# VERMONT ENVIRONMENTAL REPORT

Published monthly by The Vermont Natural Resources Council, a non-profit citizens' conservation organization supported by membership dues and contributions. 26 state street, Montpelier, Vermont 05602 [802] 223-2328 Chairman, David R. Marvin Executive Director, Seward Weber, Editor, Nathaniel Frothingham

FEBRUARY, 1976 --- NUMBER 48

# James Griffin & Scott Skinner discuss: Nuclear Power in Vermont

#### JAMES GRIFFIN:

James Griffin is President of the Central Vermont Public Service Corporation. He is also President of the Vermont Yankee Nuclear Power Corporation, the corporate owner of Vermont's only nuclear power plant in Vernon. Griffin has been a leading utility spokesman for nuclear power in Vermont.

#### SCOTT SKINNER:

Scott Skinner was Director of the Vermont Public Interest Research Group from 1972 until 1975. He played a leading role in the fight to require legislative approval of further nuclear plant construction in Vermont. He worked in the New England region on energy-related matters for Ralph Nader. He has been a consistent opponent of nuclear power.

#### INTRODUCTION:

No region in the United States is more vulnerable to the continuing crisis of energy than New England. No-one needs to tell us of Vermont's special geographic place in the New England Region, nor does anyone have to remind us that Vermont is particularly exposed, being at the end of the line for ever-more-scarce and ever-more-expensive supplies of imported petroleum.

Fully over 70% of Vermont's total energy needs are today supplied by oil. 75% of that oil is imported.

As Forrest Orr, Director of the State Energy Office, has pointed out, our dependence on oil in the near future will continue. This will happen, not because we'want it to, but because it takes at least eight years to bring on any of the available alternative fuels.

Essentially what we are looking at today is the need to make a decision on the kind of energy that we in Vermont will use eight or ten years hence. It cannot be oil. Not even the opening of the Alaskan pipeline will help. As Forrest Orr again points out, the peak of our domestic oil production has already been reached and these supplies are declining.

In the circumstances, we have some choices to consider. Should we choose coal? Should we seek to buy power from Canada? Should we choose to rely on nuclear power? Should we attempt to develop new alternative sources of energy? Should we inaugurate a tough program of energy conservation? These are difficult and timely decisions.

On January 23rd, VER Editor, Nat Frothingham, moderated a taped discussion in Rutland on the subject of nuclear power. Participants in that discussion were James Griffin and Scott Skinner, two men who have been deeply involved in the consideration of Vermont's energy future.

What follows here is the first of a two-part series taken directly from the edited transcript of that discussion. In "PART ONE" of this series, Griffin and Skinner debate the "ECONOMICS OF NUCLEAR POWER." In "PART TWO" of this series which will appear in the March VER, Griffin and Skinner will discuss some of the safety questions that have been raised about nuclear power.

(During the course of these discussions, James Griffin indicated that a decision to build a second nuclear power plant in Vermont is now being actively discussed.)

# The Cost of Nuclear Power

Nat Frothingham: Can we talk about the cost of nuclear power? I have read articles in FORBES MAGAZINE, in BUSINESS WEEK, in the NEW YORK TIMES, addressing these questions: "Is nuclear power competitive with coal?" "Is the cost of building a nuclear facility increasing?" "What about the cost of uranium?" "What about the kinds of controls that the Nuclear Regulatory Commission is insisting upon?" "Are there alternatives?" Scott, could you speak to these questions?

Scott Skinner: Well, I think the economics of nuclear power are looking very, very bad. And there are a number of reasons for this. Every stage of the fuel cycle, --purchase of the uranium, fuel enrichment, plant operation, re-processing, storage--, is experiencing increased costs. The most significant single cost of a nuclear plant is plant construction. And construction costs have been rising at a faster rate for nuclear power plants, than they have for say, coal power plants, (31% a year for nuclear as opposed to 13% a year for coal over the period from 1969 to 1975.)

People who have studied this in great detail like Prof. Irving C. Bupp at the Harvard Business School say they see the costs of building nuclear power plants climbing at alarming rates and they can't predict where it will stop. This means that nuclear power, once expected to be an enormous bargain, is in real economic trouble, inspite of enormous federal subsidies.

Nat Frothingham: Is nuclear power competitive in New England?

Scott Skinner: Well, Prof. Bupp says you can at least make the case for it here. But my point is that you can make a case because any form of power is going to be more expensive in New England. That's why I'm so big on pushing energy conservation wherever possible. But the basic economic argument is that nuclear power has lost its advantage over coal primarily through the large capital cost and also because there is some question about the efficiency of nuclear plants. In other words, do they operate at their intended efficiency? We're accumulating

more data on this every year but overall the nuclear plants have only operated at about 54 or 55% of their capacity. These figures will vary tremendously between individual plants. Vermont Yankee had a very good year in 1975 and was one of the more efficient plants in the country. But will it continue? In terms of our economic situation here in Vermont I hope so, but whether that efficiency will continue, I can't say.

Nat Frothingham: Good. Jim, would you like to comment here?

Jim Griffin: I'd love to. I disagree very strongly with Scott that the economics of nuclear power are bad. I do, however, have to agree with him that there are increasing costs in just about every stage of the cycle in the operation of a nuclear plant. However, I would like to point out that these increasing costs are also associated with oil and coal plants. Here in New England we have studied the performance of four nuclear plants, and we have studied the performance of five fossil plants for 23 months ending November 30, 1975. The nuclear plants have been producing electricity at an average cost per kilowatt of 1.3 cents. The fossil plants, on the other hand, have been producing electricity at an average cost of 2.5 cents per kilowatt-hour. almost a doubling. Scott mentioned that Vermont Yankee did quite well in 1975; it did do extremely well during that year. Our average cost per kilowatt-hour was 1.6 cents during a year when we had an excellent reliability factor. Our capacity factor was up something in the vicinity of 80%. The four nuclear plants that we studied had an overall reliability level of 69%, compared to 58% for the fossil plants. So I'm quite bullish about nuclear power for the immediate future here in New England.

Scott Skinner: Let me follow up on this though. First of all a question for Jim. These fossil plants,--- were they coal or oil, or both?

Jim Griffin: I don't know, Scott. Maybe Larry Keyes can answer.

Larry Keyes: (Larry Keyes is Public Information Director for Central Vermont Public Service

### nuclear power...

Corp., and was present at the taped discussion)
As I recall the names of the plants, three out
of the five were oil; and two were coal.

Scott Skinner: See, here's my point. We've got to be very clear in this economic discussion that what we're talking about in terms of cost is what will the cost of FUTURE power be. And any talk about oil distorts the thing because everyone agrees that oil simply cannot be burned to produce electricity. It's just too rare and the price has skyrocketed. So therefore any figures comparing the "nukes" with oil is only knocking down a straw man. I would almost expect that the oil plants would have been even higher than 2.5 cents per kilowatt-hour that Jim mentioned. Oil distorts the picture; the question is, "What will nukes cost in the future versus coal?" Or, "What will nukes cost in the future versus some other means of producing power, or saving power?"

Nat Frothingham: Would you like to get back on that one, Jim?

Jim Griffin: Yes. I don't disagree with Scott when we say that the nukes in this study were 1.3 cents and the fossil plants were 2.5. That does put together a mixture of oil and coal plants. However, the point that it does prove is that with that mix, nuclear power is less expensive. One of the big factors that we have with coal-burning plants is the removal of SO2, the scrubbers that are currently being studied and devised by the environmental people. And it's my belief that we will be able to perfect this type of a piece of apparatus to make the burning of coal environmentally-safe. However, in perfecting it, it's going to add, I believe, somewhat to the cost of the capacity of these plants. It's somewhat like the added costs that Vermont Yankee had when we put in the cooling towers and the advanced off-gas holding system. We got a beautiful plant; it's clean; it operates very well; and to make coal good we're going to have to put in scrubbers to protect the environment.

Scott Skinner: Incidentally though, the figures that I'm using in terms of coal, include the cost of scrubbing equipment. And it's a heavy cost, but these costs are factored in. The Atomic Energy Commission a year ago in January put out a study indicating that nuclear had an advantage over coal of about ½ cent per kilowatt-hour for the future. They said that coal would cost 28.9 mills per kilowatt-hour and nuclear power would cost 22.6 mills. Well, they assumed in that study that nuclear plants would operate at

75% capacity at a cost of \$680 per kilowatt to construct. Now already the plant that Jim (Griffin) may feel it is necessary to build in the 1980's is going to cost well over \$1000 per kilowatt to construct and that skews that figure somewhat. And if a new plant doesn't operate at 75% capacity that changes the figure even further. So what I'm saying is that these studies depend on certain assumptions coming true, and that right now the cost of building the plants has gone up so much that the nuclear cost advantage has disappeared.

# 'I think the economic factor is going to be the determining one.'

Nat Frothingham: OK. I'd like to interrupt here a bit. I'd like to inject into this discussion the whole question of subsidies. To what extent does the government subsidy influence the cost of nuclear power? Would you care to address this question, Jim?

Jim Griffin: I'd love to do that, but let me go back to the other point that Scott was talking about. I think when we get down to what will the next plant be for Vermont, it's going to be very heavily weighed on the economic factors. If we could prove that a coal plant, by the time we transport all the coal here to Vermont, would be less expensive than a nuclear, I'd have no hesitation about going that route. I think the economic factor is going to be the determining one.

But going into the subsidy area. Some people have commented that the so-called 'Price-Anderson' insurance protection act is a subsidy to the electric utility industry. And I say: "No problem. I won't argue that it is a subsidy. Sure." But I think when we're talking of subsidies to one form of energy we should also consider the subsidies that other forms of energy are receiving. And I see nothing wrong with what the government is doing here. But again it should be brought out. That in the case of the use of coal

### nuclear power...

there's a disease known as the 'Black Lung Disease' and the federal government in 1972 made payments to miners and to their dependents of something in excess of \$500 million. In 1974 this payment went up to something in excess of a billion dollars, and we understand that in 1975 it went up quite a bit more than the billion dollar level. So I think that everything that we do today; every activity that we are engaged in, receives some type of a federal government subsidy. If we're going to mention one; I think we should mention all of them.

Nat Frothingham: Good. Scott, would you like to get back on this subsidy question.

Scott Skinner: Yes. Nuclear power has been heavily subsidized by the government, and more than subsidized, it was of course the government's creation, the government having taken on all the initial development. I've heard dollar figures thrown around that suggest that something like \$29 billion has been put into the development of the nuclear industry by the government. These subsidies continue, and it had been hoped that by this time the industry would be free of subsidies and operating on its own. Subsidies exist in terms of the enrichment which is controlled by the federal government now. There's now an attempt by the federal government to turn this over to private industry.

And private industry is demanding federal guarantees of something like \$8 billion in order to do this. There are subsidies in terms of waste storage. And how do you calculate the cost of storing something essentially forever? How can that be calculated in meaningful terms? I agree totally with Jim that the costs of coal should not necessarily be subsidized; that the price of any energy product should include all the costs, including the social costs, of the use of that energy.

Nat Frothingham: Can we get that cost? That's the question I want to lodge. Do the predictions and calculations of Prof. Bupp and other people, do they include the social costs of nuclear power, do they include the social costs of Black Lung Disease?

Scott Skinner: No, I don't think they do and I think we've got to start evaluating the social costs of all forms of power. I think we've got to consider the social costs of what I regard as our overuse of energy. Up to a certain point energy use is a social benefit. But there may come a point, and the best example of this is the automobile, when increased use is no longer a social benefit, but imposes enormous social costs on society. And the final thing I want to mention on this line is that there has essentially been no subsidy for energy conservation.

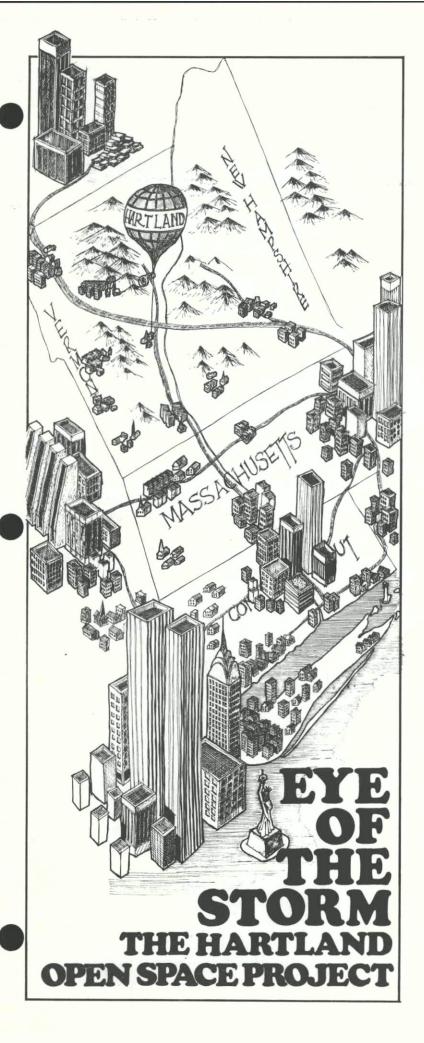
# 1976 GENERAL ASSEMBLY REPORT ON ENVIRONMENTAL BILLS

What follows is a report on the status of selected environmental bills, as of February 1st, 1976

H. 134 (Hoyt) Rep. Norris Hoyt's bill to create more equitable taxation for owners of open farm and forest land is presently resting in the House Ways and Means Committee. Joan Knight, Co-ordinator of the Vermont Open Space Tax Coalition, predicts that H. 134 will soon come out of the House Ways and Means Committee and be referred to the House Appropriations Committee.

H. 163 (Graf) The House Transportation Committee has approved a bill to protect the integrity of scenic roads. With the passage of H. 163, scenic roads would not be subject to the usual highway standards and would not be re-constructed or "improved", except under special circumstances.

H. 168 (Stone) The purpose of H. 168 is to encourage energy conservation by favoring smaller, lighter cars with a lower registration fee. Rep. Stone indicated that the Department of Motor Vehicles was working out the details of a new fee system and that the results of their findings would be prepared in time for the 1977 Session.



### a. Introduction

"We used to do business about 100 percent with farmers. Now it is 5 percent. I used to know 90 percent of the people who came here. Now I know 10 percent. This is a bedroom community for other towns."

--- Robert Campbell Service Station Operator

People who have lived in a town all their lives can tell us how it has changed.

We look out on rural Vermont today and know that it is changing. It is changing in ways that are at once both dramatically clear and almost too subtle to describe. People are leaving. Newcomers are arriving. These newcomers are carrying with them much more than their possessions. They have a different feeling for the open countryside, a different rhythm in their speech, a different sense of passing time.

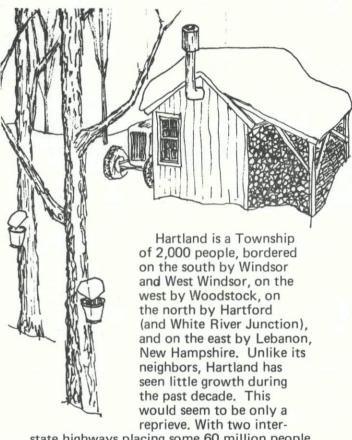
When Robert Campbell looks at Hartland, Vermont, when he tells us about the "90 percent of the people" that he once knew face-to-face, he is talking about a value that is just as much a part of rural character as a cleared field or a running brook.

The Hartland Open Space Project deals with a modest, but nevertheless vital, part of the total rural scene: the land and the future of land. This Project seeks to offer one answer to this question: "How can Vermont towns, like Hartland, accomodate future growth without losing the rural character of their land?" One answer is zoning. But governmental regulation alone is not the whole solution. It is the decisions of individual landowners that can determine in large measure what a community becomes.

Over the past year, these groups have worked together: the Hartland Board of Selectmen, the Hartland Planning-Commission, the Ottauquechee Planning and Development Commission and the Vermont Natural Resources Council. The Hartland Open Space Project is the result. These groups have collaborated to develop a program at the municipal level that offers landowners a greater range of choice for the future of their lands. We have devised four alternative open space protection plans. Each plan makes imaginative use of existing state laws. These laws permit municipalities to reduce or stabilize taxes on undeveloped land. Voters in Hartland will decide in May whether or not to adopt one of these alternatives.

This "Special Report" explains why the Hartland Project was undertaken; it describes some of the issues confronting the Town; and it supplies the details of the four alternative programs. We hope that the ideas generated in Hartland will be of use to other towns that are concerned with problems of growth and the future of open space.

# b. Issues That Gave Rise to the HARTLAND OPEN SPACE PROJECT



state highways placing some 60 million people within a day's drive of Hartland, it would appear to be only a question of time before the pressures of development increase.

Despite this comparatively slow growth in the number of permanent residents Hartland has experienced some significant changes in the past ten years. Consider these figures. In the past ten years the number of parcels of land on the Grand List has increased by 49%, most of these being six acres or smaller. Permanent homes (including mobile homes) grew by 45%, and second homes jumped by 51%. The reasons behind these trends are varied and complex, but the fact remains that the continued fragmentation of ownership and the increased number of houses will have a profound impact on the traditional agricultural, forestry and recreational uses of land in Hartland.

Another problem faced by Hartland landowners is the burden of rising taxes. Town officials have recognized that some type of tax stabilization program may be needed if agricultural forestry and other open space lands are not to be forced into development in order to pay the taxes. Town officials have also recognized that because Vermont is the only New England state without a statewide program of tax stabilization for undeveloped lands, that the municipality itself must take the initiative.

Another circumstance that gave rise to the Hartland Project was the discovery that the taking of land for development is often more costly TO THE TOWN than the existing agricultural, forestry or recreational uses. In Hartland, the AVERAGE new permanent dwelling requires \$890 per year in municipal services (schools, highway maintenance, sewage, etc.), and yet provides only \$610 per year in additional revenues. The difference, \$280 per unit annually, must be absorbed by all other Hartland property owners.

In addition to these considerations, the Hartland Board of Selectmen and the Town Planning Commission had three other concerns.

First was their concern for the survival of a tradition of free access to undeveloped lands.

Second was their interest in encouraging the productive use of land. Town officials realized that simply preventing future subdivision and development of open land would not ensure that the land will be used productively. Hartland officials wanted to encourage citizens to make active use of their land, especially in farming and forestry.

Third, and finally, the Selectmen and Planning Commission members hoped to implement Hartland's Town Plan by encouraging appropriate use of the land. The Open Space Project was not seen as an attempt to exclude development, but rather as an effort to encourage appropriate land use. In deciding upon the four alternative programs, Hartland's officials were guided by the idea that as much development as possible should occur in and around existing settled areas. At the same time they wanted to discourage new development in those areas of town where it would prove particularly expensive.

## c. Common Features of the Four Programs

Each of the alternative programs offered in Hartland differs in scope, in cost, and to some extent, in goals. These are the features, however, that are common to all four programs.

#### ALL FOUR PROGRAMS:

(1) WOULD BE IMPLEMENTED THROUGH THE USE OF WRITTEN AGREEMENTS BETWEEN LANDOWNERS AND THE TOWN.

These agreements would be voluntary. Landowners would decide for themselves whether or not to enter the programs. The Town's authority for entering into such agreements is derived from Title 24, V.S.A., Section 2741 and 10 V.S.A., Chapter 155.

(2) WOULD REDUCE THE TAX BURDEN ON QUALIFYING OPEN SPACE LAND.

Under Program 1 and 2, taxes would be reduced at the outset. Under Programs 3 and 4, taxes would be held at existing levels. All the agreements would expire after ten years.

- (3) WOULD EXEMPT FROM ELIGIBILITY, BUILDINGS, TWO-ACRE HOMESITES, AND COMMER-CIAL AND INDUSTRIAL LAND.
- (4) WOULD REQUIRE THAT LAND ENTERED AS OPEN SPACE NOT BE SUBDIVIDED OR DE-VELOPED, (EXCEPT THAT DEVELOPMENT COULD OCCUR WHERE NECESSARY FOR AGRI-CULTURAL AND FORESTRY USES.)

Subdivision or development before the end of the ten-year period would terminate the agreement. The consequences of early termination differ depending upon which program is adopted.

(5) WOULD PROTECT SOME PUBLIC ACCESS TO THE QUALIFYING PROPERTY.

Current laws governing snowmobiling and hunting would not be altered. Landowners, under the terms of the agreement, could not prevent persons from crossing their land on foot or on horse back on designated trails unless such access conflicted with agricultural uses.

## d. The Four Alternative Programs

#### PROGRAM ONE: ALL FARM LAND

WHAT LAND WOULD QUALIFY: Two categories of agricultural land would qualify: first, land which is owned by a farmer; and second, land which is owned by non-farmers, but which is actively used by a farmer as part of his farming operation.

WHAT THIS PROGRAM WOULD DO: Taxes on qualifying land would be reduced by 35%. If land were taken out of farming, subdivided, or developed, the agreement would terminate. There would be no penalty, however, for ending the agreement, i.e. no rollback in taxes.

**COST:** Approximately 4,265 acres out of a total of 28,544 acres in Hartland could qualify at the present time. If all this property was entered in the program there would be a 1.2% increase in Hartland's tax rate.

#### PROGRAM TWO: ALL ACTIVE AGRICULTURAL LAND

WHAT LAND WOULD QUALIFY: All agricultural land which is actively used for the production of agricultural products, including: cropland, pastureland, hay fields, orchards, sugarbush, and actively-managed forestland. (No distinction would be made here between farmers and non-farmers.)

WHAT THIS PROGRAM WOULD DO: Taxes on qualifying property would be reduced by 75%. If any portion of the land were developed or subdivided within the ten-year period of the agreement, the owner would have to repay all taxes that were saved under the agreement, plus the legal rate of interest.

**COST:** Approximately 4,300 acres in Hartland could qualify immediately for this program. Other lands could qualify in the future as pastures are brought back into production and as landowners undertake forest management programs. Assuming 4,300 acres were entered in the program, Hartland's tax rate would increase by 2.6%.



#### PROGRAM THREE: ALL UNDEVELOPED LAND

WHAT LAND WOULD QUALIFY: All undeveloped land, except commercial and industrial property.

WHAT THIS PROGRAM WOULD DO: There would be no immediate reduction in property taxes. Taxes would remain at the same level that they were at the time the agreement was originally entered into. If the land were subdivided or developed in the ten-year period, there would be a rollback of taxes.

**COST:** There would be no initial cost. Any increase in Hartland's tax burden would fall onto developed and commercial/industrial property and onto open space land not entered in the program.

#### PROGRAM FOUR: DENSMORE HILL OPEN LAND DISTRICT

WHAT LAND WOULD QUALIFY: All undeveloped land lying within the Densmore Hill Open Land District. This District is approximately 4,000 acres in size, is remote from present village centers and is relatively undeveloped. Approximately two-thirds of this land has steep slopes or shallow soils or both, and would be costly to develop. This District also contains a major winter deeryard.

WHAT THIS PROGRAM WOULD DO: This program is identical to Program Three except that is is more restricted, being confined to the Densmore Hill District. Program Four could be adopted separately or in conjunction with Program One or Program Two.

COST: This program would have the same costs as Program Three.

### e. Hartland: A Model for Local Control

The four programs described as part of the Hartland Open Space Project by no means exhaust the alternatives that are available to towns concerned about the pressures of development and the impact of growth on open space. The Hartland Project was intended, in part, to serve as a model to other towns by raising many of the critical issues that towns such as Hartland are facing. The Hartland Project was also intended to indicate the range of options for open space protection that are available under current state laws. The Hartford Selectmen and Planning Commission members chose the four alternative programs that we have described because these programs seemed to meet the particular needs of that particular town. Other municipalities can devise programs that meet their own requirements. The Hartland Project is a model for "local control".

Even should voters in the Town of Hartland choose to adopt one of the four proposals of the Hartland Project, this act alone will not will not solve all of the problems of growth in Hartland. Devising a plan for open space protection on the Hartland model is just one of the steps that a town may take, in addition to zoning and regulation, in working to implement a Town Plan. But it is a step. What makes the Project so exciting is that it presents an opportunity for a town and its citizens to work together to influence the future of their community.

The Ottauquechee Regional Planning and Development Commission and the Vermont Natural Resources Council are currently preparing a complete technical report on the Hartland Project. This report will cover all the economic, legal and planning issues that were investigated in the course of this Project. This report and further information on the Hartland Project can be obtained from Harvey Jacobs at the Ottauquechee Commission, 39 Central Street, Woodstock, VT., 05091, Tel. 457-3188; or from Darby Bradley at the Vermont Natural Resources Council, 26 State Street, Montpelier, VT., 05602, Tel. 223-2328. If sufficient funds can be found for the purpose, the Vermont Natural Resources Council hopes to extend the Hartland Project by providing assistance to other towns and regions that might wish to consider the adoption of an open space protection program.

THE HARTLAND OPEN SPACE PROJECT WAS MADE POSSIBLE BY GRANTS FROM THE CONSERVATION LAW FOUNDATION OF NEW ENGLAND, INC., BOSTON, MASSACHUSETTS AND THE EVA GEBHARD-GOURGAUD FOUNDATION, NEW YORK, NEW YORK.

THIS SPECIAL REPORT ON THE HARTLAND PROJECT IS PART OF THE FEBRUARY, 1976 ISSUE OF THE VERMONT ENVIRON-MENTAL REPORT, THE MONTHLY PUBLICATION OF THE VERMONT NATURAL RESOURCES COUNCIL. THE DRAWINGS FOR THIS SPECIAL REPORT ARE BY BOB HAIGHT, BIG TOMATO GRAPHICS, WILLIAMSTOWN, VERMONT. THE SPECIAL REPORT WAS WRITTEN BY DARBY BRADLEY AND NAT FROTHINGHAM.



# ENVIRONMENTAL BILLS

- H. 383 (Comm. on Natural Resources) A bill to revive a land use plan has been approved by the House Natural Resources Committee and by the House Ways and Means Committee. The revived land use bill is now being considered by the House Agricultural Committee. Agricultural Committee Chairman Elizabeth Dunsmore said she was hoping the land use bill would emerge from her Committee no later than the end of the first week in February.
- H. 407 (Comm. on Gov't Operations) This bill, which would create a new Department of Energy to address the problems of energy management and development, is now being considered by the Senate Energy Committee. Some members favor the creation of a strong administrative body to handle energy-related matters; other members are reluctant to appropriate money for this purpose at the moment.
- H. 415 (Allen and others) Rep. Allen's bill calls for the immediate betterment of U.S. Route 7 between Bennington and Burlington. There was support for this measure at a recent hearing of the House Transportation Committee. Opinion on the Transportation Committee itself is divided: some members favor immediate betterment of Route 7; others want to wait for a major reconstruction of Route 7 at a later date.
- H. 476 (Comm. on Agriculture) This bill would establish an Agricultural Development Commission to promote self-sufficiency and to expand food-processing. H. 476 has the strong support of Rosalyn Oakes of the Vermont Food Commission and is strongly supported by the House Agricultural Committee.
- H. 490 (Carse) This bill would provide for the identification and designation of natural areas. The House Natural Resources Committee heard testimony in support of this measure on Thursday evening, January 29th.
- H. 492 (Tudhope) Rep. Tudhope has introduced H. 492, a comprehensive measure aimed at alleviating pollution problems in Lake Champlain. The provision in H. 492 that addresses the problem of phosphates in household detergents is exactly the same as S. 128, a bill introduced in the Vermont Senate by Senator Arthur Gibb. What makes H. 492 different from S. 128 is that it goes much further. It asks for local control over agricultural pollution from fertilizer runoff; it calls for the installation of tertiary water-pollution control facilities in municipalities that discharge into Lake Champlain. These facilities would have to be in place no later than 1981. H. 492 calls for a program of local inspectors who would work in the summer and whose salaries would be paid from an increase in the motorboat registration fees.
- S. 128 (Gibb) S. 128 would ban phosphates from household detergents. It has the support of the State's Water Resources Department and was approved by the Senate Natural Resources Committee. It will soon be considered by the Senate Agriculture Committee where it is expected to encounter some resistance. Farming spokesmen are reportedly unhappy about legislation that brings on further regulations of any kind. S. 128 specifically excludes a ban on detergents used in agriculture.
- S. 192 (O'Brien, R.) This bill would create an advisory committee on waste utilization and waste reduction. The proposed advisory committee would encourage the use of sludge as fertilizer and would encourage municipal composting. According to reports, the Senate Natural Resources Committee was inclined to support this bill but it balked at the idea of paying advisory committee members the customary 'per diem' allowances. It was also reported that representatives from the Agency of Environmental Conservation testified that the Agency was already dealing with waste reduction problems. Agency people reportedly said that composting did not warrant serious exploration at this time.

# DAVID MARVIN

#### INTERVIEW: 100 STATE OF THE PARTY OF THE PAR

#### VNRC'S NEW CHAIRMAN, David Marvin

David Marvin was fresh from his election as Chairman of the Vermont Natural Resources Council. It was Thursday afternoon, January 22nd, one of those clear, sharp, painfully-cold days in mid-winter. The VNRC Board of Directors had been meeting all afternoon in the basement of the Vermont Federal Savings building. It was getting on towards 4.30 p.m. and the jam of people and cars grinding out of Montpelier was beginning to form.

I asked Dave Marvin if he would be willing to come across the street to VNRC headquarters for an interview. Yes, he would be willing. He came across to the Council and we talked for forty-five minutes about himself, his work, his sense of the issues facing us in Vermont and his thoughts on the future of the organization that he will lead.

David Marvin is a sugar-maker and a Christmas tree grower. He was born and raised in Vermont. "I made a long time ago," he related quietly, "a commitment to live in Vermont. I also wanted to be self-employed." After the University of Pennsylvania he attended UVM and graduated in Forestry in 1970. He worked for the Forest Service for two years and then bought a farm in Johnson.

Marvin talked about his involvement with the Green Mountain Profile Committee. The Profile Committee had been founded by Shirley Strong in the late 1960's. The purpose of the Committee, an arm of The Nature Conservancy, was to preserve and acquire for the public, some of Vermont's fragile mountain land.

Marvin's participation on the Profile Committee led to a seat on the VNRC Board of Directors. He soon moved up to the Vice-Chairmanship of the Council. Today, at 28, he is the youngest Chairman in the 12-year history of VNRC.

We talked about the most pressing natural resources questions facing the State. "These things evolve," said Marvin. "For me, at pre-

sent, the most urgent questions are assuring proper patterns of growth, and the protection and utilization of our natural resources." Of these resources, Marvin looks first to Vermont's forests and farms.

Marvin sees a need to examine long-term problems as well. "How are we going to feed people and provide the necessities of life? If we do not learn to recognize this problem, we are going to be in trouble. Everything relates to that. If a State like Vermont were to utilize its resources intelligently we would use what we have to the best advantage, and we would require less of what other states have; and everyone would benefit." Marvin is interested in the advantages of achieving a positive energy balance. And he says, "What we can do, we should be doing, regardless of what other people can do better."

What Marvin is talking about is raising more of the food we eat, making more of the products that we use, doing what we can do best with the resources available to us, and developing internal markets instead of depending on goods and services made somewhere else and transported here at great expense.

We talked about the future of the Vermont Natural Resources Council.

Marvin has some pretty definite ideas about where the Council should be going. For the moment, however, he is holding back. He is looking forward to the next three months and an exchange of ideas that he feels should take precedence over his personal vision of the Council's future.

"Today," he reported with obvious pleasure, "we formed a Committee to look at the future of VNRC." This Committee will consist of five persons from the Board and will include Executive Director, Seward Weber and David Marvin himself as ex-officio members. "That Committee is going to work pretty hard," predicted Marvin, adding, "And I do not want to prejudice the results of that Committee."

You get the feeling from Marvin that the Council has come through more than a decade

### **David Marvin**

of service, that the Board now wishes to evaluate what has been achieved, to pause briefly, and consider carefully, what the Council's future role should be, before plunging ahead in new directions.

What exactly will this "Committee on the Future of VNRC" do? According to Marvin it will have a formidable agenda. It will dig into everything. It will look at the day-to-day operations of the Council. It will review VNRC's traditional obligations to members, to providing service, to conducting projects of various kinds. It will poll the membership and seek their advice and criticism. It will get back to basic principles. It will ask of VNRC: "Who are we?" "What do we want to do?" "How do we want to do it?" and, "How are we going to pay for it?"

It was January 22nd. David Marvin had just been confirmed as the Council's new Chairman, and he was ready to begin.

# Update...

On Saturday, January 31st, residents of the town of Walpole in southwestern New Hampshire voted NOT to permit the Parsons & Whittemore pulp mill to locate in their community. The vote was 866 against the mill and 699 for the mill. Parsons & Whittemore agreed to accept the results of Saturday's vote as a referendum on the project. Parsons & Whittemore officials are now looking at alternative sites in northern New England, including locations in Vermont.

Vermont has a new publication. It is called POSSIBILITIES. POSSIBILITIES is an 8-page quarterly news journal. It will discuss Vermont's man-made environment. POSSIBILITIES is published by the Historic Preservation Graduate Curriculum at the University of Vermont. Its Editor is Chester Liebs. The first issue has 16 well-reproduced photographs. It tells the story of, among other things, a railroad station, a street, two hotels, a fountain, -- objects, spaces, structures, there to be valued, restored, or adapted to new uses. Those who conceived this publication see it in a necessary, timely light. They see opportunities in the responsible use of our physical resources. And these physical resources are, in their words, "the traditional fabric of our towns and cities, --buildings, streets, neighborhoods, which interact to make each community unique.

## Letters:

To the Editor:

It is the opinion of many legislators that planning by the Highway Department is not in keeping with present conditions either economically or environmentally.

Our highway system is deteriorating and over 900 miles of state highways are rated poor or bad. Many bridges are also in desperate need of repair.

	197	6 VI	VRC I	REN	EW	AL	FO	RM	
1976 \ the expense	VNRC Me of a rem	embership ( ninder.	Dues are now	payable.	Please se	nd them	now in c	order to sav	ve VNRC
In orde	er to save es payme	e secretarial nt, unless re	time and po equested.	stage VN	RC will no uest an ac	ot routin	ely send dgement	an acknow of my 1976	ledgement 3 dues.
Enclos	sed are m	y renewal o	lues of \$	for	1976 VN	RC Mem	bership.		
		Student Individual Family	\$ 5.00 10.00 12.50		Non-Profit Associate Business		15.00 25.00 50.00		
	NAME:								
	ADDRESS:								
	ZIP								
	Please accept my additional contribution of \$ for VNRC PROJECTS.								

# LETTERS

The cost of maintenance, both winter and summer, has risen dramatically so that our yearly cost is \$13.5 million, and growing. The 320 miles of interstate highway with its dual roadway costs \$8,000 per mile for maintenance and will certainly grow in cost. As the years progress the interstate will need major repairs.

Our "bonding balance" is up to \$150 million and the debt service is \$13.6 million per year. To make matters worse, gasoline revenues, which make up the greater portion of the Highway Fund, have leveled off.

The financial burden of our highway system will soon be borne by the taxpayers who are all too few in a rural state.

Our future highway plans which are on the drawing board, call for very costly projects. One reason for the high cost is that highways built with partial federal funds have to be built to federal standards which are costly and many times beyond our needs.

We have planned more new highways for the future than we will have the money to build.

Every new highway increases our yearly maintenance cost, debt service, and poses environmental problems and strains our economy.

Our existing highways have been neglected and people are beginning to understand that for the next decade we must spend our limited resources on improving and maintaining the existing highways.

Yours sincerely, Rep. Daniel W. Allen (D. Rutland)

# VNRC

Non-Profit Org. U. S. Postage PAID Montpelier, VT. Permit No. 285

## THIS ISSUE - - - FEBRUARY -- 1976

#### contents:

- James Griffin and Scott Skinner Discuss: "The Cost of Nuclear Power in Vermont"
- SPECIAL REPORT: "Eye of the Storm"--Hartland's Innovative Open Space Project
- INTERVIEW: DAVID MARVIN, VNRC's Newly-Elected Chairman

ADDRESS CORRECTION REQUESTED

VERMONT NATURAL RESOURCES COUNCIL, 26 STATE STREET, MONTPELIER, VERMONT