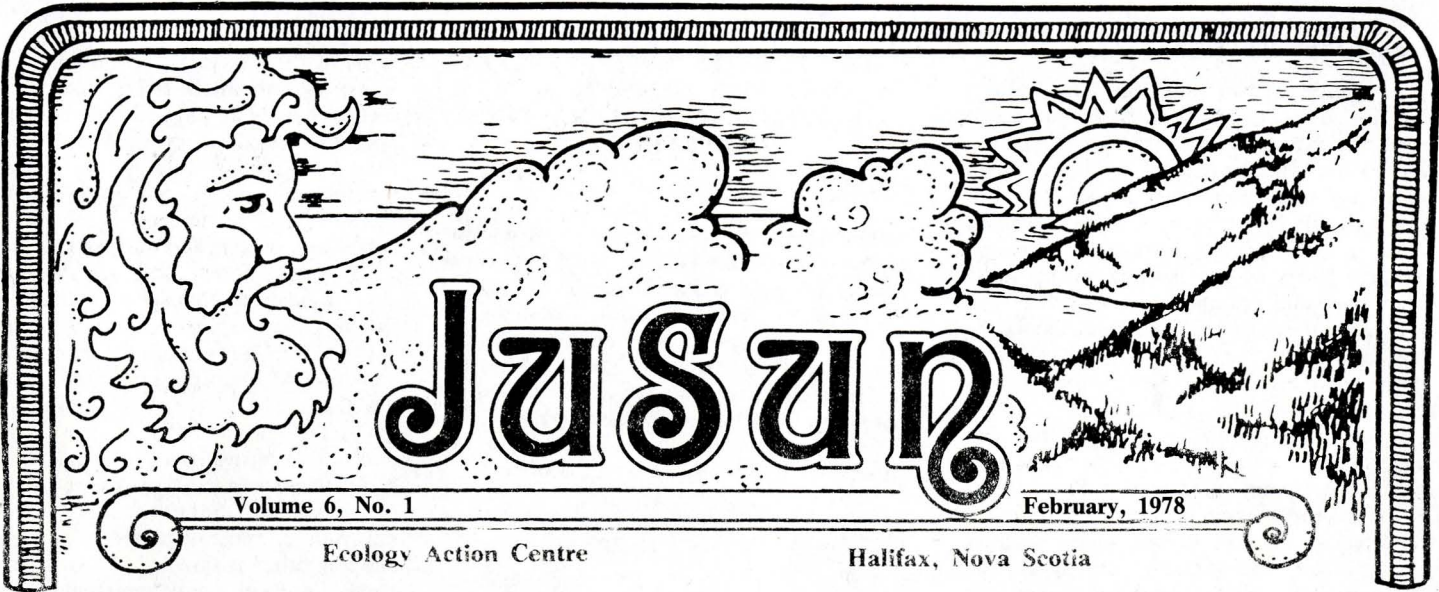


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THE CHANGING POLITICAL SIGNIFICANCE OF CITIZEN GROUPS

Editor's Note: The following is the major portion of a paper drafted by Susan Holtz and presented by Susan Mayo at a gathering of environmental groups from across Canada on the occasion of their second meeting in Ottawa with the Canadian Environmental Advisory Council in November, 1977.

It is our opinion that the political significance of environmental public interest groups is basically increasing, for at least four reasons.

Development of Democratization

Firstly, it is our perception that citizen groups as an institution are increasingly important in the further development of democratization. By this we mean that citizen groups are becoming an important vehicle for people trying to achieve some significant input into the decisions which are affecting their lives. This process of trying to achieve greater personal control or a voice in decision-making is going on in other sectors as well, for example, in the workplace where workers in many occupations are trying to improve safety conditions. However, most citizen groups are concerned with decisions specifically in the political sphere, i.e., decisions which affect the public generally. Citizen groups are thus becoming a vehicle for promoting more participation in decision-making within the larger political arena.

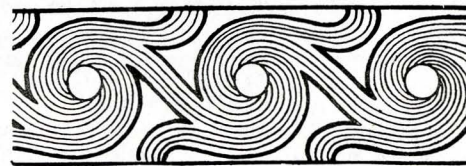
Creative Participation

Citizen groups can internally function in a manner which gives a greater opportunity for individuals to participate creatively. This is mostly due to the small size of the group. Even large citizen organizations usually work through committees which facilitate this activity. Moreover, since citizen groups are, at least in principle, more committed to effective work than to continuing their traditional organizational structure, there may be more freedom than in traditional political institutions to experiment with open, flexible, creative, non-hierarchical

modes of structure. In other words, citizen groups can respond to new political values within their own organizations more easily than established institutions with greater inertia. This is important in an era in which major political value shifts are occurring, for example, bringing values from the personal growth and feminist movements to bear on organizational structures.

Information Overload

A third and negative reason for the increasing political importance of citizen groups is the inability of our established political institutions, parliament and legislatures in particular, to cope with the massive amounts of information required to make decisions in complex situations. Politicians are too busy to acquire a real familiarity on their own with the many issues they are required to deal with. The same can often be said for media people and bureaucrats. Methods of processing and digesting information, perspectives, and values are being developed on many fronts - the Berger Inquiry is one example - and in this capacity citizen groups are clearly playing a more and more important role.



"Counterweight"

Finally, it is our perception that the power and influence of citizen groups is increasing because they provide the beginnings of a political counterweight for ordinary people against the massive concentration of economic and political power in big corporations and big government. Of course, in this struggle, citizen groups are so much the underdogs that the term "counterweight" may seem extremely optimistic. Nevertheless, certain conditions are favourable to the increasing importance of citizen groups. One is the fact that virtually all citizen groups

have non-profit structures; whatever vested interests such groups have, they are not essentially commercial or profit-oriented, and so in many situations they have greater credibility than opposing business interests. Also, citizen groups tend to involve people who are deeply committed and concerned about serious issues - and deep personal involvement in issues which are for the benefit and wellbeing of others, not just self, often can release great personal energy and creativity. In our experience, these qualities of commitment, energy, and creativity can make an impact out of all proportion to the size or economic backing of the group.

ELECTRICITY FROM A VERTICAL AXIS WINDMILL

by Jill Shlossberg

The Waitemata Electric Power Board's windmill at Silverdale Hill, near Auckland, New Zealand, generates more than four times the amount of electricity projected for it. After three months of operation the windmill has been dismantled and is undergoing repairs to strengthen the mechanism to enable it to withstand the effects of the unexpected output.

Silverdale Hill's 5 metre windmill was built at the School of Engineering of Auckland University and was installed on the roof of the School in 1975. In July 1976 it was moved to a 4 foot tower at Silverdale. Wind tunnel tests at the School had suggested 5KW of electricity could be generated by the machine. It was connected to the national grid and in gusts of 40 knots its output rose to 23KW.

Like the National Research Council of Canada's 100 foot windmill being installed on the Magdalen Islands in the Gulf of St. Lawrence, the machine at Silverdale is a vertical axis type. The particular model in both instances is known as the Darrius Vertical Axis Wind Turbine. It was invented in France in 1925. In 1971 P. South and R.S. Rangi of the National Research Council of Canada re-invented it.

Continued on Page 2

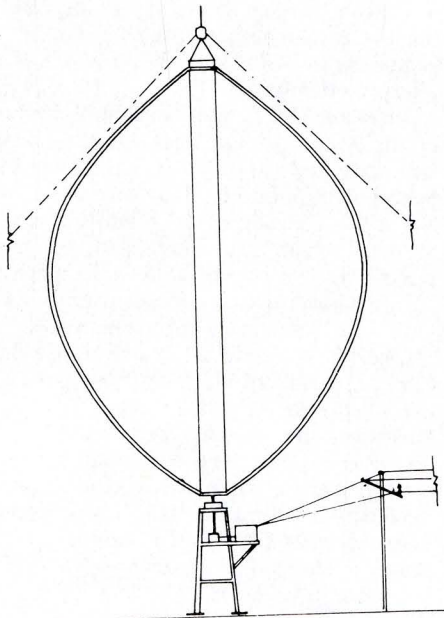
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Conventional windmills, like those seen in Holland, have a horizontal axis around which their blades revolve. The vertical axis type has its axis at right angles to the wind. These machines have several advantages, the first being that they can be built at ground level because no blade clearance is necessary. Secondly, they do not have to be turned to face the wind. A third advantage is the lessening of gyro forces on the blades since the mechanism responds to wind from any direction. This means less maintenance is required.

A disadvantage is that the vertical axis windmill is not self-starting and requires a separate starting mechanism like a car battery. Another interesting characteristic is a tendency to stall at higher wind velocities rather than to generate ever-increasing amounts of electricity. Individual home units are not economic at this stage since the cost of a 20 foot Darrius windmill is NZ \$7,000 plus. These problems do not rule out the use of wind turbines for electricity generation by a power board, or a group of users drawing from the same machine.

Field tests now in progress besides those on the Magdalen Islands and Silverdale Hill, include a 17 metre turbine built by Sandia Corporation in New Mexico. This machine is also being connected to a national grid. Mason Mesco, the local agents for the Dominion Aluminum Fabricating Company (DAFCO) who built the Canadian windmill, reports about fifty enquiries.

After the unexpected productivity of their windmill at Silverdale, project supervisors Prof. V. Chasteau of the University of Auckland School of Engineering, and Mr. R. Hubbard, Chief Engineer of the Waitemata Electric Power Board, are anxious to reinstall the machine. Though the data is very interesting from an experimental viewpoint, Mr. Hubbard reports a much longer period of operation is necessary before practical conclusions can be drawn.



DARRIUS ROTOR

CALL FOR INTENSIVE FOREST MANAGEMENT AND SILVICULTURAL PRACTISE IN CAPE BRETON

Editor's Note: The following is an open letter to the Honourable Vincent MacLean, Nova Scotia Minister of Lands and Forests, the Honourable Len Marchand, Minister of State for Environment Canada and the Honourable Jack Horner, Federal Minister of Trade and Supply on the occasion of their proposed meeting in Ottawa January 24, 1978. The letter is also addressed to the provincial legislature of Nova Scotia.

Dear Sirs:

It is apparent from the information coming to light as a result of the spruce budworm issue that the state of Cape Breton's forest leaves much to be desired.

In 1922 when there was a budworm epidemic here we were advised to pursue careful and intensive forest management and silviculture practise. In 1952 when there was another epidemic we were again advised that budworm epidemics arise as a result of forest conditions. Spraying to kill a portion of the current budworm population does not alter the susceptible nature of the forest. Furthermore spraying cannot be expected to eliminate the pest population. This has been amply demonstrated in New Brunswick where the initial outbreak on 200,000 acres in 1952 now encompasses virtually the whole province. As a well respected member of the Nova Scotia cabinet recently said, "the New Brunswick forests are certainly not the envy of anyone involved in proper forest management."

In Manitoba where an experiment was run to determine the effectiveness of spraying it was found that "... attempts to artificially control the budworm have not achieved any appreciable results three years after treatment. Reduction of defoliation and mortality is minimal between trees in sprayed and unsprayed plots." Thus in New Brunswick more than 125 million dollars has been spent on a programme which has little or no benefit beyond the year in which yet more money is spent.

No large scale experiment has ever been carried out in Canada on intensive forest management and silviculture practise. We suggest that Cape Breton Island be taken as such an experimental area. The high unemployment on the Island recommends a scheme which would employ a relatively large number of Cape Bretoners compared to the limited number of imported pilots and technicians necessary for an aerial spray campaign. The rural people of Cape Breton clearly do not want their health and possibly the lives of their children put at stake by a spray programme.

Nova Scotia Forest Industries, the Port Hawkesbury pulp company, was awarded their contract in Cape Breton partially on the

basis of their record in the silviculture and forest management field. Although their record here has lagged far behind their operations in their native Sweden we trust they would be willing to get behind any scheme that would put into effect those forestry and silviculture practises which might best protect and nurture the sustained yield of the forest and reduce budworm susceptibility. Such a scheme should also tie in with Devco's proposed hardwood mill and with the DREE programme for small woodlot owners which encourages careful forestry practises.

Similarly the potential market of wood for domestic heating and electrical generation could become part of an overall picture in which a more carefully tended forest while still yielding most of its trees for pulp could support other major users and a variety of small rural secondary industries.

The personnel to help implement such a scheme should be available from the new forestry course offered at Bridgewater Nova Scotia or from similar courses here and the enthusiasm for it will come from the people of Cape Breton who love their Island and believe in its future.

Signed, Chris King, Charlie Restino,
Sam Brooks, Jim Morrow
Baddeck, Nova Scotia



Ecology Action Centre would like to express sincere thanks to the Honourable Vincent MacLean and the Nova Scotia Department of Environment for covering the printing costs of our new membership brochure.

FUTURIST READING FOR ENVIRONMENTALISTS

by Grant MacDonald

L.S. Stavrianos **The Promise of the Coming Dark Age**, San Francisco; W.H. Freeman and Company, 1976. ISBN 0-7167-0496-X, 200 pages, in paperback about \$4.95.

They roll the concrete over it
To try to keep it back . . .
God bless the truth
That fights towards the sun.
They roll the lies over it
And think that it is done.
It moves through the ground,
It reaches for the air,
And after a while
It's growing everywhere.
And God bless the grass.

(Malvina Reynolds c 1964 Schroder Music Co. ASCAP)

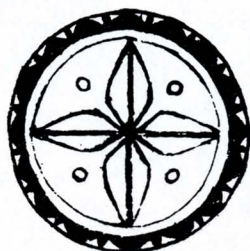
In the last few years there has been a flurry of books published that attempt to describe the current state of society and present some of the options open to humankind as we race toward the future. Most of these works have almost exclusively concerned themselves with the western world's abusive technological habits and with the dwindling supply of natural resources.

While the "energy crisis" is partly responsible for most of these books there is a handful of authors, most notably E.F. Schumacher and Barbara Ward who, for some time, have been writing about the future from a much broader perspective. Their view is one that suggests that what we popularly refer to now as the "conservative society" must involve significant social, political and economic changes as well as technological ones.

One fascinating work which unquestionably falls into this category is the recent book by historian L.S. Stavrianos provocatively entitled **The Promise of the Coming Dark Age**.

Stavrianos points out that we are living in a time of increasing pessimism and despair about the future. "It is a time when Robert Heilbroner writes of the **Human Prospect** and finds it bleak and threatening"; a time when democracy finds itself in peril because of both growing demands on, and mistrust of our major political institutions. It is a time in history strongly reminiscent of the collapse of great civilizations or the demise of widely accepted schools of thought. But, writes Stavrianos, it is just those conditions which in the past have allowed for "new beginnings", for the blades of "green grass" to sprout forth to form a new, more

exciting society. The foundations of such a new order are alive today and challenging tradition. They are found in the growing counterculture which is expressing a concern for appropriate technologies, conservation, and increasing opportunities for participation in institutions and decision-making.



The Promise of the Coming Dark Age offers a planetary perspective on most of the issues of interest to environmentalists. In a somewhat documentary style, Stavrianos examines a truly amazing number of "green grass" ventures occurring throughout the world. While he finds a surprising quantity of experiments going on in North America, as well as Europe, he is particularly taken with what is happening in China and devotes a considerable number of pages to that major social experiment. This book might well be considered a catalogue of some of the most interesting social and technological demonstration projects throughout the globe.

The Promise of the Coming Dark Age should contribute much to discussions of the future. The examples of alternative technologies, life styles and institutions cited go a long way towards countering the argument that we are "up against" human nature in our pursuit of a new, more cooperative society. Stavrianos' study presents a valuable historic perspective on social change heretofore neglected in most of the futurist literature.

The book is convincingly written, and full of insights into such matters as the economics of global agriculture and the growth of industrial democracy.

Like any other major study, **The Promise of the Coming Dark Age** is not without its flaws. It lacks the sense of continuity that is often best supplied by a strong theoretical perspective. The book suffers a bit from reliance on generalizations whenever means rather than ways are being discussed. This is especially evident in the section of participatory democracy. Finally, the author's arguments suffer somewhat from the anti-urban bias that is present in a lot of the environmental literature.

Despite these criticisms, the book is of considerable importance. As a reference work alone, it is invaluable. Crammed into its 200 or so pages lies an abundance of facts, ideas, quotes and sources. For anyone concerned with the future of society this book deserves a great deal of attention.

HARE REPORT COMES UP SHORT

by Doug Taylor

"The disposal of Canada's nuclear wastes is a problem that deserves much greater priority, but a slower, more scientifically detailed approach is needed" Susan Holtz observed in the Centre's brief presented in January to the House of Commons Standing Committee on Natural Resources and Public Works. The paper was in response to the Hare Report, a paper prepared on the subject for the federal Department of Energy, Mines and Resources, and published last fall, after only four months of research.

Several aspects of the Report were explored and a number of these were found wanting. The brief expressed fundamental disagreement with the Report's most important conclusion, that there are "good prospects for the safe, permanent disposal of reactor wastes and irradiated fuel." EAC noted that there was no discussion at all as to what constitutes evidence of "bad prospects."

The Centre added that the Report "lacks scientific depth" in not citing the major U.S. study for the Environmental Research and Development Administration, and that it downplayed many of the proven hazards of the entire nuclear fuel cycle. Calling the issue a moral one, EAC's brief stated that the underlying assumption, that it is acceptable to proceed with a large nuclear program in the absence of a proven plan for the disposal of wastes, has been specifically challenged by the prestigious British Royal Commission on Environmental Pollution, the Flowers Report, as well as in Swedish policy statements. The Centre underlined the position that continuing with Canada's nuclear program in these circumstances is not morally acceptable.

Copies of the brief are available upon request at EAC.

UPDATE:

February 15, 1978. David Cook, Clerk to the Standing Committee on National Resources and Public Works called today to invite Ecology Action Centre to send witnesses to Ottawa to appear before the Standing Committee to testify on the Hare Report.

The Centre's travelling expenses will be paid by the federal government. Susan Holtz, Energy Coordinator and chief author of our brief will be one of our witnesses. We hope to find one or two other expert witnesses from the Centre.



MORE NUCLEAR POWER STATIONS

A DOCUMENTARY FILM FROM DENMARK

This rare documentary film, produced by a Danish filmmaker, gives us an inside view of the nuclear power industry as it functions in today's society.

DISCUSSION FOLLOWING FILM LED BY SUSAN HOLTZ, ENERGY COORDINATOR

Tuesday, March 14, 1978, 8 p.m.
McInnes Room
Dalhousie Student Union Building
6136 University Avenue, Halifax

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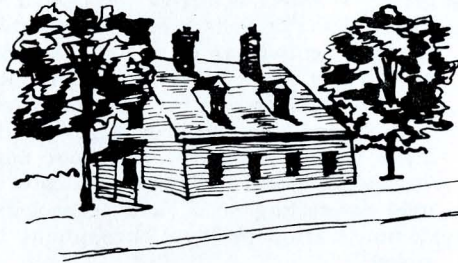
RAFFLE WINNERS

In December the winning tickets of the ECO Action Raffle were chosen. The winners were Matt Hughes of Hammond, Ontario who won the afghan and Vaughn Munroe of Halifax who took home seven pounds of Nova Scotia honey.

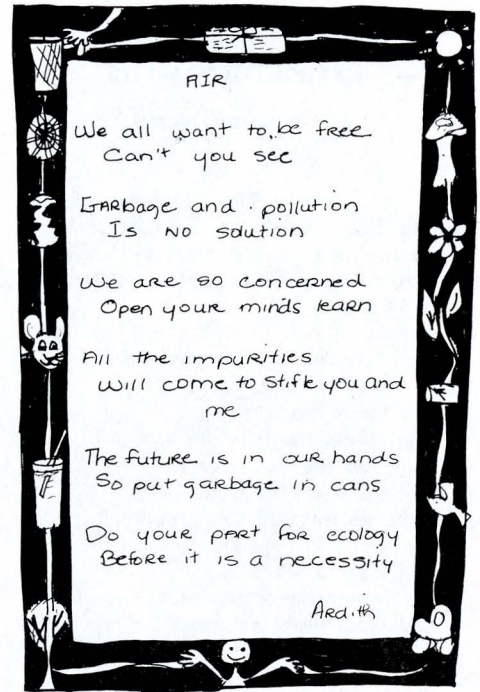
Special thanks to Fred Holtz who made the afghan blanket and to The Bean Sprout Traditional Foods Ltd. who donated the pail of Fleming's honey and to all those who sold tickets. We made \$130.

If anyone wants to organize a "Spring Raffle" give Susan Mayo a call at 422-4311. If you can donate something to raffle we'd appreciate that. Let's think, a gallon of maple syrup might be good. Or something handmade.

SHELTER BIBLIOGRAPHY



The Centre has, with the help of several volunteers, published a guide to the numerous books available on building and designing your own home, complete with mini-reviews and illustrations. Titled "Shelter Bibliography", it is available from EAC for a 25 cent donation.



JUSUN is the MicMac word for "wind". It also contains our English word "sun". As wind is the active agent of solar energy it is hoped that the JUSUN will serve as a medium for voicing environmental concerns throughout the Maritimes.

JUSUN STAFF

Editor Susan Mayo
Assistant Editor Doug Taylor
Proof Reader Susan Holtz
..... France Gravel



Membership Form

I wish to join Ecology Action Centre and receive free copies of JUSUN, the E.A.C. newsletter.

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