rely almost exclusively on land disposal of solid waste, but concern about ground water contamination, the impact of inflation on public services and ever-increasing energy costs have stimulated the investigation of alternative disposal methods. Energy recovery -- incinerating solid waste and capturing energy -- has received considerable attention. Incineration can reduce waste volume by up to 90% and the energy can be sold to stabilize disposal costs.

26 towns in Sullivan County, New Hampshire and in Windsor and Windham Counties in Vermont are contemplating an energy recovery facility. Similar projects are under consideration in Burlington and Rutland County.

The potential for reducing solid waste disposal costs stimulated all of these projects, but local conditions offered the initial impetus. Vermont's Agency of Environmental Conservation (AEC) is closing all open dumps. Consequently, 10 Vermont towns participating in the Project contracted with a privately owned regional landfill in Rockingham. But disposal costs have risen sharply, and in 1979, the Vermont AEC found significant contamination in at least six wells down-gradient from the site.

The New Hampshire Bureau of Solid Waste has not moved as quickly to eliminate open dumps. Most towns in Sullivan County still operate open dumps. Some of them still burn their refuse and others have potential ground water contamination problems. The Sullivan County Engineer has been unable to find physically and politically acceptable alternative sites and no new landfills have been located in Sullivan County for over seven years.

**The NH/VT Project:** In 1978, three towns in Vermont and two in New Hampshire joined together to finance a study of energy recovery as an alternative to land disposal. The results of the study indicated that towns within a 30-mile radius of Claremont, New Hampshire, could supply up to 150 tons of solid waste per day and that two industries in Claremont could use all of the steam produced by burning solid waste.

A year later, the NH/VT Project, under the auspices of Sullivan County and the Southern Windsor County Regional Planning Commission, received a \$100,000 grant from the Urban Policy Program. 26 municipalities contributed the necessary matching funds.

The Federal funding was designed to help the towns overcome technological and institutional barriers to energy recovery. Hundreds of Western European and Japanese cities use energy recovery to reduce land disposal requirements. But in those countries, land is more valuable, energy costs are higher, and environmentally-sound waste disposal is an accepted government function. In the United States, the availability of low-cost land disposal sites, legal problems associated with guaranteeing both a long-term waste supply and a reliable energy market, and the high initial cost of a waste-to-energy facility have obstructed many energy recovery projects.

**The Economics of Energy Recovery:** In its first year, the NH/VT Project concentrated on investigating the economics of energy recovery and on creating an organizational structure capable of tying all of the towns together into a financially strong legal entity. The Project hired Camp, Dresser and McKee of Boston to compare the life-cycle costs of land disposal versus an energy recovery facility.

The Boston firm concluded that a regional land disposal system was the least costly op-

tion. If such a system had been in place by 1980, the total cost would have ranged between \$900,000 and \$1,200,000. Energy recovery would have cost \$1,500,000 after deducting energy sales revenue. However, if oil prices continue to climb, energy recovery could be competitive with regional land disposal by 1987.

Camp, Dresser and McKee also worked with potential steam markets to determine the demand for energy. They determined that in some cases, the steam supply exceeded potential demand, so they also investigated the sale of electricity. They concluded that it would be possible to produce electricity, and that net costs would compare with those of generating steam, but the lack of data from similar facilities increases technological risks.

Finally, the Project investigated the potential for integrating waste separation and recycling with either land disposal or energy recovery. It concluded that recycling could be an important part of any regional system. As with land disposal and energy recovery, regionalization reduces costs. However, two areas of concern remain: first, while recycling involves a relatively low capital investment, it requires significant public education in order to be successful; second, there is an ongoing debate over the value of paper as an energy source versus paper as a secondary material.

**The Next Steps:** Representatives from participating municipalities wrestled with the legal, political and financial issues associated with organizing 26 towns in two states. They concluded that solid waste districts were the only

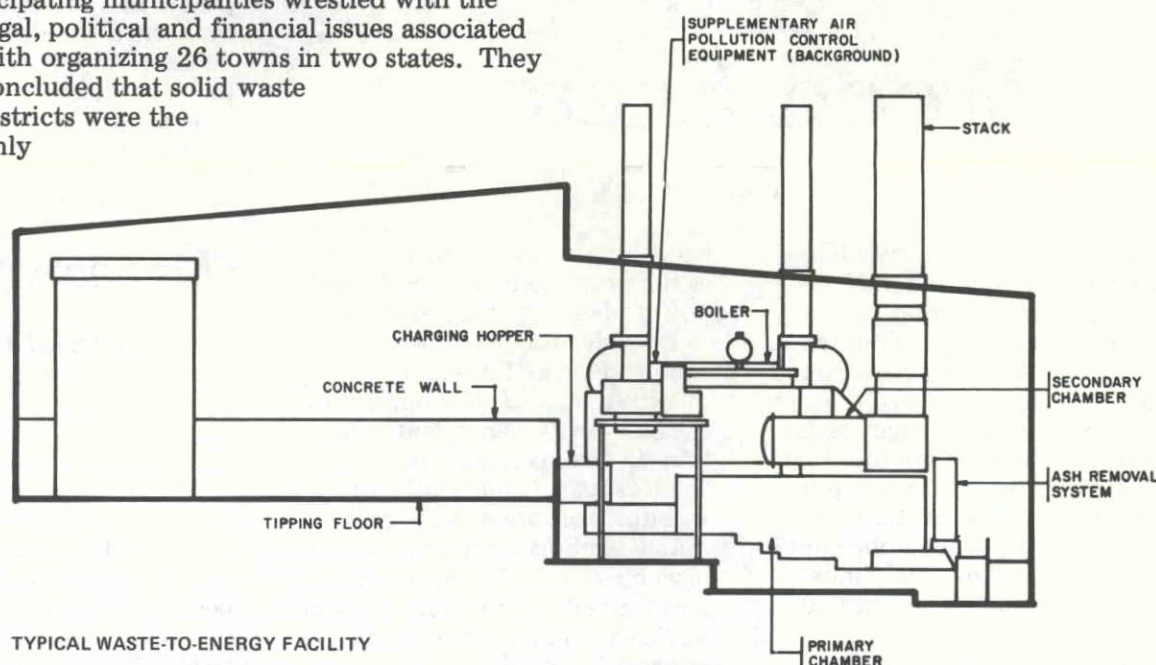
legal entities capable of solving the solid waste problem on a regional basis. Participating towns are now drafting district agreements in each state for consideration at the 1982 town meetings.

At the 1981 town meetings, all 26 municipalities voted to continue with the Project. During the next two years, the Project hopes to form solid waste districts, find regional ash disposal sites, negotiate energy contracts, prepare environmental analyses and permit applications and secure private or public funding.

Three major conclusions have been reached to date: first, solid waste disposal costs will increase dramatically in the future, primarily because of the need to protect ground water quality; second, the feasibility of energy recovery depends on high inflation and continued increases in energy costs; third, the institutional problems associated with energy recovery require the formation of a strong legal entity, such as a solid waste district, which can take land by eminent domain, control the waste supply, and assess the towns for the cost of constructing and operating the facility.

In return for higher taxes (at least in the early years) and reduced municipal control, the region benefits from (1) energy equivalent to one million gallons of oil per year, (2) the elimination of 13 environmentally-unsound land disposal sites and (3) a long-term (15-year) solution to the waste disposal problem. The fact that all 26 municipalities voted to continue with the Project, given the projected costs, indicates significant support for the concept of energy recovery.

*Ted Siegler is the Manager of the NH/VT Solid Waste Project.*



TYPICAL WASTE-TO-ENERGY FACILITY

## Other Forays into the Field of Energy Recovery

The Burlington Street Department is considering a plan to incinerate trash and sell steam or hot water to the UVM Medical Center. Bill Rockwell, Assistant Superintendent of Streets, says that there is really "no alternative" to energy recovery: Burlington must abandon its landfill within three years; using the present site only for ash disposal and for waste disposal when the waste-to-energy plant is down could "extend its life considerably."

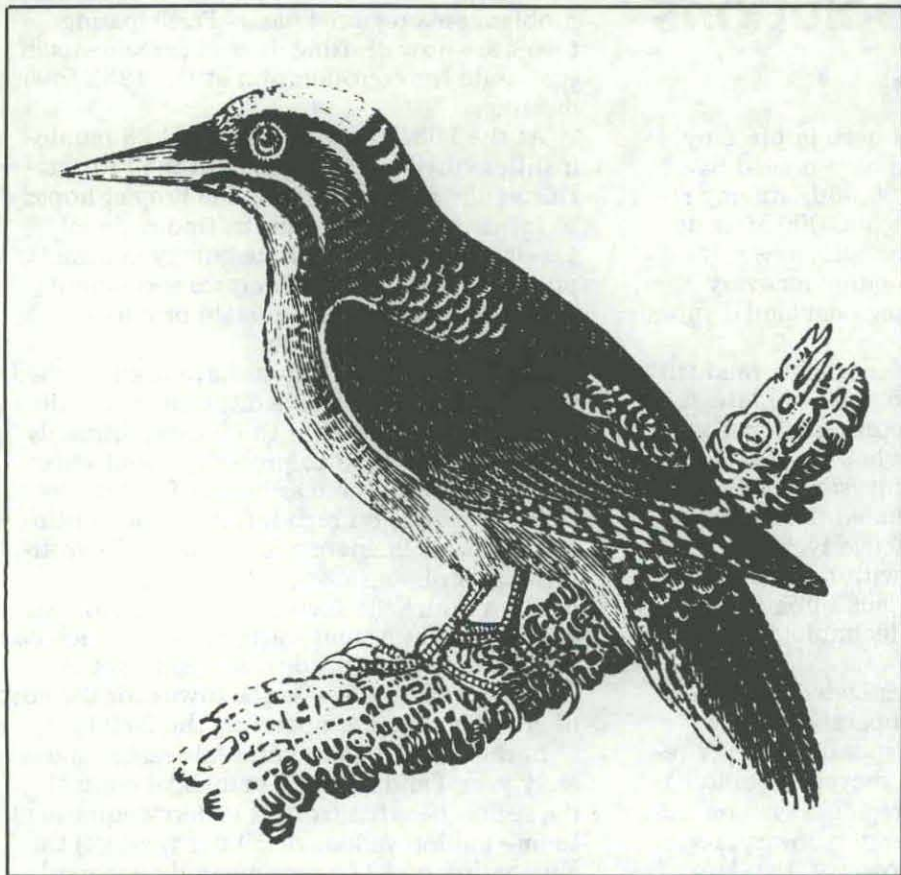
The Department has completed a feasibility study and is in the process of applying for Act 250 and air quality permits and landfill certification. Burlington voters approved a \$10 million bond to pay for the project, but current cost estimates run as high as \$11.5 million. Rockwell predicts that the energy recovery facility will "run in the red" at first but that it will

"begin to break even" after two or three years. He hopes that construction will begin next year and that the plant will go on line in 1983.

In Rutland County, eight municipal landfills affecting 13 towns will close by the end of 1982. The 20-member Rutland County Solid Waste District is looking at sites for a resource recovery plant and a regional landfill which could accept ash, and trash until the plant is operational.

Unlike Burlington and the NH/VT Project, Rutland County does not have a ready market for hot water or steam. The District is negotiating a 20-year contract to sell electricity to the Central Vermont Public Service Corporation. Project plans include two 64-ton-per-day incinerator units which could generate about 1.75 megawatts of electricity by 1985. MM





## Naturalist's Journal Woodpeckers and Wood Energy

David E. Capen

Large-scale wood energy has been widely publicized in New England. Burning wood to produce electricity -- once considered a novel, if not slightly hairbrained, idea -- has become part of the standard fare of local newspapers and magazines. Readers are told that the supply of wood for this purpose is nearly inexhaustible, and that low-quality trees alone could furnish much of the fuel. Indeed, we are told again and again that a wood-burning power plant would improve our forests by creating a market for "rough and rotten" trees.

"Rough and rotten" is forestry lingo for trees which are dead, diseased, misshapen, broken or otherwise unsuitable for cutting into eight or ten-foot sections and skidding out to the local sawmill. Forest managers and proponents of wood energy tell us that creating a market for these low-quality trees would encourage landowners to "weed the garden," "clean up the forest" and "find a use for those otherwise worthless trees."

But what about woodpeckers? Woodpeckers, as well as dozens of other birds and mammals, depend on rough and rotten trees for food and shelter. Can dead and diseased trees be removed from the forest without destroying the habitat so necessary for these wildlife species? Not if

harvesting methods are as good as the proponents of wood-fired power plants say they are!

Intensive forest management can produce a "forest" of high-quality trees with few opportunities for cavity-dependent wildlife. In the managed forests in the Northwest and Southeast, woodpeckers are so rare that public land management agencies have been forced to introduce new timber-cutting practices such as "leaving at least two snag trees per acre."

Why all the concern over woodpeckers? One reason is that they are an important part of the natural diversity of forest communities. One of their many roles in the community may be to keep insect pests under control. Forest managers in the South have recently learned that woodpeckers are important predators of the southern pine beetle, and that infestations of this beetle are worse in areas where intensive forest management has eliminated woodpecker habitat.

Woodpeckers are also great favorites with bird-watchers and outdoor enthusiasts. But most importantly, woodpeckers serve as "indicator species:" their presence indicates that a forest is suitable not only for a variety of woodpecker species, but for some other species of wildlife as well. Many birds and mammals

rely on woodpeckers to excavate cavities in trees which they take over once the woodpeckers have abandoned them. These woodpecker-dependent species are known as secondary cavity-users, whereas woodpeckers are the most common primary cavity-users.

Most woodpecker species, unlike the vast majority of other native birds, are year-round residents of Vermont's forests. The pileated woodpecker is probably the best-known. This woodpecker, the largest in North America, is seldom seen, but it leaves conspicuous evidence of its activity. It excavates fist-sized holes in dead or dying trees; sometimes, these holes are enlarged vertically and may be several feet long. The pileated also makes smaller oval holes in trees which have sound sapwood surrounding soft, decayed heartwood; these cavities are used for nesting in the summer and for roosting during other months of the year.

The hairy woodpecker, and its smaller relative, the downy woodpecker, are more visible in Vermont. Yellow-bellied sapsuckers and common flickers are also abundant. Less common species include red-headed woodpeckers and two species found in the forests of the Northeast Kingdom: the northern three-toed woodpecker and the black-backed three-toed woodpecker (yes, they do have only three toes instead of the usual four).

The black-capped chickadee and the red-breasted nuthatch are

sified as secondary cavity-users. Fewer than 30 species overwinter in our forests and at least 12 of these are cavity-using birds. Mammals also use tree cavities. At least 30 species of mammals frequent tree cavities in New England.

Forest managers can preserve habitat for cavity-using wildlife by recognizing which trees are preferred by cavity-users and adjusting their timber-harvesting practices accordingly. Woodpeckers use trees of many different sizes, but some should be as large as 24 inches in diameter in order to accommodate pileateds. Hardwood trees are used more often than softwoods, but the most important criterion appears to be the presence of fungal heartrot which softens the interior of a tree and paves the way for excavation of a nest cavity. Heartrots are common in most forest stands and can be identified by shell-like conks on the bark near the area of decay. Heartrots usually enter trees where large limbs or tops have broken off. Such damage is the mark of a potential cavity tree.

Chickadees and nuthatches will excavate nest cavities in trees as small as four inches in diameter. These birds often select trees which have abundant sapwood rot. Sapwood fungus are easy to detect by conks on the bark. Trees or snags such as these appear in most forest stands unless they are removed by intensive forest harvesting.

Clearcutting large tracts of land eliminates habitat for cavity-using

## Management for better trees is not necessarily management for a better forest.

familiar cavity-nesting species. These birds produce their own nest cavities, but unlike woodpeckers, they have small, weak bills and cannot excavate in sound trees. They rely on standing dead trees (snags) which are rotten and soft and often broken off only a few feet above the ground. These trees have little or no value for energy production, but they are often removed during logging because they present safety hazards or simply because they are easily knocked down by large machinery.

The importance of cavity-using wildlife to Vermont can be further illustrated with some simple statistics: only about 120 bird species nest regularly in the forests of Vermont; 10 of these are primary cavity-using species and at least 25 additional species can be clas-

sified as secondary cavity-users. Fewer than 30 species overwinter in our forests and at least 12 of these are cavity-using birds. Mammals also use tree cavities. At least 30 species of mammals frequent tree cavities in New England.

In other words, management for better trees is not necessarily management for a better forest. Foresters should bear in mind that even "worthless" trees have great value for certain birds and mammals. These species contribute to the diversity of life in our forests and they may play an important role in controlling pests. In the long run, good forestry may mean leaving some of the "weeds" in the garden.

*David Capen is an assistant professor of wildlife biology at the University of Vermont. He and his students are researching forest management practices and wildlife in Grafton, Vermont, through the Grafton Forest Resources Project. Interested landowners are particularly encouraged to visit the project. For information, call 843-2430.*



# Commentary

## Energy Office Wins Converts to Conservation

Peg Garland

Since the oil embargo of 1973, conservation has become an important part of Vermont's energy picture. The people of this state have slowed the rate of energy growth, and in at least two areas, they have actually reduced consumption. Home heating oil use dropped from 160 million gallons in 1975 to 132 million gallons in 1979. Gasoline use between 1978 and 1980 dipped from 269 million gallons to 237 million. These achievements resulted in part from the efforts of the State Energy Office.

The Energy Office emphasizes energy efficiency in the many programs it conducts. Energy efficiency, or conservation, is our first recommendation in the broad spectrum of energy alternatives.

One example of energy efficiency at work is the experience of Joseph and Gertrude Neraud of Montpelier. Before calling the Home Energy Audit Team in March, 1979, their two-story home was using about 1480 gallons of fuel annually. They followed the recommendations of the Home Energy Audit Team (HEAT), adding insulation to exterior walls and stopping cold air leaks with weather-stripping and caulking. Fuel oil consumption dropped to 834 gallons and the Nerauds recovered their investment in less than two years. What's more, their home is more comfortable in both winter and summer. More than 7500 homeowners have used the HEAT program, which is cosponsored by the Energy Office and the UVM

Extension Service. We estimate that HEAT saved 1.1 million gallons of fuel oil last heating season, or about \$1.4 million.

The Schools and Hospitals Program is another popular Energy Office effort. It offers matching grants for conservation to schools, hospitals and other public buildings. With an Energy Office grant, Woodstock Union High School added an insulated roof and replaced single window panes with insulated glass. These measures helped reduce fuel consumption from 55,000 to 36,000 gallons per year. Woodstock High School is one of 143 buildings in Vermont which have received a total of \$1.8 million from this program.

Industry uses 10% of Vermont's energy. The Energy Office promoted conservation among Vermont's 800 manufacturers by coordinating an industrial self-help program. Using teams of volunteers from industry, the Vermont Industrial Energy Advisory Program surveyed 163 plants. The committee reported to Governor Snelling that Vermont industries could reduce electrical consumption by 10% and fossil fuel consumption by 20% with little or no investment; greater savings were possible with capital investment.

Vermont motorists are saving energy, too. Gasoline consumption dropped to 237 million gallons in 1980 from its peak of 269 million gallons in 1978. Some of these savings can be attributed to ride-sharing. There are 110 commuter vanpools and hundreds of carpools on Vermont

highways. The Energy Office helped organize most of the vanpools with interest-free loans and with assistance from our Ride-sharing Coordinator. These vans save about 550,000 gallons of gasoline annually with savings for each vanpooler estimated at \$750 to \$1500 per year. The office also uses its toll-free Energy Action Line (1-800-642-3281) to perform carpool matching. Over 1000 commuters have used this matching service since January, 1980.

The Energy Action Line is one of Vermont's best sources of information on conservation and renewable energy. A vital part of the Energy Office's Information and Education Division, the toll-free number handles about 6000 calls a year. This Division also helped establish a Vermont Energy Program in public schools this year. Working with the Public Service Department and 15 private sponsors, the program provided about 245 teachers with materials and training for classroom use. The Office also promotes energy efficiency at fairs and other public gatherings.

Renewable energy programs which focus on the use of wood, solar, wind and hydropower are a large part of the Energy Office's operation. Vermont has a good record in wood and solar energy. The Energy Office estimates that Vermonters burned 653,000 cords of wood in 1980. Solar energy has grown at a dizzying rate. More than 1000 solar buildings dot Vermont's landscape today, compared with only a handful in 1974.

Energy efficiency is alive and flourishing in Vermont. Every time this concept wins a convert, the energy future of this state becomes brighter. The Energy Office is helping more people every day realize that conservation means increasing comfort and saving money. People who want to learn more about Energy Office programs and about what they can do to use energy efficiently should call (802) 828-2393 or write: State Energy Office, State Office Building, Montpelier, Vermont 05602.

*Peg Garland is the Director of the State Energy Office.*



Drawing by Alice Anderson

## Ground Water Protection Strategy is "Important First Step"

Mary S. Hooper

With a mandate from the Vermont Legislature, the Agency of Environmental Conservation (AEC) has proposed a strategy for protecting the quality of Vermont's ground water. The strategy has drawn fire from several quarters, including the so-called "Committee to Save Act 250." Critics argue that the strategy will create more bureaucratic red tape, discourage economic growth and interfere with private property rights. But VNRC feels that the AEC



strategy is basically sound and that it represents an important first step toward protecting Vermont's underground water supply.

The main component of the strategy is an aquifer classification system. Aquifers which are present or potential community water supplies would be mapped, and State-regulated activities in those areas would be carefully scrutinized: landfills and hazardous waste disposal sites in "aquifer protection zones" could not receive certification; salt storage piles and wastewater treatment plants would probably be prohibited; District Environmental Commissions would probably have to study the effect on ground water quality of a large commercial or industrial development before awarding an Act 250 permit; but construction of individual septic systems and the use of fertilizers, pesticides and insecticides would probably not be affected.

Most importantly, the ground water maps would help towns plan for growth and development. For the first time, towns would learn

the exact location of their drinking water supplies. They could use this information to encourage environmentally-sound development and to guide amendments to town plans or zoning regulations. Individuals could use the maps to determine the limitations on the use of their land.

Mapping Vermont's aquifers would not create new laws and regulations. It would aid in the proper and fair administration of existing programs and it would help towns protect the quality of their drinking water.

The AEC has also proposed to coordinate existing State programs affecting ground water and to consolidate information generated by approximately 10 departments and State agencies. This should help streamline and simplify the regulatory process for developers, private landowners and State and local officials.

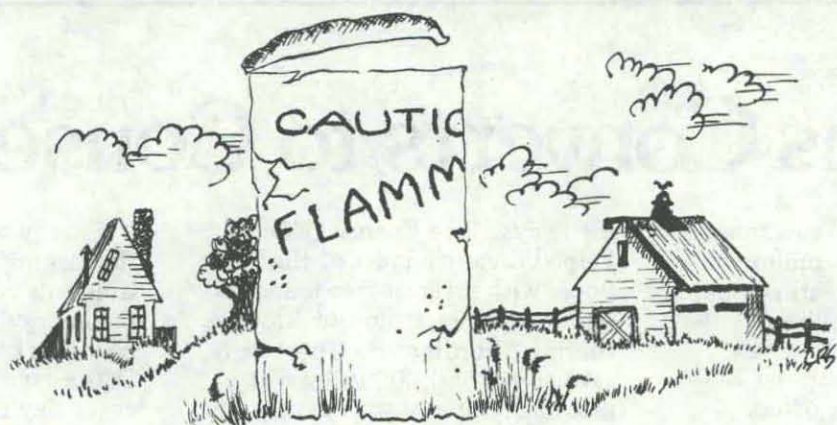
There are a number of problems to be worked out in the strategy. Prohibited and permitted activities in aquifer protection zones must be defined, as must the method of providing a thorough and effective review of programs with jurisdiction over ground water. Questions regarding the level of protection this strategy affords to ground water areas outside the aquifer protection zones and the proper protection of new community water supplies should also be investigated.

The AEC will not be able to resolve all of these issues immediately. But if we want to continue to enjoy high quality drinking water, we should encourage the AEC in its efforts to protect ground water. With the wisdom of hindsight we have learned that it is far easier and cheaper to maintain the quality of our water than to attempt to restore it.

*Mary Shattuck Hooper directs VNRC's Sewage Planning Project.*



# Not In My Back Yard



Drawing by Carolyn Stewart

## Ground Water and Hazardous Wastes

*This article is the fourth in a series on Vermont's ground water prepared by the Vermont Natural Resources Council under a public information grant from the Environmental Protection Agency.*

"No other environmental issue has more potential for creating a mass movement than the hazardous waste issue," according to former VNRC Board Chairman Mark Lapping. Many people find it difficult to comprehend the significance of the survival of the snail darter or the sandhill crane, but the hazardous waste issue raises such fundamental questions as "what is in my backyard?" and "is it going to kill me or make me sick?"

Love Canal is the most celebrated case of waste-related illness, injury and property destruction, but there have been hundreds of such incidents nationwide, including several here in New England: In Lowell, Massachusetts, highly toxic wastes from a chemical reprocessing facility poisoned the land and turned up in the local sewer system; in Gray, Maine, leakage from a waste reclamation plant contaminated 20 domestic wells; and in Rockingham, Vermont, waste coolants infiltrated and contaminated several nearby wells.

**How the Goo Gets Into the Ground Water:** Ground water contamination is one of the most serious consequences of unwise hazardous waste disposal practices. Chemical waste dumps can be sealed off and their contents removed or neutralized. But if explosive, flammable, toxic or corrosive wastes enter an aquifer, it's extremely difficult to track them down and clean them up. Also, since ground water moves very slowly, chemical contaminants may not show up until many years later.

Hazardous wastes can enter ground water from landfills or surface impoundments. About 90% of all industrial wastes are in liquid form. On-site lagoons, basins, pits and ponds are used to de-water and separate the wastes. When the impoundment is full, it can be dredged to remove sediment and re-used. But if the impoundment is on sandy soil or fractured bedrock, or if there is inadequate separation from the water table, wastes can enter the ground water. In fact, most impoundments operate on the theory that some leakage will occur. According to an EPA study, "an evaporation pit may operate successfully in a humid region only if enough leakage takes place through the bottom and sides of the pond to create storage space for continued waste discharges."

Solid wastes and the sludges that settle out of surface impoundments are usually disposed of in landfills. The EPA estimates that until recently, about 90% of industrial wastes that were considered hazardous were landfilled, mainly because it was the cheapest method. But landfills are among the principal sources of ground water contamination. Rainfall filters through the refuse in a landfill and forms a concentrated leachate which can percolate down to the water table (see "Garbage In, Garbage Out" in the May/June VER).

**Safety in Numbers:** Fortunately, there have been very few instances of ground water contamination from hazardous waste treatment, disposal or storage in Vermont. Vermont industries aren't necessarily more conscientious than those in other states, but there are fewer of them, and most of the state's major industries -- wood products, paper and printing, and granite and mineral extraction -- do not generate large amounts of toxic, flammable, explosive or corrosive wastes.

Vermont's hazardous waste stream consists mainly of lacquers, thinners, cooling oils, solvents and electroplating sludges. Ironically, some of the most significant sources of these wastes are Vermont's so-called "clean industries." IBM, Digital and General Electric all produce flammable, carcinogenic, corrosive and toxic wastes. But these companies have the means and the motive to dispose of their wastes in a responsible manner. EPA inspectors gave IBM very high marks during a recent visit.

**"New Jersey Isn't Going to Take it All:"** IBM, like most Vermont industries, ships its hazardous wastes out-of-state for disposal. Richard Valentinetti, Director of Vermont's Air and Solid Waste Programs, estimates that 80% or more of Vermont's hazardous waste is disposed of out-of-state. While most readers will probably be relieved to learn that such a small percentage of Vermont's hazardous waste is disposed of within the state's borders, dumping the problem in someone else's backyard is not a solution. As one State official said, "New Jersey isn't going to take it all." Out-of-state dumping may become more difficult and costly as more states enact strict regulations governing hazardous waste transportation, storage, treatment and disposal.

The high cost of shipping the wastes out-of-state also creates a strong temptation to use unlawful or imprudent disposal methods. "Midnight dumping" has alarmed New Englanders more than any nocturnal activity since Paul Revere's ride, but Hazardous Waste Chief John Malter reasons that illegal dumping is more likely to occur in heavily-industrialized areas, closer to the source of the wastes.

Vermont's new hazardous waste regulations should discourage midnight dumping. The new regulations, which went into effect last year, require all manufacturers and institutions (such as hospitals and laboratories) to report the type, volume and method of disposal of the hazardous substances they generate. A "manifest tracking system" will enable the State to follow the wastes "from cradle to grave." Businesses and institutions must prepare a "manifest" (invoice) for wastes that are shipped off-site. The manifest travels with the waste until it reaches a certified treatment, storage or disposal facility.

**Not In My Backyard:** There are very few certified hazardous waste facilities in the Northeast. Many of Vermont's hazardous wastes go to secured landfills in western New York or to incineration facilities in Montreal. To reduce the cost of hazardous waste treatment and disposal, the New England Regional Commission has proposed a network of multi-phase hazardous waste facilities including high-temperature incinerators, secured landfills and chemical waste processors. NERCOM estimates that the facilities would carry a price tag of around \$170,000,000. But besides cost, the project is plagued by the NIMBY ("Not in My Backyard") syndrome. According to John Malter, Americans have been so thoroughly traumatized by the hazardous waste issue that they see any type of treatment or disposal facility as a "potential Love Canal." Malter insists that a well-designed hazardous waste treatment facility can be safe. It is certainly safer than our current practice of shipping large volumes of hazardous wastes long distances for disposal and dumping smaller quantities in municipal landfills which were not designed for the purpose.

One of the most encouraging results of stricter hazardous waste regulations is that in some cases they are correcting the problem at the source, where it makes the most difference. Several Vermont industries have found that it is cheaper to reduce the volume of waste they generate than to pay the high cost of shipping it out-of-state: Fellows Gear Shaper of Springfield has discovered ways to get more mileage out of its cooling oils; Union Carbide of Bennington is recovering lead from its wastewater before sending it to the local sewage treatment plant; other industries have installed sludge-drying units, oil/water separators and filtration devices to concentrate their waste streams and recover as much re-useable material as possible.

**That Little Baggie of Hazardous Waste:** Innovations such as these are surely part of the solution to the hazardous waste problem. But consumers who demand sophisticated manufactured goods and who depend on industry for their livelihood also bear responsibility for the generation and disposal of hazardous wastes. Says John Malter, "we have to accept the fact that every time we buy, say, an automobile or a color TV set, a little baggie of hazardous waste is generated and we have to take care of it." Individuals can take responsibility for their own wastes by practicing thrift, ingenuity and common sense. Before you buy something new, be sure you've used up what you have on hand, and don't buy more than you really need. Whenever possible, choose the least toxic product available and consider whether a more innocent means could accomplish the same purpose (a fly swatter instead of a bug bomb). If you buy a hazardous substance, don't put it on the shelf and forget about it. And if you have questions about how to store or dispose of pesticides, paints, solvents or other hazardous materials, call the Agriculture Department (828-2420) or the Solid Waste Division (828-3395).

We've been lucky here in Vermont. We've had relatively few cases of ground water contamination from hazardous waste disposal. We have only a handful of industries that generate large amounts of hazardous wastes, and most of those wastes are shipped out-of-state for treatment and disposal. But that doesn't let us off the hook. Because we demand sophisticated manufactured goods and because we depend on industry for our economic well-being, we are responsible for the generation, treatment, and disposal of hazardous wastes. We can discharge that responsibility by making marketplace decisions which reduce the volume and toxicity of industrial wastes and by guaranteeing safe disposal practices even if that means siting a hazardous waste storage, treatment or disposal facility "in our own backyards." MM



# Planned Giving

## The Future Lifeblood of Charitable Organizations?

Darby Bradley

The push to reduce Federal spending and cut taxes could profoundly affect the financial health of private charitable organizations. Some impacts, like the loss of government grants and contracts, are obvious; other effects are less apparent, but in the long run may be even more significant. In order to survive, charitable organizations must find new ways to meet their budgets.

The competition for charitable dollars is increasing. You may have noticed that you are receiving more solicitations in the mail. Corporate donors and foundations have also been inundated with requests. The result is that charitable dollars are being spread thinner, and traditional fundraising methods are becoming less effective.

**Tax Cuts Cost Charitable Organizations:** Changes in the tax laws are also having profound impacts. When the standard deduction for individual taxpayers was increased, charitable contributions plummeted (see the January/February 1981 VER). Reducing the maximum tax rate from 70% to 50% could have a similar effect. A person in the 70% tax bracket who wants to make an after-tax gift of \$1000 can afford to give \$3333 to charity because of the tax savings, but someone in the 50% bracket can only give \$2000. A proposal to raise the size of an estate which can be transferred free of Federal estate taxes from \$175,625 to \$600,000 could similarly reduce the incentive for charitable giving.

**Doing More With Less:** All of this is coming at a time when charitable organizations are expected to take on more responsibility. In the last six months, for example, VNRC has been asked to become more active in Act 250 proceedings, initiate an environmental health project, take stands on wind generators on Lincoln Ridge and power lines in the Northeast Kingdom, lobby more intensively in the Legislature, investigate the problems of toxic wastes, ground water protection and energy conservation, and help find ways to preserve the family farm.

Some of these requests stem from the demise of other environmental organizations in Vermont. Gone are Vermont Tomorrow, the Conservation Society of Southern Vermont

and the Vermont Environmental Center. Other groups are clinging to thin financial lifelines with reduced staffs and diminished capabilities.

VNRC's ability to respond to these requests will be determined by its own budgetary constraints. Unless the Council can build a stable financial foundation in the years ahead, it will not be able to take on new challenges without sacrificing its ongoing commitments.

VNRC hopes to secure its financial future by combining the best of both traditional and new fundraising methods. In the next few years, the Council will concentrate on increasing its membership, launching an annual fundraising drive and instituting a planned giving program.

**Membership:** VNRC has already enjoyed considerable success in building and maintaining its membership. In the 2½ years since Don Hooper and Sylvia Stewart joined the Council staff as Assistant Director and Membership Secretary, the membership has grown from under 1000 to more than 2000 households. 85% renew their membership each year, better than the 70-80% which is the norm for most environmental organizations.

years ago, two benefactors enabled the Council to establish a permanent endowment fund with a gift of \$250,000. Since then, several members have added smaller gifts. Another member has advised VNRC that she will leave \$20,000 to the Council in her will. The endowment fund currently yields \$18,000 per year in interest, or approximately 10% of VNRC's annual budget.

Planned giving differs from annual giving because it requires the donor to look beyond the current checking account balance and to consider his or her long-range personal and financial goals. It is one element of financial and estate planning. Planned giving may involve lifetime gifts (such as donation of an insurance policy), testamentary bequests, or gifts which are deferred until death (such as a charitable remainder trust). Gifts of property can include stock, life insurance and other real or personal property.

Taxes are a major consideration in planned giving. A charitable gift at the proper time can decrease income taxes, capital gains and estate taxes. It may even increase a person's total income by exchanging a low income-producing asset for a higher one.

In the months ahead, VNRC will inform its

### *Charitable organizations are losing their funding while being asked to take on more responsibility.*

**Annual Fundraising Drive:** VNRC's Development Committee is working on an annual fundraising campaign which will involve new people in the Council both as fundraisers and as contributors. Headed by David Griffiths of Charlotte, the Development Committee is building a network of area and local chairmen who will make most of the contacts during the two-month campaign each fall. These gifts will enable the Council to meet its operating budget and program commitments each year. Volunteers will conduct the campaign, freeing VNRC's staff to concentrate on project work.

**Planned Giving:** In the long run, VNRC's financial stability will depend upon its success in building an endowment program. Three

members about the benefits of planned giving by publishing a series of brochures on estate planning and gifts of life insurance, real property and charitable remainder trusts. With the assistance of knowledgeable financial planners, it will also conduct several estate planning seminars for members who want to learn more about this complex subject. VNRC believes that spreading the word about tax law incentives will benefit not only its members and the environmental movement, but will also enhance the ability of all charitable organizations to meet the challenges of the Eighties.

*Darby Bradley is VNRC's Staff Attorney.*

## VNRC Responds to Act 250 Criticism

**AN OPEN LETTER TO HARRY BEHNEY, SECRETARY OF THE VT. AGENCY OF DEVELOPMENT AND COMMUNITY AFFAIRS**

I have marvelled at recent statements attributed to you concerning inadequacies of Vermont's permit system, particularly as they relate to the Mitel Corporation's Act 250 permit application. If I am not mistaken, you have claimed that in this and similar cases, the red tape, expense to the applicant, and delays were a "nightmare."

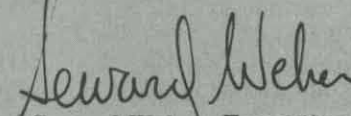
As I understand it, the District Commission which considered Mitel's Act 250 permit application bent over backwards to give Mitel a prompt hearing and an early decision. I think the record will attest to this fact. The Mitel Corporation filed its Act 250 application in early April and received a final decision June 19th. In view of the large number of parties involved in this case and the complexity of the issues, eleven weeks does not strike me as undue delay.

The \$100,000 which you say the applicant spent to get its Act 250 permit certainly cannot be attributed to red tape and other unreasonable bureaucratic demands. This money was spent primarily for project planning and engineering, including running sewer lines under the interstate. Furthermore, most of the information required for the Act 250 permit application is also required to obtain various other permits. It hardly seems fair to attribute this to Act 250.

While there may be evidence that the Act 250 permit process requires improvement, it hardly seems reasonable to point to Mitel in support of your contention. Of all the large projects subject to the Act 250 permit process recently, I can think of none which has been handled more expeditiously than this one. This is not surprising, because there have been few cases in recent memory where there has been so much pressure to get the necessary permits issued in short order. From all accounts, the District Environmental Commission and the Chittenden County Regional Planning Commission were subject to intense "encouragement" by the corporation and yourself to get on with the job. Under the circumstances, it would not surprise me if some of the issues which ought to have been given a full and objective airing might have been glossed over.

In closing, may I say that no one should object to improving the efficiency of this system, but this should not open the door to compromises that would adversely affect Act 250 and the local review process.

Sincerely yours,



Seward Weber, Executive Director,  
Vermont Natural Resources Council



# VNRC

## By-law Changes

The Board of Directors has considered several suggested changes in the Council's by-laws and will make the following recommendations to the membership at the Annual Meeting:

(1) Change Article 4, Section 1, having to do with the number of Directors and their election as follows: rewrite the final sentence which now reads, "The elected Directors shall be elected for three-year terms, except that terms shall be so staggered to insure an annual election of at least one-third of the membership of the Board." The recommended change is: "The elected Directors shall be elected for three-year terms, except terms shall be staggered to insure continuity of membership and leadership on the Board."

The reason for this proposed change is that last year several Directors were elected to fill unexpired terms and were inadvertently elected for three-year terms (the normal term) rather than for the shorter unexpired periods. In several years, the situation could arise where less than one-third of the membership would be up for election and the terms of the by-laws could not be met.

(2) Modifications have also been recommended in the second sentence of Section 6, Article 4, having to do with vacancies on the Board of Directors. The sentence in question reads, "The term of such appointment shall expire at the next Annual Meeting of the Council at which time a Director shall be elected to complete the term of office vacated." The proposal reads, "The term of such appointment shall expire at the completion of the term of office vacated." With this change, it might be easier to fill vacancies when they occur with competent people since they will not have to stand for election almost immediately after coming onto the Board.

The Board also wants to recommend a change in the dues structure under Section 2 of Article 2 which requires that dues for each specific classification of membership be voted upon by the membership at any Annual or special meeting. The Board recommends that business membership, which is currently \$75.00, be modified to provide for three classes of business membership as follows: small businesses -- \$25.00, medium-sized businesses -- \$50.00, large businesses and corporations -- \$100.00. The Membership Committee has recommended this change because the present business membership dues discourage many businesses from joining the Council.

## Meet the Candidates

Each year at its Annual Meeting, the Council elects new members to its Board of Directors. The Board consists of 15 at-large members and six organizational members plus VNRC's Executive Director. One-third of the positions become vacant each year, but this year an additional vacancy was created by the resignation of one Board member. The Nominating Committee has proposed a single slate of candidates for the Board, but Council members may also nominate candidates until 30 days before the Annual Meeting. We've asked all of the Board candidates for brief biographies and statements of their interest in becoming members of the Board of Directors of the Vermont Natural Resources Council.

### At-large

**R. Montgomery Fischer** (Montpelier) *"My involvement has centered, and will continue to center, on the Council's role as a coordinator of environmental activities in Vermont. Because all environmental groups face financial difficulties, it is imperative to clearly identify the role of each group in meeting the natural resource management needs of the state."*

Monty Fischer has been involved in resource management problem-solving in Vermont for 10 years. He is the Manager of the Lake Champlain Basin Program, as well as the Vermont Chairman of the Lake Champlain Committee and the Chairman of the Champlain Maritime Society. He serves on the Board of Trustees of the Lake Champlain Islands Trust and on the Board of Directors of the Vermont Natural Resources Council.

**Lawrence K. Forcier** (Charlotte) *"I hope to contribute to the Council's work of obtaining and conveying environmental information to government officials and the general public. The stewardship of highly productive lands and the protection of surface and ground water quality are of particular personal and professional interest to me."*

Larry Forcier was educated at Exeter, Dartmouth and Yale and has held academic positions in Montana and Wisconsin. His professional memberships include the Ecological Society of America, the Society of American Foresters, the Wildlife Society, the Lake Champlain Committee, the Lake Champlain Islands Trust, VNRC and the Board of Trustees of Shelburne Farms Resources.

**David G. Griffiths** (Charlotte) *"I am committed to using Vermont lands to feed Vermont people. I foresee a time when land will be more valuable for its food-producing capability than for its commercial or residential use."*

Dave Griffiths is a veteran of both the education and communications fields. He owns and operates Black Willow (beef) farm in Charlotte. He is a member of the Lake Champlain Committee, Green Mountain Audubon Society, and Planned Parenthood as well as VNRC. Griffiths was elected to the Council's Board of Directors to fill a vacancy left by the resignation of Janet Clark. He serves as Chairman of VNRC's Development Committee and would continue in that capacity.

**Christine Hadsel** (Burlington) *"Preservation of prime farmland in Vermont is the most crucial problem of the next decade. I am also concerned about the source and delivery of electrical power to and through Vermont, and with the effects of airborne pollution, especially acid rain."*

Christine Hadsel received her BA from Northwestern and her MA from Berkeley. She helped found Citizens for Safe Energy in St. Johnsbury and she serves as Secretary of the Board of Planned Parenthood of Vermont. She is a member of VNRC, the Sierra Club, the Audubon Society and the Appalachian Mountain Club, and she worked with the Ad Hoc Citizens' Committee which held forums and did research on Burlington's proposed wood-fired power plant.

**Sarabelle Hitchner** (Craftsbury Common) *"I would welcome the opportunity to use my training and experience in education, fundraising and government to make an active contribution to VNRC and to the decision-making processes which can so quickly and dramatically affect the health of Vermont's resources."*

Sarabelle Hitchner was a resource ranger with the Army Corps of Engineers in Idaho. She is on the faculty of Sterling Institute where she teaches courses in ecology, wildlife, woodlot management and outdoor skills. She also carries major responsibility for fundraising at Sterling. She has two years graduate education in ecology from the University of Chicago and she is continuing her education, on a part-time basis, in Resource Management and Administration.

**Charles Ross** (Hinesburg) *"During the 19 years that I served on the International Joint Commission, we were actively engaged in the clean-up of the Great Lakes, so I am interested in those activities in Vermont concerned with air and water pollution. In addition, I have always been concerned with energy problems in light of my experience on the Vermont Public Service Board, the Federal Power Commission, and as a member of the Ford Foundation Energy Policy Project."*

Charles Ross is a lawyer and an energy consultant who received undergraduate and graduate degrees from the University of Michigan. In addition to his work with the International Joint Commission, the Ford Foundation, the Federal Power Commission and his Chairmanship of the Vermont Public Service Board, Ross was a trustee of the Environmental Defense Fund and a member of Governor Deane Davis' Commission on Environmental Control.

### Organizational

#### CENTRAL VERMONT AUDUBON SOCIETY --

**Bob Jervis** (Middlesex) *"I would like to work toward maintaining environmental diversity in Vermont, establishing regulatory standards for air and water quality which exceed declining Federal standards, securing and implementing endangered species legislation, and making environmental studies an integral part of every Vermonter's basic education."*

Bob Jervis is a trained ecologist with a PhD from Rutgers who has taught at Goddard College for the past 13 years. He has directed the hawk and owl rehabilitation clinic, the college herbarium, and the Goddard Summer Program in Outdoor Education. Jervis is a member of the Endangered Species Advisory Panel and the Fragile Areas Review Board and he was instrumental in preparing the State's fragile areas registry.

#### VERMONT TIMBERLAND OWNERS' ASSOCIATION --

**Bryce Thomas** (Newbury) *"I am a conservationist and I believe in the multiple use of Vermont land. I think my value to the Council is that I am a free individual, not working for anyone else or wearing anyone's collar."*

Bryce Thomas studied at Bowdoin College, Johns Hopkins University, Fordham University and the University of Birmingham. He taught English at Bowdoin, Johns Hopkins and Pace University in New York City until his retirement this year. He is the President of Thomas Realty, Inc., and a member of the Vermont Timberland Owners' Association. He runs a tree farm in Newbury.



# The Council: Resolutions, Transitions, Celebrations

Saturday, September 12th --

## A ROYAL CELEBRATION IN THE NORTHEAST KINGDOM

Council members and friends will enjoy the best of both natural and built environments in northeastern Vermont at VNRC's 19th Annual Meeting. Burke Mountain's new Base Lodge will host lunch and an afternoon meeting, and morning field trips will include visits to Victory Bog, the Fairbanks Museum and Planetarium and Lake Willoughby. Two field trips of special interest will be a dowsing workshop at the Dowsing School in Danville, and a tour of the Gingue farms near St. Johnsbury where the State is clearing a path for Interstate 93.

Most of the field trips begin around 9:00 a.m. We'll meet back at the Burke Mountain Base Lodge at noon for socializing, lunch and a business meeting. Bob Gray, former Executive Director of the National Agricultural Lands Study, will address the assembly at 3:00. He'll discuss the national perspective on farmland loss and preservation strategies for Vermont. Board member and singer Dave Griffiths will close the meeting with a little Vermont farming history and several Grange songs on the guitar.

Your invitation to the Annual Meeting with directions, times, detailed descriptions of the day's events and registration forms will arrive within the week. Give us a call at 223-2328 if you have any questions. See you at Burke Mountain!

## SUMMER BOARD MEETING SAYS NO TO WATT, WIND TURBINES

The Board of Directors met on August 3rd in West Glover. They elected David G. Griffiths of Charlotte to the Board to fill the unexpired term of Janet Clark who has moved to Missouri. Mr. Griffiths owns and operates Black Willow Farm, a beef cattle operation. He will head the Council's Development Committee.

The Board also approved a resolution calling upon President Reagan to discharge Secretary of the Interior James Watt and replace him with a Secretary "who by professional training, experience and philosophy is qualified to manage the nation's heritage and natural resources." The resolution will be sent to the President and to Vermont's Congressional delegation.

In other action, the Board decided not to oppose the placement of meteorological instruments on a 50-foot tower at the top of the Sugar-bush gondola on Lincoln Ridge, since this area is already subject to intensive recreational use. But the Board said there should be no wind generation or other energy development on Green Mountain National Forest lands until a revision of the overall Forest plan has been completed. This plan should show where such development will be permitted and where it will be prohibited.

## BENT HILL HERITAGE FESTIVAL

Step back into the 19th century at a heritage festival at Bent Hill in Waitsfield on Saturday, August 29th. The VNRC benefit, sponsored by Weather Hill Restoration and Vermont Castings, will feature horse-drawn carriage rides, a country auction with Dick Hathaway, demonstrations of early American crafts, a generous harvest table, musicians, minstrels, old-time storytellers and more.

The setting is Historic Bent Hill Settlement, where Gregory and Carolyn Schipa and the Weather Hill joiners have rebuilt and restored seven elegant 18th and 19th century houses.

The festivities begin at noon, everyone is welcome, and there is no admission. As VNRC's Don Hooper says, "the only requirement is a generous heart and a willingness to enter into the spirit of the country auction," for which area businesses have contributed a Garden Way cart, a bicycle from Onion River Sports, dinners for two, balloon rides and other fantastic offerings. Call 223-2328 for information and directions.

## MARY HOOPER, DARBY BRADLEY IN TRANSITION

Darby Bradley, VNRC's Staff Attorney and Director of the Environmental Law Service, will be leaving the Council to work for the Ottawa-Quebec Regional Land Trust. On August 1st, Bradley began working part-time for the Woodstock-based organization, which uses innovative financial and legal agreements to protect farm and forest land from development. VNRC has not decided whether or not Bradley will be replaced by another attorney. Staff and Board members are considering several possibilities, including redirecting the activities of the Environmental Law Service and making better use of the private bar.

Mary Hooper is also phasing out her work for the Council. For the past two years, she has directed VNRC's Sewage Management Project, but her position was funded primarily by grants from the National Science Foundation and the National Demonstration Water Project. The NSF grant ran out on July 1st, and NDWP funds were withdrawn by the Reagan Administration. Hooper is shopping for alternative funding, but she faces stiff competition for private grants because of the decreased availability of Federal monies. Hooper says she is concerned that the demise of the Sewage Management Project along with the Lake Champlain Basin Program would leave very few private groups working on water issues in Vermont, and that this is a "frightening" prospect in a state which has such tremendous water resources.

**NEWMEMBERSNEWMEMBERSNEWMEMBERSNEWMEMBERSNEW**  
We're pleased to welcome to the Council the following people who joined us in May and June: Deborah Stetson, Putney; Francis Rohr, Brattleboro; Herbert Ogden, Windsor; Norman Wright, Grafton; William Blachly, Marshfield; Mary K. O'Neill Leary, Burlington; Lindsay Jarvis, Springfield; Robert H. Trask, Londonderry; Rev. F.W. Rouelle, Windsor; Parker E. Wade, Westminster Station; Marvin W. Clark, Williston; Patricia Peat, Hartland; Ludger Guillemette, Shelburne; Franklin Stevens, Chester; Steven Vogl, South Royalton; William Coleman, Bondville; Marlene and Philip Russell, Hinesburg; Anna Lord, West Brattleboro; Steve and Jeanette Chupack, Huntington; Gwen Bronson, Shelburne; Henry Burnham, Stowe; Karl Chapman, South Wallingford; Milton Sage, Cambridge; Pat McClary, Moretown; Bruce and Elizabeth Urie, Craftsbury; C. Martin Lang, Stowe; Bebe Wicker, Charlotte; George and Dorothy Squier, North Clarendon; Stephen Bromley, Wallingford; Loren and Jessica Sanderson, Milton; Paul Kelton, Plainfield; Nicholas Biel Jacobson, Norwich; Sally Shaw, Manchester Center; Vermont State Grange; Russell Allen, Vergennes; Marion Spencer, Vergennes; Dr. Omar T. Pace, Longmeadow, Massachusetts; Lyndall Heyer, Stowe; Audra Taft, Huntington; Vic Maerki, Alexandria, Virginia; Walter and Eileen Griffiths, Bel-lows Falls; Ann Thomas, Cuttingsville; Mrs. Everett Chase, White River Junction; Howard Wilson, Underhill; Edwin Thompson, South Ryegate; Springfield Grange No. 114; Paul Tremblay, Highgate Center; Elizabeth Schaeffer and John Bohnert, Underhill; Robert Ferris, Windsor; Cedric and Robin Fitch, Calais; Mrs. Heidi Mitchell, Cuttingsville; Sarah Spencer, Norwich; Charles Ross, Hinesburg; Debbie Wuersch, Burlington; Essex Center Grange No. 155; Bridport Grange; Cathy Gauthier, Morrisville; Bishop Farm, Inc., Springfield; Arthur Davenport, Wallingford; Fred Schmidt, Shelburne; Rees/Scanlon, Newfane; John Bruno, Woodstock; Keith F. Barnaby, Burlington; Robert A. Lyon, Rochester; Warren Foster, Wilder; Joseph Bornstein, Burlington; Gregory Schultz, Barnard; Liza and Casey Murrow, Marlboro; Mr. and Mrs. Peter Ludwig, Canaan; Edward Churchill, Haddonfield, New Jersey; Elsie F. Beard, East Barre; Bennington College; Carl Bohlen and Kristy McLeod, Hinesburg; Katherine Graham, Barrington, New Hampshire; Russell and Sharon Dimmick, Randolph Center; John M. Spencer, Cuttingsville; Cassandra Church, Middlebury; Mrs. F.T. Fenn, Jr., Brownsville; Edward G. Janeway, Jr., Montpelier; Dr. H. Taylor Yates, Jr., St. Albans; Paul Stockwell, West Brattleboro; George T. Costes, St. Albans; Stephanie Kaplan, South Royalton.

## Preserving Nature's Best



No two authorities agree on the best way to can tomatoes, and the same is often true of preserving our natural resources. The Vermont Natural Resources Council believes that thoughtful use of our environment is the best way to preserve it. We believe that we can boost our economy, revitalize agriculture and encourage industrial and commercial growth and still protect our fresh air, clean clear lakes and rivers and the natural beauty of our countryside. But it will take careful planning and informed decision-making; we must take special care to educate ourselves about the many trade-offs in any land use decision.

Environmental education is one of VNRC's most important activities. We need the advice and support of citizens who are concerned about protecting and preserving the best of Vermont. If you have read this far, perhaps you are one of them. Won't you join us today?

Name \_\_\_\_\_ Address \_\_\_\_\_

Town or City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

( ) Please bill me.

( ) Enclosed is \$ \_\_\_\_\_ for a membership in the following category: ( ) Individual -- \$15.00 ( ) Family -- \$20.00

( ) Student -- \$5.00 ( ) Fixed or Limited Income -- \$6.00 ( ) Business -- \$75.00



# Sugarbush

(Continued from page 1)

Joe Sposta, a staff officer with the Forest Service, says that it is "not uncommon to require the permittee to pay part of the cost" of the Environmental Impact Statement, and that although Sugarbush is paying the bills, the Forest Service "has direct control over the whole project." But these assurances are not entirely satisfying, and as the EIS studies trickle in, critics inside and outside of the regulatory process have charged that they are inconclusive and that they sidestep some of the most important issues.

**Ski Area Spin-offs:** Bernie Johnson, Assistant Director of the State Planning Office says, "I think there is some question at this time about whether the studies are doing an adequate job on questions relating to impacts on communities." He says he hasn't seen "specific information on either the revenue side or the cost side" of municipal services which will be required because of the Sugarbush development.

Vermont's Agency of Environmental Conservation also had some "important criticisms" of the studies, particularly of the methodology of the hydrological studies, according to Agency planner Stephen Sease. "We thought that the Forest Service was going to consider a lot of the spin-offs of ski area development, and a lot of subjects relevant to Act 250," says Sease.

Part of the problem lies with differing interpretations of Forest Service jurisdiction. Forest Service officials maintain that they can only rule on two questions: the size of the permit area, and increased use within the permit area. "Our main concern is what happens on Forest Service land," Joe Sposta says. "We do also have some concerns about what happens on adjacent private lands, but we certainly don't want to get into the position of trying to provide direction for zoning or planning outside Forest Service lands."

Elizabeth Humstone, director of the Mad River Valley Growth Management Program, disagrees. She says the Forest Service has "quite an ability to influence what happens on non-Forest Service land," and that the agency has required western ski areas to "mitigate the influence on everything from fire protection to traffic."

"If the Forest Service decides it's not going to consider the spin-off effects of the ski area on private lands, that's going to make it very difficult for the State to deal with this thing in Act 250," Stephen Sease concludes. He says the State's biggest question right now is whether or not there is enough water to supply the needs of Sugarbush Valley and still maintain minimum flows in streams and rivers near the development. He also says that the terti-

ary sewage treatment plant at Sugarbush Village is within 20,000 - 30,000 gallons of capacity.

Paul Nergaard, Coordinator of the Sugarbush Valley project, will write the Environmental Impact Statement for the U.S. Forest Service. He dismisses environmental concerns about the development as "engineering problems." He says that the only real problem is "getting the regulatory agencies to do their jobs" but that "you can't deny developers the right to build on the basis of the fact that we can't enforce the law."

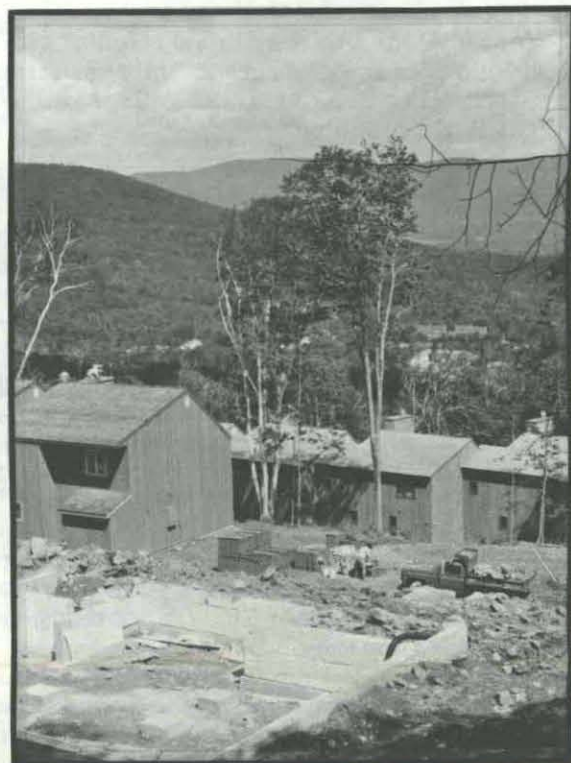
Nergaard also wants to correct the popular misconception that "there are 400 bulldozers on Lincoln Mountain warming up their engines." Lift and trail improvements at existing ski areas could begin as soon as Sugarbush receives all the required permits, but there won't be any construction at Slide Brook for another 12 years. There will be "plenty of time for communities to modify their town and regional plans."

**Towns Must Take Charge:** In the end, responsibility for regulating the rate and quality of growth in the Mad River Valley will probably rest with the town governments of Waitsfield, Warren and Fayston. Two years ago, the Central Vermont Regional Planning Commission launched a program designed to help the three mountain communities beef up their town plans and zoning regulations. Elizabeth Humstone directs the Mad River Valley Growth Management Program, which last year produced a detailed study of the capacity of the valley to accommodate continued high rates of growth.

According to the study, if the valley grows at a rate typical of western destination resort ski areas, in ten years the population will nearly double, and the three towns will have to build a new middle school or an addition to at least one of the three elementary schools as well as a high school addition. They will need more than 1100 new permanent housing units along with several new traffic lights, additional traffic lanes and a bypass around Waitsfield.

Among the tools which towns can use to control growth are "capital programs," which identify what types of capital improvements a town will invest in based on its financial capability. Towns can deny building permits or require phasing of development in order to comply with the capital program. But making full use of capital programs and other planning tools will require that the towns overcome long-standing rivalries. Judd Babcock says that his "biggest concern is that the valley towns act together as a whole." If they don't, he says, he's not sure they can guarantee orderly growth. Bob Cook, Chairman of the Fayston Planning Commission, concurs: "They've got to get together to capitalize municipal operations, and planning also requires deep-rooted coordination and cooperation."

Proponents of planned growth in the valley have at least two things going for them: while most Vermont towns are under tremendous pressure to encourage growth in order to increase their tax bases, at least two of the valley towns are in "an extremely favorable tax position," according to Jeff Squires of the Central Vermont Regional Planning Commission. Warren, Fayston and Waitsfield have the lowest tax burdens of any towns in Washington County. Moreover, there is widespread public support for controlling growth and maintaining the rural character of the valley. The results of a survey mailed out with the 1980 town reports indicate that 84% of valley residents endorse preservation of agricultural land and open space and 77% are willing to use tax dollars for the purpose. 86% favor controlling the pace of development and 72% want to maintain the valley's visual character even if it means fewer jobs and higher taxes.



Beth Humstone says that if the towns work together, they can have "some real clout" in this process. "Act 250, the EIS process and the local planning process offer opportunities for regional planning commissions, towns, developers and the State to work together to make sure that the valley will continue to be a quality environment." She suggests that people who are interested in the Sugarbush project contact her (229-0389), Paul Nergaard (496-2178), their local planning commission or Board of Selectmen. "Towns are in the process of amending their planning and zoning regulations and responding to the EIS studies. The more they hear from local people, the more representative their response will be." MM

## Vermont Environmental Report

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