

Vermont Environmental Report

A Forest Resource Advisory Council Report

FRAC Axes More Harvesting Regulations

A report from the Vermont Forest Resource Advisory Council (FRAC), released in March, recommends that no new environmental protection regulations covering timber harvesting operations be enacted at the present time. The report states, "The general consensus...among the representatives of both the industry and the public who appeared before the committee was that the environmental damage occurring from present harvesting practices is not extensive or serious enough to warrant major government intervention in the form of new regulations."

FRAC's decision to recommend no further controls came after 10 months of review by a three member Resource Management Committee appointed by the Advisory Council. Members of the committee included Chairman Sam Lloyd, Representative from Weston, Leo Laferriere, General Manager of the Ward Lumber Company in Waterbury, and Darby Bradley, staff attorney for the Vermont Natural Resources Council. The committee drew up a list of alternatives for timber harvesting regulations ranging from "no further action" to requiring a permit system for virtually all harvesting operations. The list was sent to over 400 people for review and comment. The committee also met with representatives of forestland owners, environmental groups, and professional foresters. Two public hearings were held in February of this year — one in St. Johnsbury and the other in Rutland.

Sam Lloyd, Chairman of the House Natural Resources Committee and a member of the FRAC committee, explained some of the reasoning behind the recommendations. He said, "With the bottle bill we saw litter along the roadside, with Act 250 we saw large-scale development moving into the state, with the phosphate ban we saw the state's water being polluted. You don't make laws unless you have a good reason. We saw no evidence at this time for further control."

Rather than stricter controls, the FRAC committee chose to emphasize better cooperation, more education and technical assistance, and self-policing by the industry. Additional recommendations pertaining to wood chip-harvesting operations

were also included.

In talking with people about the report, it became apparent that the recommendations were received with varying degrees of approval. Some felt the recommendations fit the current timber harvesting situation in Vermont, others felt the report did not go far enough, yet others saw it only as the bare minimum, a first step. Below is a summary of the major findings and recommendations of the FRAC report and comments from people who are involved and concerned with managing and protecting one of Vermont's most valuable natural resources... its forests.



"As the above recommendations indicate, the members of the committee put considerable faith in the success of educational and direct assistance programs for woodharvesters and landowners alike and in the ability of the industry to engage in successful self-enforcement to minimize the adverse impacts of conventional logging and whole-tree chipping operations."

from the Forest Resource Advisory Council report

Education and technical assistance...

"The word is sometimes more convincing than the badge" is a prevalent theme throughout the report. If people know about sound environmental methods of harvesting timber, most people will use them. Therefore, the report recommends that "statewide educational and technical assistance be expanded."

Some examples of the kind of technical assistance that should be encouraged include: how to put in water-bars, how to build temporary bridges across streams, what to do with a landing site after the job is finished, how to reduce erosion when building a skid road.

Educational efforts have begun already. For the second year in a row, water quality workshops will be held in the state for industry people and private landowners who harvest timber. The workshop will be sponsored by St. Regis Paper Co., UVM Extension Service, the Vermont Timber Truckers and Producers Association, and Agency of Environmental Conservation. One workshop will be held in Stratton on July 20th and the other in Island Pond on August 7th. Erosion control practices for logging jobs will be the focus of the workshops. Speakers will talk about such subjects as: water quality laws, the impact of pollution of fisheries, and basic erosion control practices. An outdoor demonstration will be conducted to show, among other things, how to design and build logging roads and skidways to avoid erosion, and how to reclaim logging landings through mulching and other soil conservation techniques.

Peter Ludwig, a forester with St. Regis Paper Company in the Northeast Kingdom, expressing a personal view of the responsibility the timber industry has to the education and technical assistance efforts, said, "Industry favors the educational approach to solve its problems. But because of fear of regulation, industry shouts that there is no problem, thereby undermining this education approach....This kind of irresponsibility should be called to task."

Enforcing existing law...

FRAC found many people felt that the existing laws need to be more "uniformly and fairly enforced."* John Danielski, Vice-President of the Vermont Timber Truckers and Producers, said, "Many times it is only the guy who is the most visible who gets caught. Other operations—maybe even more poorly run—may never be bothered." The report stresses, "compliance by all in the wood-harvesting business would benefit the entire industry and may forestall the need for additional regulations."

To help obtain uniform compliance with the existing laws, the industry has begun a self-policing effort. The Timber Truckers and Producers Association has formed 3 three-person Complaint Evaluation Committees in the northern, central and

southern regions of the state. In cooperation with Water Resources investigators, members of the committees will visit sites that have received complaints. The industry investigators will



A Nat Frothingham Photograph

evaluate whether or not an operation is in violation of the water quality regulations. If the operation is doing environmental damage to the site, an effort will be made to solve the problem through negotiation and assistance. If the operator of a harvesting site refuses to cooperate or continually violates the regulations, the case will be turned over to the Water Resources investigators for possible prosecution. In commenting about the work of the Committee Danielski said, "People working on a one to one basis with people they know is an effective way to solve problems. Many times it's more effective than a badge."

Not everyone, however, is as optimistic as Danielski about the ability of industry to regulate itself. Dick Brett, businessman and forester in Woodstock, is one such skeptic. In a letter to FRAC, Brett argues, "To pay off, economically expensive machinery must operate continuously because the costs of taxation, insurance, depreciation, and interest on borrowed money go on whether the machine works or not. Consequently, even a well-intentioned operator cannot favor the public good versus his own economic survival."

Then there are those who see no present need, but are concerned about the accelerating pressure on our forest to supply fuel. John Nessel, Water Resources Assistant Planner, feels that the pressures for using wood as fuel will precipitate controls to protect the environment. "If the 50-megawatt wood burning plant goes in at Burlington," Nessel cautions, "we'll be harvesting two-thirds more wood than we are now harvesting."

*Vermont water quality laws are broad enough to correct soil erosion and stream sedimentation caused by poor logging practices. Act 250 covers all logging operations over 2,500 feet elevation.

"The [Advisory] Council firmly believes that the State of Vermont has a crucial responsibility to future generations of Vermonters to ensure the viability of the forest resource in the face of increasing demands for wood and the suggested potential impact of new whole-tree harvesting technology."

from the Forest Resource Advisory Council report

The report indicates that others share Nessel's concern. It states, "Those who felt that Vermont needs or may need to adopt further regulation based their position on the prediction of greatly increased utilization in the future. This prediction is supported by the state's current interest in wood energy and the arrival of the whole-tree chipharvester in Vermont."

In an effort to check on possible environmental damage, the report recommends monitoring of logging operations. The FRAC committee concluded that, "Should these investigations reveal that wood-harvesting operations are in fact having an adverse impact, new control, including limitations on the size of clearcuts, should be considered at that time."

Modest steps are now being taken in this direction. Five new county forester positions were created last year in the Department of Forests, Parks, and Recreation. According to former Commissioner Jim Wilkinson, the Department intends "to adjust the staff so that some monitoring will take place in the northern part of the state at least part of the time."

This increased monitoring effort, plus the new foresters, means more than the state becoming a better "watchdog." It will also mean the collection of objective information about harvesting operations and their environmental impacts.

More research...

The committee found little scientific data on the environmental impacts of logging operations in Vermont. The members had to rely almost entirely on subjective opinion and their own observations. Because of this dearth of objective information, the report calls for "a cooperatively supported research program...be initiated to determine, in a systematic fashion, the nature and extent of the environmental impact of existing harvesting operations in Vermont."

FRAC suggests a report be issued after a two-year study. This report "would serve as a basis for evaluating the impact of these (harvesting) operations and a review of the recommendations here." Although it is not stated in the report, committee members see the nature of the study as a random sampling of operations during all seasons, and in all areas of the state.

The chipharvester...

The wood chipharvester, says the FRAC report, "has made it possible to harvest large quantities of wood fuel at prices which are competitive with oil." Because of the potentially devastating impact this new technology could have on Vermont forests, the FRAC report singles it out for special consideration.

Essentially, the Advisory Council's recommendations for the chipharvesting operations are: the requiring of a license from the Department of Forests, Parks, and Recreation and the distribution of the Department's guidelines. There is no mandatory requirement for operators to follow the guidelines. The

only requirement for retaining a license is filing with the Department a "Notice of Intent to Harvest" prior to beginning operations.

An integral part of FRAC's position on the chipharvesting operations is inspection of the site by state foresters, "to observe the effects of the operation on the timber, water, wildlife, and soil resources." A report from the forester would then be submitted to the Department and to FRAC. Again this recommendation is a reflection of FRAC's desire, as one member put it, "to make laws on the basis of real—not imagined—problems."

The task begins...

Almost all of the actions FRAC recommends in this report will cost money. But the report says the investment of public funds will yield valuable socio-economic benefits. The Advisory Council urges the state "to ensure the viability of the forest resource in the face of increasing demands for wood and the suggested potential impact of the new whole-tree harvesting technology."

FRAC's work has not come to an end with the issuing of this report. Hugo John, Chairman of FRAC and head of the UVM School of Natural Resources, sees the report as only a small part of the Council's mandate. "FRAC must continue," said John, "to monitor harvesting activities. And we must always be asking ourselves if more regulation is necessary." The report is clearly a beginning to looking at the environmental impact of harvesting timber in Vermont.

It is also a lever of sorts. Sam Lloyd observed the broad implications of the report in this way. "Our hope is that the state can cooperate with the private sector in a mutually beneficial way. But the report also holds a club over industry, and says, 'OK, you can police yourself and remove the necessity for more regulation, but if you fail in this duty, we will be ready to enact stronger regulations.'"



A Nat Frothingham Photograph

Hazardous Waste Costs

From *Conservation News*, a National Wildlife Federation publication

An Environmental Protection Agency report places the preliminary costs for cleaning up hazardous waste sites in the U.S. as high as \$4 billion. The staggering estimates are, at best, initial figures based on admittedly scanty information. The report is a result of requests to EPA from the federal Office of Management and Budget. OMB officials are worried about the costs the federal government may have to bear to clean up chemical dumps. The U.S. Congress, under pressure from states and localities, is also extremely interested in the highly political question: "Who pays for cleaning up hazardous wastes?"

The latest study, prepared by Fred Hart & Associates, under contract to EPA, estimates the costs of public health and the environment, the engineering studies required to identify remedial measures, and the remedies themselves. Twenty-four hazardous waste sites were selected as "representative." For four weeks these cases were investigated. Government files were researched and, in some cases, sites were visited. The most prevalent type of facility was a pond or landfill holding organic and inorganic wastes. The most common problems was contamination of surface or groundwater. Two levels of costs were computed. One level was for emergency, minimum corrections to prevent the situation from becoming worse. The other level was for the ultimate, proper disposal. These costs estimates were then applied to the total 1,200 to 2,000 sites "known and suspected" of hazardous waste problems that might require special government funding to clean them up.

For the Level I, emergency cleanup, an average cost of \$3.6 million per site was computed. For the Level II approach,

proper disposal, an average cost of \$25.9 million per site was applied. Depending on how many sites are considered in need of cleanup, the costs range between \$3.6 to \$6.1 billion for minimum treatment and \$26 to \$44 billion for the more adequate remedy. None of the estimates, however, included compensation for property damage, economic losses, or personal injury. Also excluded from the calculations was cleanup costs for radioactive waste sites.

EPA's Assistant Administrator for Water and Waste Management, Thomas Jorling, said that while these are the best estimates at this time, they are very "rough." They do, however, provide a "reasonable order of magnitude estimate of the minimum costs" the nation faces in correcting past mismanagement of hazardous wastes.

Although the report is punctuated with qualifications and discussions of the uncertainties surrounding the figures, the issue of who is liable for the cost of cleanup is clearly recognized. Many sites have been abandoned or the owner is not financially capable of paying the cleanup bill. In such cases, some level of government must foot the bill.

Preliminary as they are, the figures indicate one outstanding point — after-the-fact remedies multiply the cleanup costs dramatically. For example, EPA officials calculated that the Love Canal site in Niagara Falls, New York, could have been properly managed for \$4 million. Now, with no accounting for third-party costs, the bill has run up to \$50 million. Likewise, proper disposal of PCB's that were dumped along a roadside in North Carolina would have cost \$100,000, but now the state faces a cost of millions to acceptably dispose of the contaminated soil.

Attention H.361 Meetings Could Lower Your Taxes

On the basis of a new state law, H.361, if you are keeping your land in agriculture or managed forest production you may qualify for a "use-value" assessment which could lower your property tax bill next year.

The Extension Service is holding a series of information meetings around the state this summer to acquaint landowners, listers, town officials, etc. with the law and draft regulations. The first formal hearing on the regulations will be held in September. People wanting to enter into the program for the next tax year must sign up before **February 1**.

For more information attend one of the meetings listed below:

<u>County</u>	<u>Date</u>	<u>Location</u>	<u>Time</u>
Addison	August 22	Middlebury Union High School Auditorium	8:00 p.m.
Bennington	August 29	St. Margaret Mary's Parish Hall, Arlington	7:00 p.m.
Caledonia	July 25	St. Johnsbury, Ext. Office, Hospital Drive	7:00 p.m.
Chittenden	August 28	Essex Jct., Educational Center Auditorium	7:30 p.m.
Essex	July 24	Island Pond Town Hall	7:00 p.m.
Franklin	August 13	Enosburg Falls Opera House	8:00 p.m.
Grand Isle	August 15	North Hero Elementary School	7:30 p.m.
Lamoille	August 6	Morrisville, Charlmont Restaurant	8:00 p.m.
Orange	August 14	Randolph Ctr. Vt. Tech. College (Conant Hall)	7:00 p.m.
Orleans	August 8	Orleans Municipal Auditorium	8:00 p.m.
Rutland	August 6	Rutland Ext. Office, Rt. 4, Center Rutland	7:00 p.m.
Washington	August 20	Montpelier, Union 32 Auditorium, Gallison Hill	8:00 p.m.
Windham	August 23	Battleboro Brooks Memorial Library, Main St.	7:00 p.m.
	August 25	Townshend Town Hall	1:00 p.m.
Windsor	August 21	Woodstock Historical Soc. Bldg., Elm St.	7:00 p.m.
	August 22	Springfield, Riverside Jr. High School, Rt. 11	7:00 p.m.

Frome Leaves VNRC But Sewage Project Flows On

Michele Frome came to VNRC in May 1977 to direct a project on sewage treatment alternatives for the Vermont 208 Planning Program. Since that time, she has firmly established VNRC's expertise in sewage treatment planning for rural areas.

As Director of VNRC's Sewage Planning Project, she conducted projects in cooperation with the Agency of Environmental Conservation, the State Department of Health, and the Conservation Foundation of Washington D.C. With vision and indefatigable energy, Michele learned about the regulations and technologies in the field. She played an active and influential role in state government decision-making and in efforts to increase local education and assistance. She also procured funding to initiate new projects. Known as the Sewage Lady, Michele took her work to leach fields throughout Vermont—giving the Council a truly new dimension to its grass roots environmental concern.

Michele leaves her position at VNRC this summer to go on to graduate work at Harvard's Kennedy School of Government. We will miss her, but her work will continue. We want to express our appreciation for her contribution to VNRC and to Vermont.

In the following article Michele relates some of the insights and experiences she has had during the past two years and traces the development of the Sewage Planning Project.



I read recently, "If you eat, you have sewage." Sewage is an unavoidable part of our lives. It affects our homes, our health, our finances, our recreation, our government. But, as with many issues, people don't pay much attention to sewage until it hits home—either in their pocketbook or in their backyards.

For many people in Vermont today, sewage is now hitting home. Sewage is surfacing in our backyards and polluting our drinking

water. And sewage treatment is increasing our local taxes and the price of building our new homes.

Sewage treatment is also of major national concern. The present federal sewage treatment program has been called the largest public works program in the nation's history. We have, in fact, spent more money constructing sewage treatment facilities than we have building the interstate highway system.

Why is VNRC interested in sewage? We are concerned about the need for sewage treatment to protect water quality and public health. And, we are even more concerned about the effects of sewage treatment decisions on land use and community development. Like highways, sewers can have a dramatic influence on where growth occurs and how land uses change. Rapid residential growth has followed the construction of sewers in suburban areas surrounding our cities. VNRC is concerned that the same kind of growth could occur in Vermont.

The VNRC Sewage Planning Project. . .

Because of our concerns about sewage treatment and land use, the Council established the VNRC Sewage Planning Project.

The Project has two purposes. The first is to help communities and people find environmentally sound and affordable solutions to their present sewage problems. The second is to promote long-range planning to prevent future sewage problems.

The Sewage Planning Project has focused on areas in Vermont that are unsewered—that is, areas that are not served by sewers and a community sewage treatment plant. Over half of the people in Vermont live in unsewered areas. Instead of public sewers, they must use "on-site systems." For the most part, this means using conventional septic systems.

Vermont is a tough place to use on-site sewage systems. According to the Water Resources Department, fully 80% of the land in Vermont is *not* suitable for septic systems under the present state regulations. Why? Because the land is on steep slopes, the soil is too heavy and tight to absorb water, the groundwater table is high, and the soil is too shallow.

Many of Vermont's unsewered areas have serious sewage problems right now. Households in one northwestern Vermont village are dumping their sewage into drainage ditches because their soils are tight and their groundwater table is high. A southeastern village has 25 households polluting a river because their tiny lots are right on the edge of a steep bank. A growing town in Chittenden County has two housing developments and a trailer park on tracts where there is simply no place for the sewage to go. In at least one central Vermont town, the sewage from the downtown still flows through a public sewer straight into the river.

Some twenty-two towns are now involved in the federal construction grants program. This program provides state and federal funds to pay for part of the costs of planning and building sewage treatment facilities to clean-up existing water pollution. But what about the rest of Vermont's unsewered towns? Many of these towns don't have water pollution problems now, but are likely to in the future if they don't plan ahead.

Through the VNRC Sewage Planning Project, I tried to help people ask the right questions: How can our planning commission revise the town plan to ensure that future growth can rely

Our committee was formed as a result of many questions concerning the proposed sewage treatment for our small town....Our early meetings consisted of gathering with the engineers and asking many questions....We went over the same things so many times and had a difficult time actually doing anything constructive.

Along the way, we heard about Michele Frome and asked her to come talk to us. Michele knows and understands the problems we are struggling with....Before she came, we were essentially being guided by the engineers. After she came, I felt we understood our position far better and were able to take the situation more into our own hands.... She gave us a whole new approach. Marion W. McChesney, Chairman, Pawlet Sewage Committee

on on-site systems? What will building a sewage treatment plant do to land uses in our village? How can we involve people with different points of view on community development in our sewage treatment planning? How can we stop polluting our stream without building an energy-intensive treatment plant that our village may not need nor want? The questions are not just technical; they are also economic, political and social.

In raising such questions, I worked with people on many levels—in federal agencies, state offices, local governments, and communities.

On the federal level, I made an effort to have Vermont's local needs considered in sewage treatment laws and regulations. In July 1977, for example, U.S. Senator Stafford held a public hearing in Burlington on changes to the Federal Water Pollution Control Act. I testified at that hearing and enlisted others to testify. We complained that the federal program was forcing some small towns to build large, expensive treatment plants, which then compelled them to promote new development to help pay the costs. We suggested that individual septic systems should be eligible for federal funding. Thanks to Senator Stafford's leadership on the Senate Public Works Committee, many of our recommendations were included in the Clean Water Act passed by Congress in late 1977.

Passing a new federal law is only the beginning—how the law is carried out is what really counts. As far as the sewage treatment construction grants program is concerned, it is actually the state Agency of Environmental Conservation that administers the program in Vermont. In my experience, most of the key decisions are made at this level.

The recent decision on the Brattleboro sewage treatment plant is a good example. In May, Agency of Environmental Conservation officials announced that because Brattleboro's construction bids exceeded cost estimates by \$5 million, they might postpone funding of as many as twenty-one other sewage treatment projects in order to fund this one plant.

I dug into the files and found a great deal of evidence to suggest that the Brattleboro project was over-designed, and that the town's problems might be solved for much less money. I documented this view at a public meeting. Following the meeting, the Agency made a tentative decision not to fund the increased costs of the Brattleboro project.

Federal and state government issues can be intriguing, but the real action on sewage treatment doesn't happen in Washington or Montpelier—it happens in the towns and villages. The final decisions are made by local leaders, voters, and homeowners.

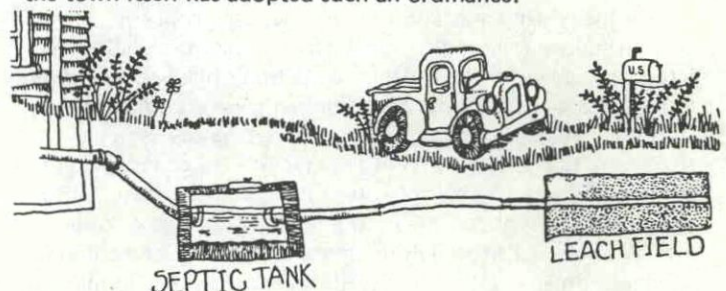
I tried to help out town leaders in a few of the towns that are struggling with tough decisions as part of the construction grants program. Pawlet is one example.

Both Pawlet village and West Pawlet have water pollution

from raw sewage going directly into rivers. The town of Pawlet has been studying the problem for over ten years. Continual delays and changes in regulations have frustrated their search for a solution. The town selectmen made a smart move when they appointed a Sewage Committee to work with their consulting engineer. The Committee, however, didn't have a clear idea of their options. I told them about the new provisions for federal funding of individual and alternative systems. I helped them get a second opinion on the ability of their soils to support on-site systems. As a result, the Committee took better charge of their own project, instead of "leaving it to the experts."

In the last six months of my work at VNRC, I shifted the main focus of the Sewage Planning Project from the construction grants program to the unsewered towns that are not working with grants. Many of these towns would like to avoid the need for expensive sewage treatment plants that could alter the size and character of their communities. To prevent this, town officials must ensure that private septic systems are properly located, designed, installed, and maintained.

Local health officers are as close to the problems of septic systems as anyone because they are responsible for preventing and correcting public health hazards. To help health officers deal with septic systems, I ran a series of workshops around the state this spring. I found enthusiastic audiences everywhere I went, from Bellows Falls to Lyndonville. At the workshops people learned how septic systems work, how they fail, and how to correct them. They also learned how to prevent septic system failures by adopting and enforcing a local health ordinance. Many people were surprised to learn that nobody regulates septic systems built for private homes in Vermont unless the town itself has adopted such an ordinance.



Where does VNRC go from here? I see four top priorities for the Sewage Planning Project. The first is to continue to help towns with planning and prevention of sewage treatment problems in unsewered areas. The second is to inform homeowners about septic systems and other sewage treatment options. The third is to study the actual land use impacts of sewage treatment plants in small towns and rural areas. And the fourth is to help people learn more about the other end of the pipe: we need to know more about where our drinking water comes from, how to keep it safe, and how to conserve it.

Annual Meeting Set for September 8

Farms, Fish, and Photos

"I've always thought of annual meetings as sleepy, in-house affairs, punctuated by organizational politics, inconsequential elections, and an occasional policy dispute. If you were lucky, they gave you a glass of cheap wine and a wedge of teflon-tasting cheese to remember it by.

That was before I got involved with VNRC. Last year at the annual meeting, I went on a canoe trip to spot migrating shore-birds, feasted at the Basin Harbor Club, got involved in the business meeting, and took part in a lively discussion about Vermont's energy outlook."

This year we think the agenda for the Annual Meeting looks just as promising. We hope you will be able to join us. Here is how the day is shaping up.

In the morning there are a variety of field trips scheduled:

Leave Nothing But Footprints: The Appalachian Trail Rediscovered -- an historical and botanical expedition around Kent's Pond, Sherburne.

Atop the Silo: A View of Vermont Farming Today -- two visits to typical Vermont farms in the Woodstock area to talk with farmers and see first-hand the issues facing agriculture.

Meanwhile Upstream at the Bethel Fish Hatchery -- a tour and discussion of what Bethel's unnatural habitat has in store annually for the 3/4 million Atlantic salmon that will pass through its tanks in the 1980's.

Take Nothing But Pictures: Outdoor Photography Workshop -- a demonstration and practical session at the Vermont Institute of Natural Science Nature Center for lenspeople who want to better their technique and composition.

A Mystery Fifth Field Trip -- to be announced, watch the August VER for details.



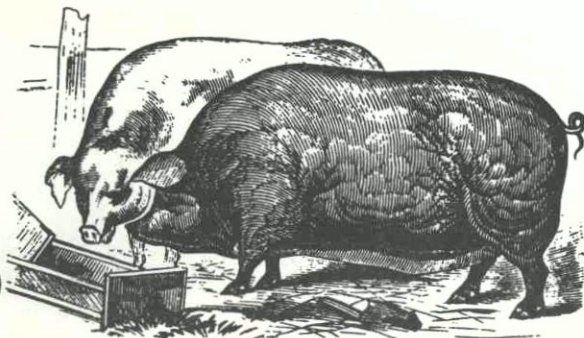
At 11:45 we'll meet back at the Kedron Valley Inn, in South Woodstock for a home-cooked buffet and get-together. Picnicking on the grounds, and a dip in Paul Kendall's pond are available also. After lunch, we'll adjourn to the near-by Vermont Institute of Natural Sciences meeting barn for a short business session followed by a panel discussion.

Agriculture Secretary William Darrow will be the keynote speaker as we examine "The Vermont Farm: An Endangered Species?" Other panelists include Robert Kinsey, Craftsbury dairy farmer and member of the Vermont House of Representatives Agriculture Committee; Deacy Leonard, Executive Secretary of the Vermont Farm Bureau; Mark Lapping, Director of UVM's Environmental Studies Program and Chairman of VNRC's Board of Directors.

Following short presentations by each of the panelists, the discussion will be open to the members. The topic is particularly pertinent this year as VNRC begins its examination of ways in which we can help save Vermont's vanishing farmland.

Nominations

Nominations of candidates for election to the VNRC Board of Directors must be received at the VNRC office, 25 State Street, Montpelier, 05602 no later than **JULY 15**. Nominations should include a short biographical sketch and a brief statement from the candidate saying why that person wants to serve. The names of nominees and their statements will appear in the August issue of the VER. An invitation to attend the Annual Meeting, together with an agenda, details about field trips, maps and reservation forms will be mailed to all VNRC members about August 1.



From Vermont Public Interest Research Group

Trouble on the Right-of-Way

by David White

Spraying season is here, and not just for farmers. Each year thousands of acres of utility and railroad rights-of-way are sprayed with a variety of herbicides. And unlike the back forty that might be treated by a neighboring farmer, these rights-of-way pass closely by the homes of many Vermonters.

This summer the Vermont Electric Cooperative, Citizens Utility Company, Central Vermont Public Service Company, the New England Power Company, and almost all of the railroads in the state will treat their rights-of-way. All except the Central Vermont Railroad plan to use a particularly toxic compound, 2,4-D, along with other herbicides. Where rights-of-way pass through towns or near homes, the health of residents may be endangered by drift and volatilization (evaporation) of spray, and by contamination of water supplies.

Rights-of-way are treated in different ways. Railroads use broad-spectrum herbicides to kill all weeds in the gravel area of the track (the ballast), and occasionally spray vegetation along the shoulders of the track. Along powerlines, operators with backpack sprayers are more selective, and spray only offending trees—those that would threaten the lines if they were allowed to grow. Occasionally a powerline is sprayed by helicopter, thus increasing the problems of spray drift.

Of the chemicals used, 2,4-D has earned the greatest disfavor among environmentalists. 2,4-D, a chlorophenoxy herbicide, gained notoriety as an active ingredient along with 2,4,5-T in Agent Orange, the defoliant used in Viet Nam. (The EPA suspended most uses of 2,4,5-T in February 1979 after the chemical was linked to miscarriages.) Research has shown 2,4-D to be toxic in many ways. The FDA reports that 2,4-D is a carcinogen in rats; a study by the Bionetics Research Laboratory demonstrated that 2,4-D caused birth defects in animals; field reports have linked chlorophenoxy herbicides with miscarriage and lowered resistance to disease in humans; and studies indicate that 2,4-D may be a mutagen (i.e. it may break chromosomes in living tissues).

Other chemicals used to kill vegetation are less notorious, but one EPA report called diuron a carcinogen and it appears that atrazine may enhance the formation of carcinogenic compounds in plants. The other chemicals to be used this summer are tebuthiuron, dicamba, diquat, glyphosate, picloram, 2,4-DP, and possibly hexazinone.

The chemicals exhibit a wide variety of activity in the soil, from relatively immobile (diuron) to highly mobile (2,4-D), and persistent (picloram) to short lived (glyphosate). 2,4-D has been known to persist in surface waters for several months, and in lake sediments for even longer. One study in Colorado found 2,4-D in well water seven years after spraying.

Before spraying, companies must apply for a permit from the Department of Agriculture. Members of the Vermont Pesticide Advisory Council review the applications, make recommendations to the Commissioner, and either approve or disapprove of the applications. Permits are prepared by the Plant Industry Division and are approved by the Commissioner.

While permits carry stipulations to protect public water supplies and to minimize spray drift, permits approved earlier this year fail to adequately protect people living along rights-of-way. After prompting by VPIRG, Agriculture Commissioner William Darrow agreed to amend the permits by adding a 100 foot buffer strip for homes close to rights-of-way, and by prohibiting spraying in areas marked by residents. But, despite the recommendations of VPIRG and the Department of Health, spray permits still do not require personal notification of each resident and as a result individual water supplies are not adequately protected from the spray.

VPIRG will continue to press for reform of right-of-way spraying this summer. Most importantly, individual notification of affected residents must become a requirement for any spray operation. Utilities and railroads should be required to supply residents with appropriate markers to delineate areas not to be sprayed.

Furthermore, it should become the policy of the utilities and railroads to minimize the use of chemicals along rights-of-way. The state should actively promote vegetation management techniques, which would reduce the need for chemicals, and require manual treatment by utilities in populated areas.

If a right-of-way passes by your home, you may find out if the utility or railroad plans to treat it this year by calling their office. You should ask to make an alternative agreement, and clearly mark areas you do not want to be sprayed.

If you observe a right-of-way being sprayed: check to see if the spray is drifting, if spray is entering any water systems (a ten foot buffer strip is required), or if any spray is coming closer than 100 feet to a well or home. Report any problems in writing to the Agriculture Department or to the Vermont Public Interest Research Group, 26 State St., Montpelier, Vermont.

An informed and outspoken citizenry is key to promoting safer rights-of-way management techniques. Address your concerns to Commissioner Darrow in the Agriculture Department (Montpelier, Vermont 05602). The Commissioner welcomes your comments and is sensitive to your opinions.



David White is Co-Assistant Director of the Vermont Public Interest Research Group. He is currently researching hazardous wastes in Vermont and is the author of "Dioxins", a report published by VPIRG.