

Vermont Environmental Report

An Interview with Vermont's Commissioner of Agriculture

William Darrow, Commissioner of Agriculture for Vermont, has been an apple farmer for over 30 years. He is now a policy-maker as well. In the following interview for the VER, Darrow emerges as a pragmatist. He sees and knows the hard realities farmers face in Vermont. But he is also a person who looks beyond the immediate, the expedient, to the future and to a wider cultural and social meaning of farming in this state. This conversation with Darrow begins the VER's examination of what farming means to Vermont. In the coming months, we will look in greater depth at many of the ideas expressed here. RD

Q: Some farmers and economists say that the United States has too much farmland in production; we produce too much food, and consequently food is too cheap. Former Secretary of Agriculture, Earl Butz, was an outspoken proponent of this theory. A number of years ago a commission on federal food and fiber policies concluded that the "advances" in farming technology had reduced the need for manpower; and, therefore, too many people were trying - unsuccessfully - to make a living by farming. Do you agree with this? And if so, why don't we just say we want to save open space and leave it at that?

WD: *It is true that many farmers say, "What! Help more farmers get into business and take away my markets."*

But I think, first of all, we should be worried about losing our farmland because of where we live - in the northeast, in Vermont. We are losing our food base here. I would argue that a state should

save and protect enough farmland to feed its people. It is not out of the question that we could face some national crisis that would prevent food from being transported long distances. I would think we would feel much more comfortable if we Vermonters were relatively self-supporting. Certainly when we know that 85% of our food is imported from other states, we have to stop and think about the consequences.

Q: Tom Daniels, an agricultural economist from Burlington, states in an article, "Vermont's Vanishing Farmland", that "In 1949 Vermont had 19,000 farms covering 60% of the state's 5.8 million acres. By 1969, there were only 6,600 farms on 1.9 million acres, or 32% of Vermont; and in 1979 about 3,500 commercial farmers own about one-quarter of Vermont, or 1.4 million acres."

Why is Vermont farmland "vanishing"? What are the pressures on farmland, on farmers?

WD: *We live in a greenbelt that*

lies between Boston, New York, and Montreal. We're in a population squeeze. Our farmland and woodlands are being continually raided. The land is not being raided by farmers, mind you, but by the 55 million people who can drive here in a day and are looking for a refuge from the pressures of the city. The pressure to use land for other purposes - housing, industry, shopping malls - is increasing.

Other factors that are affecting us now are the economy, inflation, the attitude of Wall Street. People who have money are being advised that land is a good anti-inflation investment. All you have to do is look at the skyrocketing price of land compared to other investments to know this is true.

You know none of this would be happening if there was enough money being made in farming.

Q: Could you expand on that last statement?

WD: *Well, look at the latest ELFAC [Electronic Farm Accounts]. For example, a farmer with 40 cows is making an average of \$7,800 a year. He probably works a minimum of 10 hours a day, 7 days a week - it comes out to 3500 hours a year at about \$2.25 an hour. When you see a \$30,000 a year supermarket manager complain to a \$10,000 a year sales clerk about the cost of food, when the food was produced by a \$7,800 a year farmer, it makes you wonder why there are any farmers left at all.*

Please turn to page 8.

Rochester's Sewage Treatment in Troubled Waters

What began as an attempt by the town of Rochester, Vermont, to stop the flow of raw sewage into the White River and to provide its citizens with adequate sewage treatment service has become a controversial issue involving the pristine nature of the White River and the protection of the Atlantic salmon.

Like many small, rural communities, Rochester had no public sewage treatment plant until recently. Most homes and businesses relied on private septic systems, and a few used a direct pipe into the White River. Because of these discharges and problems with private septic systems malfunctioning, the town decided to build a subsurface treatment system. The system was completed in 1975. It is, essentially, a large, sophisticated septic system which collects waste from a number of households and treats it through a settling and filtration action. This sort of system has proven very effective and is virtually guaranteed to work if designed, built, and maintained properly. If not, it is guaranteed to eventually fail.

In the fall of 1975, after six months of operation, one of the leach fields did fail. Several months later, a second field also began to malfunction. Construction and design limitations were cited as the causes for the

system's failure. As a result of this failure larger amounts of raw sewage were being dumped into the waters of the White River than ever before. There were actually more homes connected to the faltering system than had originally been polluting the River.

In an effort to correct this situation, the town's consulting engineers considered three choices: (1) rehabilitating the existing system, (2) building a new subsurface system in a different location, and (3) building a conventional, centralized above-ground sewage treatment plant. Rehabilitation of the existing facility was dismissed as impractical because of soil conditions and site location. A Rotating Biological Contactor (RBC), a kind of centralized above ground treatment facility, or a new subsurface system in a different location are considered to be the only choices open to the town.

The new subsurface system would be more expensive than the RBC in actual cost - \$656,600 as opposed to \$356,500. But because there is more state and federal funding available for the subsurface system, the cost to the town is only \$16,500, whereas the RBC would cost Rochester citizens 2½ times as much or \$43,300.

Please turn to page 3.



I'm in apples -- not dairy -- and when I speak of diversification, I know exactly what it means.

The Council

New Staff Launch Programs

Water Quality

Following several weeks of proposal writing last April and then several months of nail-biting over the summer, we are delighted to announce that the Council has been awarded a \$40,000 National Science Foundation grant. The fifteen-month project begins immediately. The purpose of the NSF "Science for Citizens" grant is to train local officials and citizens in small Vermont communities to analyze the nature of their sewage problems and come up with appropriate solutions.

Mary Hooper, a new staff member at VNRC and director of the NSF grant, brings several years of experience to the new project. Her last job, with the League of Women Voters in Washington, D.C., dealt with water quality issues and public participation programs.

Hooper will develop workshops and a slide show to engage citizens, town officials, and technical resource people in actively working on sewage treatment issues in communities throughout the state.

Farmland

Another new member of our staff, Marsha, is heading up the first year of a two-year project aimed at developing strategies for reversing Vermont's alarming loss of farmland.

The project will begin with an analysis of Vermont farming, its character, its economic condition, and the special pressures which affect it today. Marsha has already compiled and begun to critique an extensive bibliography, and started to interview a variety of resource people who are familiar with the problems confronting farmers in Vermont. She will also assess land retention policies and laws enacted elsewhere in order to better understand what path Vermont might take in protecting its farmland. A conference is planned for later in the year as well.

If it appears that VNRC can play an effective role in helping to shape public policy for farmland preservation, the Council will apply for a foundation grant for the second year of the project.

Marsha, who was raised on a farm in the Mad River Valley, has been concerned with farming issues for a number of years. She is currently studying rural land use planning through UVM's Environmental Studies program.



Annual Meeting: Worth the Trip

Our environmental crowd-o-meter tallied more than 170 at this year's VNRC Annual Meeting in Woodstock.

The day began with some frustration as participants were limited to one field trip each. "I couldn't decide between the farm tour and the fish tour," said one exasperated member, "so I went on the Windsor Minerals tour. It was great."

At noon, everyone, including hikers returning from the Appalachian Trail trip, were treated to a sumptuous barbequed spare-rib buffet laid on by the Kedron Valley Inn. One outdoor photography student, who opted for the picnic lunch by the pond, finished his morning photo project by snapping close-ups of his ham sandwich before he devoured it.

In the afternoon, Board Chairman Mark Lapping presided over the business meeting, introduced each of the candidates for the Board, and honored three environmentalists.

Citations for "Outstanding Contributions to the Environment and the State of Vermont" were awarded to Richard M. Brett and James E. Wilkinson, while a citation for "Special Service to the VNRC" was awarded to Hugo B. Meyer.

Dick Brett, referred to by many as "Mr. Environment", was cited for his useful demonstration of ecological realities. The award read in part "the organization you helped create and guide through its critical early years, continues to hold you in the highest esteem for your devotion to the cause of environmental sanity here in our beautiful state of Vermont."

Jim Wilkinson, who retired this year from his post as Vermont's Commissioner of Forests, Parks, and Recreation was praised for his 33 years of conscientious hard work in the stewardship and management of the state's precious natural heritage.

Hugo Meyer, a member of the Council's Board of Directors for the past six years, was cited for his special commitment to the

Council's aims, his vision of what VNRC could become, and the strength of his support in helping realize that vision.

In recognition of the contribution which each had made to the welfare of Vermont's forests, Brett and Wilkinson, received handsome desk-top boxes and Hugo Meyer received a serving board . . . all appropriately hand-crafted in "their favorite material."

Following the awards, Commissioner of Agriculture, William Darrow, led off the afternoon discussion of "Vermont's Farm Future." Darrow summed up the state of the art in agriculture when he asked us, "Do you remember how people behaved in the gas lines this year? I wonder how the average consumer would react in a food line?" In his usual candid fashion, Darrow told the audience that we have more to lose than just our scenery. He encouraged -- urged -- town folk and farmers to become united in the effort to save our farms.

Robert Kinsey, Deacy Leonard, and Mark Lapping then offered commentaries of their own in what proved to be an engaging, occasionally provocative, session. Though little time remained for audience participation, most were satisfied that the afternoon had been a successful kick-off to a much longer dialogue between farmers and environmentalists.

The following people were elected or re-elected to three-year terms to the VNRC Board of Directors:

At Large: Maurice Arnold, William Eddy, Jr., Milton Potash, Carl Reidel, and Patricia Tripp.

Organization Representatives: Jean Davies, Vermont Camping Association; and Robert Klein, The Nature Conservancy.

The day concluded with a discussion of how VNRC might stimulate more communication among its membership. Periodic regional meetings were suggested as one way members might be able to participate more fully in Council affairs.

moving!

WHERE: 7 Main St., Montpelier. VNRC's new office will be in what is familiarly called the "Depot", a recycled railroad station. The warren of small offices looks out on two feed stores, a gas station, a supermarket, and the Winooski River.

WHEN: By November 1.

WHY: To put it simply, we've outgrown our present space. About two months ago we were embarrassed to realize that we were unable to shoe-horn another person into our present offices. When you're unable to take advantage of free help, or accept the services of an enthusiastic new legal intern because you're unable to find desk space, something's amiss.

thanks...

VNRC does not normally acknowledge the many contributions and gifts it receives from members. We regret that we are not able to individually thank you for your generous support. We feel that as much money as possible should be used directly for the substantive work of the Council. We hope that you agree with this allocation of limited resources.

We do want to offer special thanks to the more than 80 people who contributed almost \$1,500 to helping the Council work on several significant new and ongoing projects in September.

EDITOR'S NOTE: After many months of planning, the new Vermont Environmental Report is here. I am very grateful for all the help and moral support I've received from the Council staff and from: Mason Singer, Larry Mires, Nat and Caroline Frothingham, Andrew Kline, Bill Eddy, and Ted Cronin. And if it hadn't been for Linda McAuliffe . . . well. Thank you.

VERMONT ENVIRONMENTAL REPORT

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The Vermont Environmental Report is published six times a year. Its purpose is to examine environmental issues in the public interest. Its content is not intended to represent official VNRC policy unless specifically stated.

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In Brief

Land Gains Tax: Ironing Out the Wrinkles

Darby Bradley

Do you remember the days when some real estate investments in Vermont looked like this: *October, 1971: 701 acres woodland Dorset/Manchester, Vermont. Purchase price \$189,000 ... no cash down payment, property secured by a purchase money first mortgage computed on a payout over 89 years bearing interest at 6%, becoming due and payable 18 years from date of closing. 1972 fair market value: \$230,000.***

And when a real estate agent might send a letter to an out-of-state investor that read like this:

*I submit this property to you because I feel that it is an extremely good investment and one that allows a person to invest in a tract of land without the usual romance that goes on in a real estate transaction. I think that you should seriously consider this program because where else in Vermont could you take 20% of 3500 acres off the market for \$25,000 with the added kicker of knowing that 85% of the down payment is deductible in the first year?****

In 1973 the Vermont General Assembly enacted the Land Gains Tax to curb the type of land speculation which is illustrated above. In every legislative session since 1973, attempts have been made to repeal or significantly weaken the law. The Vermont Supreme Court has upheld the constitutionality of the tax, but opponents charge that it hurts legitimate real estate transactions, duplicates Act 250, and no longer is needed.

What, then, has been the effect of the Land Gains Tax, and is it still needed?

The Law: The Land Gains Tax is a special capital gains tax imposed on the profit realized from the sale or exchange of land held for less than six years. Buildings are not subject to the tax, nor are the first 10 acres surrounding the purchaser's principal residence. The amount of tax depends on: the size of the seller's gain and the number of years the seller has held the land. The maximum tax is 60% of the profit where the seller earned a 200% or more profit after holding the land less than one year. In other situations the tax is lower. For example, if a person buys some land for \$10,000, holds it for three years and sells it for \$25,000, the tax would be 22.5% of the \$15,000 profit, or \$3,375. Land sold after six years is not subject to the tax.

The Attack: Following an unsuccessful attempt to repeal the Land Gains Tax outright two years ago, opponents of the law introduced H.343 which would substantially diminish the law's effect. Under the bill, the maximum possible tax is reduced from 60% to 30% of the profit, and the maximum holding period (beyond which no tax applies) is reduced from six years to three years.

At a joint hearing before the House Natural Resources, Agriculture, and Appropriations Committees last July, proponents of H.343 made the following points in favor of this first step toward an eventual repeal:

- It is difficult to determine how much of the profit should be attributed to the land which is taxable and how much to the buildings, which are not taxable.
- While there is a partial exemption for land sold for a first home, there is no exemption for land sold for second homes. This hurts small Vermont builders who buy land on which to construct and eventually sell second homes.
- The tax applies to commercial properties which are already developed. An example of the tax applying to a ½ acre parking lot in downtown Burlington was cited.

The Defense: At the same hearing, Lisle Baker, a professor at the Suffolk University Law School in Boston, presented the preliminary findings of his study of the Vermont Land Gains Tax. The purpose of the project, which was financed by the National Science Foundation, was to assess the effect of the law on the Vermont land market. During the course of the three-year study, over 1,000 land gains tax returns were examined, and over 600 people who had participated in the land market during the previous 10 years were interviewed. On the basis of his preliminary analysis of the evidence, Baker could see the following trends:

- An increase in the proportion of lower income purchasers of large parcels.
- A decrease in large parcels bought for investments rather than for use.
- A decrease in professional and/or out-of-state investors.

During the interviews, a number of investors and subdividers confirmed that the land gains tax had influenced their behavior, including causing them not to purchase parcels of Vermont land which they might otherwise have acquired. In summary, Baker said, that while the conclusions are still tentative, "We have enough signals pointing in the same direction to indicate that the Vermont Land Gains Tax probably did cause some alteration in the Vermont land market so as to discourage particular types of investors, leaving the market more 'open' to purchasers who intended to use the land and who had lower levels of income."

In Conclusion: The Vermont land market has changed considerably since the late 1960's and early 1970's. Prices are no longer escalating at fantastic rates, and the number of out-of-state speculators has diminished, along with the number of large subdivisions. Nevertheless, speculation and quick profits are still possible for a person who buys a large tract of land and subdivides it into smaller tracts with a higher per-acre sales price. This kind of subdividing can, if the investor is clever, escape the jurisdiction of Act 250 and other environmental regulations, which may have a detrimental effect on agricultural and forest land management.

VNRC should work to mitigate some of the unintended consequences of the tax. Perhaps a partial exemption for commercial property and second-home property should be considered, provided the exemption is carefully drafted. After all, a one-half acre parking lot in the center of Burlington has little to do with protecting Vermont's open space, and any person developing many second homes will be picked up quickly by Act 250. The Land Gains Tax has provided the state with substantial protection from the type of speculation illustrated in the court case quoted above. We should work to make the law function better, but we should also insure that it remains effective.

***Excerpts from the decision in Bartels v. Algonquin Properties, Ltd. (no 76-144) decided in U.S. District Court for the District of Vermont on March 23, 1979. The suit was the legacy of a real estate investment gone sour. The land transaction cited here is one of 10 similar transactions made by the Algonquin Properties company.*

Darby Bradley is VNRC's staff attorney.

Rochester, continued
from page 1

Despite the difference in cost, the town selectmen voted unanimously to build the more expensive RBC. Those who have been following the situation closely feel that the vote was based on past experience with a subsurface system, and the possible necessity of condemnation proceedings in order to acquire suitable land.

Whether the RBC can ever be built, however, is still in doubt. Unlike the subsurface system, a RBC facility must be able to discharge treated sewage into a stream. The stream in the case of Rochester is the White River. The River is now classified as a Class B stream; no sewage, treated or untreated, may be dumped into it. Therefore, the town has requested the State Water Resources Board to reclassify the segment of the River which would be receiving the treated sewage from the RBC. If the Water Resources Board decides that the reclassification of the White River segment is not justified, the town cannot build the RBC facility.



The seriousness of the eventual decision by the Water Resources Board is exacerbated by the presence of the Atlantic salmon. Located 16 miles downstream from Rochester is the Bethel Fish Hatchery, part of a multi-million dollar federal project to re-establish and propagate the endangered Atlantic salmon. The salmon that are raised at the Bethel Hatchery will be used to restock the Connecticut River Basin which includes the White River.

When asked whether the U.S. Fish and Wildlife Service had any concerns about the possible construction of an RBC facility in Rochester, Steven Rideout, coordinator for the Atlantic salmon project, replied, "Yes, we are concerned. We do not favor building this facility." When asked why, Rideout explained that discharged sewage is usually treated with chlorine which is toxic to fish. He also noted that while the engineer's report calls for the chlorinated water to go through a dechlorinating process, there is no scientific evidence that the chemical used for dechlorination is not harmful to fish.

In October, the Water Resources Board will hear testimony from the town of Rochester and its consulting engineers, several experts in the field of salmon propagation and water pollution, and a staff member of VNRC's Law Service. The Board must decide whether the RBC is the only choice the town of Rochester has for treating its sewage, and therefore, whether the reclassification of the White River is justified.

Naturalist's Journal

Our biological knowledge is still so pitifully small that it is less than likely that science can identify the immediate worth of any given species. The roster of species directly useful to man, however, is far greater than most of us would suspect; and we know just enough about the extent of our ignorance to understand how huge our untapped biological resources must be. It is therefore imprudent to allow an estimate of immediate worth, as perceived by men trained to think in terms only of near-term goals, to be the basis for deciding whether a given species is to be preserved.

What good is a snail darter? As practical men measure "good", probably none? But we simply don't know. What value would they have placed on the cowpox virus before Jenner; or on penicillium mold (other than those inhabiting blue cheese) before Fleming; or on wild rubber trees before Goodyear learned to vulcanize their sap? Yet the life of almost every American is profoundly different because of these species. — James L. Buckley. Excerpted from the National Review.

Perennial Corn: An Argument for Species Preservation

Robert Klein

Who cares about *Zea diploperennis*? Until last year, no one did. This inconspicuous grass was unknown to science. In 1978, while vituperative critics belittled Furbish's lousewort and the Tennessee Snail Darter—two endangered, but otherwise "insignificant" species—the discovery of this equally rare, and previously unimportant, plant went practically unnoticed. Yet this discovery holds out a dramatic hope for the world's poor and hungry people.

Found in a remote and unnoticed Mexican highland forest, *Zea* is a perennial relative of corn, and is generally compatible with high-yielding hybrid corns now in cultivation. Corn is the world's third most important grain crop, and scientists believe that when this plant's perennial characteristics are bred into existing corn strains, many of the world's farmers will be able to cultivate an everbearing crop. This would save a tremendous amount of time, energy, wear and tear on equipment, and soil erosion that now accompanies the annual sowing and cultivation of corn. It would essentially revolutionize agriculture. Perennial corn would also reduce the cost of growing and purchasing this grain, promising better nutrition for the world's poor.

It is difficult to attach a monetary value to the likes of *Zea diploperennis*, or to assess the costs of living without it. The oak-magnolia forest where this obscure plant lives is now being cut for timber, and *Zea* could become extinct in the wild within a decade or two. We were fortunate enough to stumble upon this species before it was obliterated, but it is not difficult to imagine a less providential scenario.

We risk the destruction—the extinction—of species' habitats daily. Forestry, agriculture, mining, dam construction, and development on a massive scale are destroying the last habitats of rare and endangered species throughout the world.

In many cases these disappearing species are unstudied, their

biological secrets and commercial or agricultural potentials unknown. Yet, with only 20 species of plants accounting for 90% of the world's diet, and with millions of acres too arid or wet, hot or cold for conventional crops, we should not be squandering our best chances to improve these crops and develop new ones. As plant breeding becomes increasingly sophisticated, it depends more on wild relatives of modern crops for the genetic material needed to improve existing strains. Ironically, we're losing these wild forms of corn, wheat, barley, and rice just when we need them the most.

During the last few hundred years, we've pushed an average of one species per decade to extinction. Now this rate is one species per year, and accelerating rapidly. By conservative estimates there are roughly three million species on earth, the majority of which inhabit the lush tropical rain forests. Though these are our greatest reservoirs of genetic diversity, 40% of the tropical rain forests have already been destroyed, and over 40,000 additional square miles of rain forest are cleared every year. If current rates of encroachment continue, it's entirely possible that we'll lose an additional 500,000 species to extinction by the turn of the century.

Although the biological processes that produce and maintain this natural diversity are still imperfectly understood, efforts to protect the world's "natural heritage" have been underway for a century. Since the precedent-setting designation of Yellowstone National Park in 1872, national parks have been established on all continents. Still, over forty countries have no national reserves, and thirty others have only rudimentary systems. Progress in this area is especially slow in the third world nations, which coincidentally sustain most of nature's species.

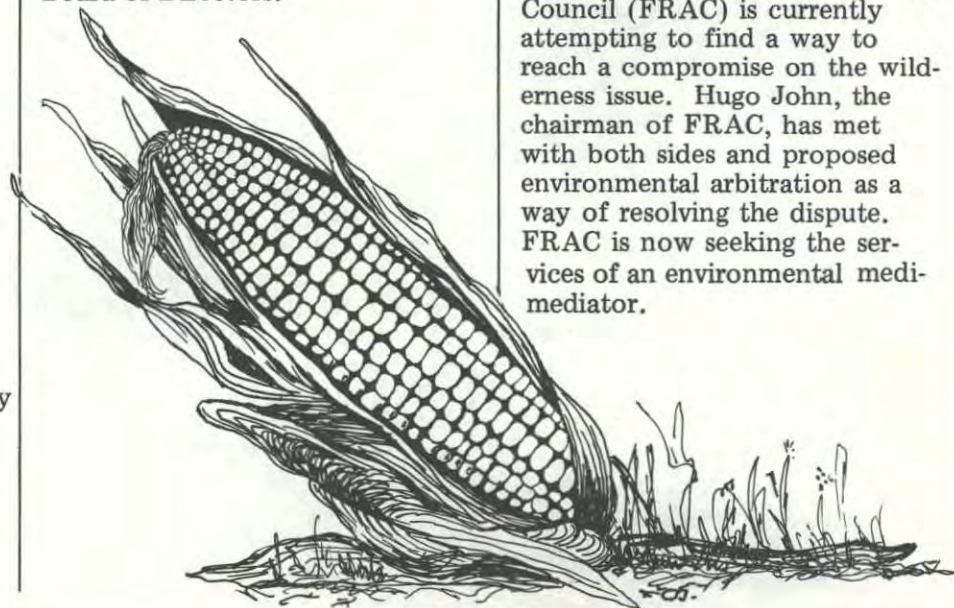
Today, many developed countries are paying natural diversity its due by systematically preserving representative examples of native plant and animal species,

and ecosystem types for careful study and stewardship. In North America, The Nature Conservancy has helped eighteen states and the TVA begin sophisticated Heritage Programs for the identification and evaluation of elements of natural diversity, and the Conservancy's acquisitions (1.5 million acres to date) favor rare species, representative ecosystems, and research areas over open space, recreation, or scenic areas.

Overseas, the International Union for Conservation of Nature and Natural Resources (IUCN) and the World Wildlife Fund are helping dozens of governments identify and preserve important habitat areas. The discovery of the *Zea diploperennis* makes clear the need for an international system of biological reserves and preserved parklands.

Although enlightened measures like the Endangered Species Act may make a difference in the U.S., many developing countries cannot afford, enforce, nor justify such elaborate conservation programs. Like so many things, the species extinction problem is tied to deeply-rooted socio-economic, political and philosophical habits, and truly effective remedies must confront these larger issues.

Robert Klein is the Vermont Field Director of The Nature Conservancy and a member-elect of the VNRC Board of Directors.



Wilderness: Parley to Begin

The prospect for more wilderness areas in Vermont seems as remote today as it did before the Roadless Areas Review Evaluation II (RARE II), a federal wilderness study, began two years ago. Last winter the Department of Agriculture concluded RARE II and recommended to Congress that no new wilderness areas be proposed for the Green Mountain National Forest (GMNF).

Many Vermont environmental groups have been pitted against some landowners, snowmobile enthusiasts, and some hunting, fishing, and trapping groups in the struggle over competing land uses in the GMNF. Wilderness proponents have criticized both the criteria used to evaluate potential wilderness areas and the method for assessing public opinion on the wilderness issue used by the U.S. Forest Service.

In an effort to quell the conflict between pro- and anti-wilderness parties and to get a more accurate sense of public opinion, Senator Leahy and Senator Lugar (R-Indiana) of the Senate Committee on Agriculture, Nutrition, and Forestry held a public hearing on July 14, in Middlebury, Vermont.

At the hearing, Senator Leahy made it clear that he wanted the opposing groups in Vermont to try to work out their differences and arrive at a compromise. In a later statement, Leahy said that he and the other members of the Congressional delegation would not push for any action by Congress on wilderness in the state until there was a serious effort to resolve the disagreements among the parties concerned.

On the same day as the hearing a front page story in the *Rutland Herald* gave the results of a public opinion survey Rep. Jeffords had conducted several months earlier. The poll sampled Vermonters' opinions on the wilderness issue. The *Herald* reported that a majority of people sampled supported the concept of additional wilderness designations in the GMNF.

The Forest Resource Advisory Council (FRAC) is currently attempting to find a way to reach a compromise on the wilderness issue. Hugo John, the chairman of FRAC, has met with both sides and proposed environmental arbitration as a way of resolving the dispute. FRAC is now seeking the services of an environmental mediator.

Commentary

Notes from India

William Eddy, Jr.

It seemed somewhat ironic to me in March of this year, when the temperature of the Northeast Kingdom dropped to 30 below zero and our hay fields lay buried under three feet of snow, to find myself in New Delhi at the beginning of an Indian Summer.

I had been invited by the United States National Park Service to respond to a request from the Indian government for help in establishing various programs in environmental education.

Most of us who are concerned with the environment, work within a cultural context which we so take for granted that seldom, if ever, is it a conscious part of our outlook or approach. As someone said, "Water is the one thing of which a fish is probably unaware." We in our habitual cultural context share a similar limitation of awareness.

I've found that working in other cultures over the past twenty years has provided a refreshing perspective on many things I had taken for granted — and on some I had never thought of before.

Ralph Nader would have a most difficult time in India, as would the Clamshell Alliance, affirmative action groups, and equal rights advocates, to name only a few whose concerns find support in a particular cultural context, yet elsewhere may be meaningless. The logic is there, the relationship between cause and effect, but the result of the process, the reality that is perceived, is very different from ours.

With an area about one-third that of the United States, India has a population of over 600 million people. Even with a modest growth rate of 2%, India adds to its population about one million people every thirty days.

Such statistics taken out of context, and carried by the mass media in this country, form the basis for almost our entire view of India. In our minds India has become a world symbol for human suffering and environmental degradation.

Such an image obviously excludes the incredible richness of India's nearly 6000 years of history. Its contributions to religious thinking, to music, to art, architecture, and political philosophy all are lost for us in a welter of images of poverty and famine, flood, filth, and disease.

Oddly enough, a great many Indians do not seem to share this vision of their country. Perhaps it is because desperation leads to

remarkable inventiveness in attempting to cope with the impossible. In the midst of all its difficulties India maintains one of the most efficient and least expensive railway systems in the world. The same is true of its airlines. And soon, I understand, the Indian government plans to launch its own communication satellite with untold possibilities for shaping public attitudes. Electronic communication cannot feed the people, but it can help to influence attitudes toward food production.

In the large and immaculately maintained public parks and gardens in the cities of India, a gas-powered lawnmower is an unheard of luxury. Instead, heavy reel-type mowers are pulled by the ever-present sacred cows. Behind each mower there is a canvas grass-catcher from which the cow gets a good meal after it has finished mowing.

Despite India's excellent relations with the oil-producing states of the Persian Gulf, gasoline is priced at about \$2.25 per gallon. No one speaks of a conspiracy by the oil companies, and at every stoplight the drivers of motorcycle rickshaws and taxi cabs turn off their engines while waiting for the light to change.

Because cars and motorcycles, as well as fuel, are expensive, every imaginable alternative to the gas engine is used for transportation — bicycles, camels, bullocks, water buffalo, horses, elephants, and donkeys. The bicycle is the only one that doesn't provide an important by-product needed for fuel or fertilizer.

Of particular interest to me was the so-called Chipko movement. (In the Hindi language "Chipko" refers to making a circle of arms around something one wants to protect.) It began in one of the northern states where the cutting of forests for commercial timber had caused severe erosion. A local Indian social worker was able to convince the farmers that the loss of their agricultural soils was the result of poor forestry practices. Village women began to go to the forest daily to join hands around the trees to prevent their being felled. The social worker was jailed by the state government as a troublemaker, but because of his commitment to what he believed, he immediately began a Ghandi-like hunger strike. The Minister of Home Affairs of India's central government was forced to intervene. The cutting was stopped,

the prisoner was released, and overnight, he became a kind of national hero.

Such a movement among illiterate farmers was possible only because the social worker knew enough about the people to translate his knowledge of forests and soils into a locally meaningful idiom.

It becomes clear that any program designed to change attitudes toward the natural environment must be structured by people with an intimate knowledge of the linguistic, social, and even religious environment in which they are working.

Although each statistic that comes from India seems to close still another door to hope, it would be a mistake to simply write India off. I believe the future will prove India's remarkable durability.

In an extremely wealthy country like America we have been encouraged to depend on a long list of financial and social entitlements under the law. We view these "rights" not as a kind of resource that we are privileged to draw upon in time of genuine need, but rather as a birthright we have come to expect. The people of India live under no such illusion. They know too well that nature is not an equal opportunity employer. If they are to survive they must seize every chance available and often what choices they have are only between lesser and greater evils. Yet in many ways they are better prepared than we to cope with such choices. They do not have expectations.

Certainly, the contrast in returning from India makes one more aware of what is special about Vermont. One important difference is that despite the necessities that world events force on all of us, we in Vermont can still exercise considerable choice about our environment. It seems to me, however, that our concern can become dissipated by trying to ensure a kind of cosmetic beauty or by attempting to preserve something as it used to be.

Beauty and preservation should not become ends in themselves. Their primary value is that they are indicators by which we can measure how successful the relationship between people and the land has been. In western cultures many attitudes about beauty and preservation have evolved from what Robert Frost described as the "lovers' quarrel" between humans and their natural environment. The plowed fields, the stone walls, the carefully stacked cords of stove-wood—all are expressions of that relationship.

When I consider Vermont in this context, it seems especially important to stem the rapid economic erosion of our farmlands. An economically healthy agriculture produces naturally in the land a diversity of aesthetic by-products. And to a large extent it is these by-products that make living in Vermont both a privilege and a pleasure.

William Eddy, Jr. is a documentary film maker, author, and lecturer on international environmental affairs and a member of the VNRC Board of Directors.



Photograph by Beryl Eddy

In the large and immaculately maintained public parks and gardens in the cities of India, a gas-powered lawnmower is an unheard of luxury.

Calendar

RURAL LAND CONSERVATION CONFERENCE

OCTOBER 26 - Friday

The conference will focus on non-governmental tools for controlling land use, with particular emphasis on conservation restrictions. The conference begins at 9:00 am and ends at 4:30 pm. It will be held at the Bolton Valley Ski Area. There is a \$20.00 conference fee. For more information write or call: Darby Bradley, VNRC, 26 State St., Montpelier, Vermont 05602. (802) 223-2328.

THE STATE OF FARMLAND IN THE STATE OF VERMONT

OCTOBER 27 - Saturday

This all day symposium will feature discussions on such topics as: taxes, mortgages, subdivisions, capital, interest, and know-how. The meeting will begin at 9:30 am and is scheduled to end at 4:00 pm. The symposium will be held at the Park-McCullough House in North Bennington. For more information, write or call: The Park-McCullough House, North

Bennington, Vermont 05257. (802) 442-2742

SECOND ANNUAL NEW ENGLAND RIVERS CONFERENCE

The New England Rivers Center is sponsoring a two-part conference focusing on the Connecticut River. The conference will address such issues as: small-scale hydro development, water conservation, public access, and other water quality management topics of regional interest.

OCTOBER 27 - Saturday

The *Lower Connecticut River Conference* will be held at Arcadia Sanctuary, Easthampton, Massachusetts.

NOVEMBER 17 - Saturday

The second session, the *Upper Connecticut River Conference*, will be held at Dartmouth College, Hanover, New Hampshire.

An optional river trip is planned for the day after (Sunday) each of the meetings. To register or for more information, please write or call Tom Arnold or Anne Davis, New England Rivers Center, 84 State

Street, Boston, Massachusetts 02109 (617) 742-4134.

CHEMICAL SPRAYING ON RIGHTS-OF-WAY MEETING

OCTOBER 31 - Wednesday

A discussion on the problems of herbicide and pesticide spraying on rights-of-way will be held in Montpelier at the Pavilion Auditorium at 9:00 am. The meeting is scheduled to end at 4:00 pm. The discussion will cover: the risks and benefits of spraying, legal requirements, and restraints. For further information, call or write: David Hafner, Vermont Department of Agriculture, 116 State St., Montpelier, Vermont 05602. (802) 828-2413.

STATEWIDE ENVIRONMENTAL EDUCATION PEOPLE (SWEEP) MEETING

NOVEMBER 9 - Friday

The SWEEP meeting will be held at the Vermont Institute of Natural Science in Woodstock. It will begin at 10:30 am and run until 1:15. Bring your lunch. For more information write or call: Sally Laughlin, VINS, Woodstock, Vermont 05091. (802) 457-2779.

SECRETARY BERGLAND TO VISIT VERMONT

NOVEMBER 27 - Tuesday

Secretary of Agriculture Bergland will be in Montpelier to discuss "The Structure of American Agriculture." Bergland's appearance is part of his tour of America to begin "a full-scale national dialogue" on such issues as: how have farms been affected by technology, the barriers to entering farming, and the social, economic, and cultural implications of federal farm policies. In preparation for these public meetings, the U.S. Department of Agriculture is distributing a series of background papers. Copies may be obtained by writing to: Project Coordinator: Structure of Agriculture, USDA, Washington, D.C. 20250. For information on the time and place of the meeting, please call your local Extension Service office.

UVM'S CHURCH STREET CENTER SCHEDULE

ISLANDS AND THE PUBLIC AGENDA

A series of discussions about the Lake Champlain Islands will be held on three consecutive evenings, from 7:30 pm to 9:30 pm, at the Church Street Center.

OCTOBER 18 - Thursday

Islands in Time and Place will be presented by Dr. H. N. Muller, President of Colby-Sawyer College and a noted Vermont historian; Craig Heindel, a geologist; and

David Capen, a wildlife biologist.

OCTOBER 25 - Thursday

Islands of Inspiration and Experience will be presented by Dr. Robert McGrath, a Dartmouth professor of art history, and David Kaston, an English professor at Dartmouth.

NOVEMBER 1 - Thursday

Islands and the Public Concern will be presented by Peter Teachout, professor at the Vermont Law School.

FUTURE DIRECTIONS FOR VERMONT AGRICULTURE

The Church Street Center is sponsoring a series of exhibits, films, and discussions exploring the changing roles of farmers, farming, and farm policy and their relationship to ownership, production patterns, marketing patterns, and economic scale. Program participants will include Richard Sweterlitsch, UVM folklorist; Canute Vander Meer, UVM geographer; Fred Schmidt, UVM rural sociologist; Tom Daniels, agriculture economist; William Darrow, Vermont Commissioner of Agriculture; and others to be announced.

NOVEMBER 10 to DECEMBER 9

A Smithsonian Site Exhibit, *American Agriculture: A Continuing Revolution*.

NOVEMBER 7 - Wednesday

12:15 pm and 5:30 pm a showing of the film *Last Stand Farmer*.

7:30 pm *Who is the Farmer of the Future?* will be a discussion of the demands and rewards in farming, the problems of passing a farm on to the next generation, and programs and policies which affect the farmer of the future.

NOVEMBER 14 - Wednesday

12:15 pm and 5:30 pm a showing of the film *Our Daily Bread*.

7:30 pm *Who Will Own the Farm of the Future?* will be a discussion of farm ownership and finance and their effect on farming and the community.

NOVEMBER 28 - Wednesday

12:15 pm and 5:30 pm a showing of the film *The Plough That Broke the Plains*.

7:30 pm *What is the Farm of the Future?* will be a discussion of scale, production, marketing, and energy.

DECEMBER 5 - Wednesday

7:30 pm *The Role of the State in the Future of Agriculture* will be a discussion of state and federal level policy choices with attention to current approaches in New York, Massachusetts, and Vermont.

For more information about these meetings, please write or call the Church Street Center, 135 Church Street, Burlington, Vermont 05401 (802) 656-4221.

letterslettersletters

To the Editor:

While such activities as the July 20 Logger's Conference on Erosion Control are commendable efforts toward reducing soil erosion, I believe that the only long-term solution to the problem will be to employ harvesting methods that minimize the initial disturbance of vegetation and soil.

A study of soil erosion in Vermont is a fine idea, but why use up valuable time and money studying a problem we all know exists when the methods and technology are available now to harvest timber in a more environmentally and economically sound manner. What really counts is that soil erosion is reduced, not that we can accurately enumerate the tons of soil washed away.

Convincing demonstrations of new and better harvesting methods would be the most direct approach to reducing soil losses from logging operations.

Sincerely,
E. Gerry Hawkes
Forestry Consultant
Woodstock, Vermont

To the Editor:

I was glad to see in the last VER, that a recycling conference was going to take place. We won't be able to attend because we will be on our fall retreat, but it does speak of the need to face waste that is buried in our landfills. I take our weekly dump trip and I

am embarrassed by, if not guilty of, adding to this shameful waste. Surely some communities have made it work and this because the community was convinced that each of us needs to conserve and to recycle whatever we can.

Let's hope that something practical can be suggested. Possibly one or two communities could experiment for a year and see where kinks come up.

With you all the way.

Sincerely,
Br. Columba
Weston Monastery
Vermont



The Green Mountain Club would like to sell a used Addressograph machine and a used 3M dry copier to another non-profit organization. If interested please call the GMC at 223-3463.

Used Elliott addressing machine. Electrically motivated, foot-pedal operated, this machine is capable of addressing envelopes or other items at the rate of one or two per second. Available with accessories for \$50.00. Write or call VNRC for details for a demonstration. (802) 223-2328

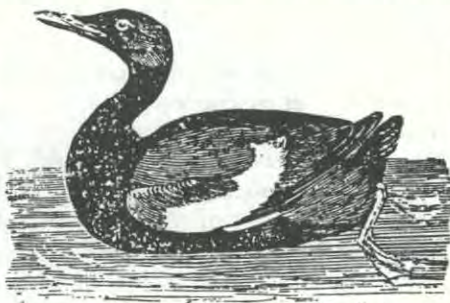
Wetlands Legislation Moves Ahead . . . Cautiously

Betsy Brent

Draining, dredging, and filling in marshes, swamps, bogs, and other wetlands was once considered to be a social good. No longer. The scientific community, and now the general public, are beginning to appreciate the irreplaceable value of wetlands. These natural areas have some remarkable qualities. For example, they act as "natural sponges" for storm and runoff water, which helps abate flooding. Through complex chemical reactions and filtration, wetlands help purify polluted water. They provide critical habitat for plants and animals. Some fish, for example, depend on wetlands for spawning and nutrition; many bird species require them for nesting.

The destruction of this resource costs taxpayers millions of dollars in the construction of man-made structures which do what wetlands do naturally. And although we may be able to control floods and even purify our water mechanically, we cannot replace, at any cost, the unique, complex ecology of a wetland when it is destroyed.

A wetlands bill, H.213, was introduced in the 1979 Vermont General Assembly. The bill proposes that the most significant wetlands in Vermont be designated



and placed under protection. Protection would mean that certain activities, such as dredging, draining, filling-in, etc., would require a permit. Permits for such activities could be acquired through the district level environmental coordinator. The regional environmental office would provide a technical evaluation of the wetland in question. Any appeal based on a district environmental commission decision would go directly to the state Superior Court.

During the last session of the General Assembly, the wetlands bill was reviewed at a joint meeting of the House Natural Resources and Agriculture Committees. At that time, concern was voiced by the Agriculture Committee members that the bill increased government control over farmers' land. In response to the farming community's concern, major amendments were drafted. Farmers may now carry out

activities on wetlands provided they are in compliance with an approved Soil Conservation Service (SCS) plan. Activities not covered under this plan would require a permit. In the hope of further allaying farmers' fears of more government control, the purpose of the bill was reworded. It now reads, "... it is not the intent of the General Assembly to place restrictions on agricultural or forestry practices of a nature which do not diminish the benefits and qualities ascribed to protected wetlands."

Rep. Sam Lloyd, Chairman of the House Natural Resources Committee and a sponsor of H.213, notes that "Education about wetlands is an important key to passage of the bill." This summer, educational efforts began at the legislative level. Bob Wanner, Project Director of VNRC's Wetlands Protection Project, led two legislative study groups which discussed the bill and took field trips to one of the major wetlands in the state, the Sand Bar Refuge. All of the House and Senate committees that were invited to the study sessions had members in attendance on the field trip, except for the House Agriculture Committee.

Rep. Lloyd is hopeful that the bill will pass out of the Natural

Resources Committee this coming legislative session. He has recommended that it then go before the House Agriculture Committee.

Some observers feel that the wetlands bill will meet a difficult test in the House Agriculture Committee. Rep. Alden Ballard believes that the farmers are not opposed to the intent of the bill, but are anxious about the prospect of the government controlling how they use their farmland. Rep. Gloria Conant feels, however, that the added amendments and clarification of the purpose of the bill may help ease the legislation through the Agriculture Committee.

Two states, Minnesota and Michigan, that have considerable agricultural interests, have enacted wetlands protection laws. The most obvious difference between the legislation passed by these states and the Vermont bill, is that Minnesota and Michigan compensate farmers for their compliance with wetlands protection. Rep. Lloyd feels that H.213 may eventually come down to that as well.

Betsy Brent is currently a student at Johnson State College pursuing studies in ecology.

Trust Publishes Islands Portrait

Naval battles are no longer fought here. Steamships and sidewheelers are no longer seen cruising up the lake. No one ever hears of whiskey smugglers taking refuge on some island. Even the sturgeon are gone. But a sense of history, of adventure, and of wildness persists—if only because the Lake Champlain islands have changed so little.

A *Portrait of the Lake Champlain Islands* has been recently published by the Lake Champlain Islands Trust as part of their effort to increase public awareness of this unique natural resource. The *Portrait* draws together the elements which make up the character of the 71 smaller islands. Myth, human and natural history, and a detailed inventory of each island are contained in the striking black and white, 60-page book.

The *Portrait* describes the islands today as a "haven for those who wish to escape the turmoil of the world, a living textbook for student and scientist, and a home to thousands of migrating waterfowl, shore birds, and song birds."

Thirty-five of the islands are private, 16 are publicly owned; the status of 20 islands is not known. "Seasonal dwellings," states the *Portrait*, "are found on less than one-third of the islands. Only two, Butler and Providence, are extensively subdivided." The private islands, according to the

book, have been owned by one owner or family continuously for years, sometimes generations.

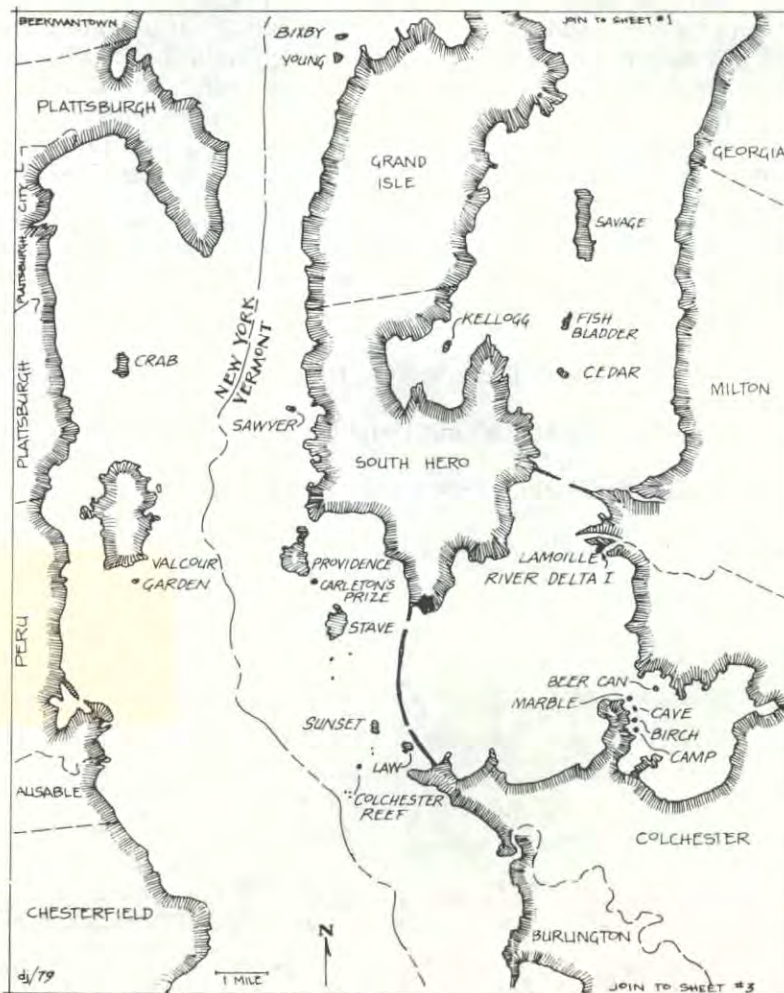
The book warns us, however, that this "stable" ownership pattern may be changing quickly. Skyrocketing land values make it prohibitive for most individuals to purchase an island but make them enticing investments for a developer. An island which may have sold for several thousand dollars in the 1950's is now appraised at \$100,000 or more.

Public and private actions are needed to protect the islands. The *Portrait* outlines some of the approaches that the Lake Champlain Islands Trust is promoting. Voluntary land conservation using "conservation restriction" agreements is one such approach. The agreement is a technical method whereby partial interest in the land may be sold or donated to a conservation organization and recorded like a deed. "This agreement spells out what uses may be made of the property and what uses are excluded." The Trust hopes to "involve island and shoreline owners in a stewardship effort which bridges the gap between public and private interests." For the time being the Trust is choosing to pursue voluntary private actions over public acquisition or legislation.

The last half of the book is the

"Islands Inventory" which identifies the location, ownership, and special characteristics of the islands.

A copy of the *Portrait* is given to new members of the Lake Champlain Islands Trust. Others may purchase it from the Trust for \$3.00. Members may also obtain additional copies for \$2.00. For copies of the publication or more information about the Trust, please write or call: Darby Bradley, Lake Champlain Islands Trust, VNRC, 26 State Street, Montpelier, Vermont 05602. (802) 223-2328.



Interview, cont. from page 1

Q: What about foreign investors buying Vermont farmland?

WD: With foreign investments it all depends on what is too much.

I have a basic mistrust, however, of foreigners owning our land -- maybe because I'm land-oriented. I disagree 100% with the Governor when he says the marketplace is the best place to decide this question. I don't think the marketplace is where decisions about land should be made.

I think we should blow the whistle on foreign ownership of land. Some states have already done this. And the rest of the world is blowing it on us. For example, an American can't own land in Mexico unless a Mexican owns 51%. You saw what happened in the Maritime provinces in the 1950's and the 1960's when a lot of people up there went out of farming. Hoards of Americans went up and bought land. For the first three or four years the Canadians thought it was lovely. Then they found themselves out-numbered and their land owned by people from another country. They blew the whistle on us.

"It has been suggested that foreign investors, eager to capitalize on the appreciation in the value of American farm real estate and take advantage of the political stability of this Nation, frequently pay more than the prevailing market price for land. This could cause further inflation of land prices to levels far beyond the reach of most small family farmers.

Concern has been expressed that control of significant amounts of American farmland by foreign investors could compromise U.S. control over its food production, affecting not only domestic food prices and supply but also international trade.

It also has been charged that non-resident foreign investors, as

absentee owners, will neglect local community activities and responsibilities and might leave the land idle, using it solely as a speculative investment." Committee Report, Foreign Investment in United State Agricultural Land, January 1979. U.S. Senate Committee on Agriculture, Nutrition, and Forestry.

Q: What do you see as the possible effects of foreigners owning large tracts of Vermont land?

WD: I am concerned mostly about the long-term effects. What do these people, who have a lot of money, intend to do with the land they purchase? They obviously want to invest and protect their money. If the best thing to do for the sake of their investment is to develop the land, then they will do it. They have no other ties with the community, the state, or the country.

Furthermore, we fled Europe to get away from renting the land we work, from working for landlords. Why should we let Europeans - or anyone else - come over here and buy up what they want just because they happen to be more prosperous and have a dollar that costs them very little.

"Irrigated land in the West produced one-fourth of the agriculture products in 1974 in the United States." The National Reporter, July 1979, Zero Population Growth.

Q: There is currently a lot of talk about trying to make farming in Vermont more diversified - more vegetables, grains, other kinds of livestock. Is this idea of growing more of our own food really possible? Would it help the farm economy, save farmland from going out of production?

WD: Yes to both of those questions. With the energy situation up for grabs, if there is anytime to try to diversify, it is now. The reason diversification might pay is because it will cost more to get items here in the future. I'm in apples - not dairy - and when I speak of diversification I know exactly what it means. My com-

petition is from Washington and Oregon, where 30 to 40% of the apples are grown. I know that it costs \$2.60 to get a bushel of apples to my backyard. Every-time the cost of energy goes up I am protected a little more. I would argue that that applies to anything we might raise here.

There are a lot of things we can do. Whether or not they will be viable depends on food prices. We are going to be able to do more in Vermont because we're not going to have such damn cheap food hanging over us. The days are over when it is cheap to grow five crops of lettuce and bring it in from Arizona. The handwriting is on the wall for the West - for water and for energy. It costs them so much money to get the water up now, to say nothing of the fact that they are going down so far that there is little water left.

"If their water use grows as expected, most of the Plain and Southwestern states will have inadequate surface water supplies by the year 2000." U.S. Water Resources Council Report, 1978.

Q: How can we save our farmland? What is it going to take?

WD: It will take more support from society than we see today. At some point we must decide what we want. If it is farms and farmland, then we must be prepared to pay for it.

I run hot and cold about farming in this state. Sometimes I'm very enthusiastic about it. Sometimes I get very depressed. I find, for example, that the house bill for a tax that would help the farmer [H.361 the current use tax] passed the General Assembly by a miraculous vote. Fantastic. Everyone in Vermont is behind the farmer. Then you turn around next time to go for appropriations and you get a cold shoulder.

Q: What are some of the specific actions we can take?

WD: Development rights is an interesting concept. It is easy to talk about when you are in southern

Vermont where I live. But in the north in Addison and Franklin counties, I think it is more difficult. The development pressure isn't as great there. Furthermore, any development rights scheme will, of course, have to adequately compensate a farmer for his land . . . that's expensive.

I can also see the merits of the New York state plan of agricultural zoning. That means you don't run water lines, sewers, or anything else that would encourage development. If a farmer is spreading manure and the wind is blowing toward my house, and I find the odor objectionable - tough luck Darrow, it is zoned for farming.

I have collected a lot of material from various states, including from the Province of Saskatchewan. Saskatchewan buys any farm that is on the market and which does not sell. If someone comes in and wants to rent it, for farming, and if the people succeed in farming the land and are in a position to buy the farm, the government will sell it to them.

Q: You have talked about increasing the support for the farming community in Vermont. Can you explain what you mean by this?

WD: It goes back to the 1920's when retired farmers used to be in the legislature. Farmers had a strong voice then. Things have changed. Now the legislature is largely a crowd that has no experience in farming. I think many legislatures are run by young lawyers, pro-industry and pro-development people, and farming is sort of forgotten . . . like a runt pig. People who are not getting their hands dirty are making decisions that affect farmers.

There is also a wide gap between people who live in the town and farming people. You must remember that farmers are only 4% of the population. We must start narrowing that gap and building a broad-based constituency for farming in Vermont.

In this issue:

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- Land Gains Tax - Attacked and Defended, Page 3
- An Argument for Species Preservation, Page 4
- Wetlands Bill Struggles Along, Page 7

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