## A PLACE FOR ECOLOGICAL CRITERIA IN CANADIAN POLITICAL ISSUES

A background paper prepared for the Western Canada Liberal Conference, Edmonton, Alberta, June 6, 7 and 8, 1970

by **Everett B. Peterson**, Environmental Sciences Centre, University of Calgary, Alberta

Ecological studies of the development and maintenance of life - supporting systems (ecosystems) have shown several parallels with the development of human society. In both pioneer ecosystems and pioneer societies, high birth rates, rapid growth, high productivity and economic profits, rapid exploitation of internally available nutrients or resources, and dependence on external sources or capital, nutrients or energy are characteristic and advantageous for development. But as the mature phase is reached there is a shift to symbiosis and more complex relationships: in ecosystems we see species population control, recycling of nutrients and material, competition, relative stability, and general self-sufficiency within the system; in societies we see development of laws, culture, education and complex economic relationships. Ecological theory suggests that when we are ready to advance from a young to a mature society in Canada we may have something to learn from nature's strategy in development from young to mature ecosystems. (E. P. Odum, 1969. Science, 164, pp 262-270).

Ecologists require the help of politicians to encourage public awareness of these fundamental concepts. It will be exceedingly difficult to convince participants of a consumer-oriented technology of the potential dangers in continued expansion of 'productive landscape' at the expense of 'protective landscape' before we have better ecological information on how far we can safely go in that trend. It will be equally difficult to introduce the idea that we may be producing more things than we need, more people than we need, and more environmental ills than we can cure. As a Canadian ecologist, I am disturbed that neither the public nor the private sector of our society yet sees the value of strong financial support for basic studies of the Canadian environment. Surely we could move more quickly to designate important ecosystems of our flora and fauna to serve as ecological research laboratories and as bank accounts of genetic diversity for uses not yet imagined by man. Surely public or private sources could provide enough financial support for ecological studies to eliminate situations as nationally embarrassing as, for example, that which finds a senior Canadian ecologist lacking the funds for publication of the monographs that would record half a study of land-vegetation lifetime's relationships. And surely it is time for us to question the wisdom of the practice wherein the private sector of our society has the right to manufacture goods while the public sector has the responsibility of disposing of the unused or worn-out portions of manufactured goods. If industrial genius can mass - assemble and mass - distribute, why cannot the same genius masscollect, mass-disassemble, and massively re-use the materials?

The lack of a public consensus in the form of ecological awareness underlines the urgency of getting on with the job. However, I would add the optimistic observation that the large proportion of our population that is under 25 years of age needs little convincing in this direction: they already know that there are some environmental problems, and they already think ecologically. Therefore, the task is to devise educative, coercive, administrative and legal mechanisms that will enhance the ecological literacy of the

interest groups that politically represent agriculture, the construction industry, and the extractive natural resource industries. Because such an educative process may require more time than we have available for implementation of better practices in ecosystem management, we should search for even more expedient measures. The possibilities for action depend upon the conceptualization of environmental goals and of related public responsibilities at the most influential levels of public office. If a political awareness were accompanied by developments of innovative legal controls that were based on relevant ecological criteria, interests that have historically acted less than responsibly towards environment and natural resources could be influenced, in a relatively short time, to think ecologically.

To promote wiser use and care of Canada's environmental heritage, three specific steps are recommended:

The current Justice Minister's concept of 'Citizens Bills', designed to support the rights of each citizen, should be extended by adoption of a constitutionally embedded 'Environmental Bill of Rights' from which the necessary legal authority could flow. The broad objective would be to recognize and protect the rights of every person to a decent environment. The 1969 action by the Supreme Court of Canada in using the 1960 Bill of Rights to overrule other federal legislation lends encouragement that a precedent would be available for a Bill of Rights that included environmental considerations. Even if the present Canadian Bill of Rights is limited to those matters falling within federal jurisdiction, its expansion to include 'environmental rights' would set a good example for provincial jurisdictions.

II. Following from the excellent international example recently set by Canada with the Bill to protect the environment of the Arctic archipelago, the Government of Canada should now be taking steps to ensure major Canadian contribution to the 1972 United Nations Conference on the Human

Environment. Furthermore, the Government of Canada should now make it clear to Canada's youth and to the organizers of the 1972 conference that any such meetings to develop strategy for environmental management cannot be held without participation of the heirs of our present environment. Youth represent a majority of the world's population and the youth of all nations must be full partners in planning, participating, and follow-up of the 1972 Stockholm meeting.

III. Political forces should provide assistance to other interested Canadians in the establishment of one or more centres for development of environmental law in Canada. The broad objective should be to provide an institutional setting from which ecological criteria for Canada's environmental goals could emanate and from which the legal and administrative means for achieving the desired environmental goals could evolve. The international nature of many environmental disorders and the profound ecological importance of the oceans for maintenance of planetary life dictate that such an endeavour could not dwell solely on municipal, regional or national environmental questions.

## SNHS SUMMER MEET WASKESIU June 12, 13, 14, 1970

This is our first summer meeting in a national park where assistance with tours and lectures is available from park naturalists.

Registration (\$1.00) is in the Community Hall where films will be shown at 8 p.m. Friday evening. Full details on the program will be available upon registration. Saturday events start with birding from the Nature Center at 6:30 a.m.

Accommodation is available in Waskesiu motels, cabins, trailer court and campgrounds.

Everyone welcome!