# THE PRESERVATION OF NATURE

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What is the nature of man that has brought him to this point in history, where by all past standards he is rich in material things but not noticeably so in the quality of his environment? How is it that a tremendous human facility in engineering skills is accompanied by so little regard for the conditions of decent living, so that wealth seems often to be purchased at the expense of physical and mental health?

I suggest that the answer lies in man's own self-appraisal. While he recognizes himself as a worker, an artisan, a technologist, he does not with the same clarity appreciate that he is a biological creature of this earth. The implications are profound.

#### Man the Developer

There can be no doubt that man is an inveterate developer, a manipulator, an entrepreneur, an activist. In the spring as the snow melts, up and down the streets men with shovels appear, to dam, divert and channel the rivulets flowing in the gutters. This is play; but more seriously they then go out to do the same thing to our rivers, diverting the north-flowing ones south and the south ones north, straightening a channel here, putting in a dam there, often heedless of the economics, let alone the ecological, consequences. When Stephen Leacock was asked for an economic appraisal of the St. Lawrence Seaway proposal, he is said to have exclaimed: "Damn the economic appraisal! The concept is magnificent and it must be done!"

Western man's most serious hangup, to use the modern idiom, may well be his almost pathologic drive to develop, to not let things alone, to tinker with environment and to convert all mankind to the same activity. In the background, providing support, is a holy writ congenial to the manipulative urge, granting man dominion over the earth and its creatures with carte blanche either to subdue them to his

purposes or exterminate them if they are in the way. Concurrently we have devised a work ethic that does not willingly excuse anyone from "productive" labour which, as automation increases, comes more and more to mean "busy work" such as selling insurance, running a gas station on a corner shared with three others, or advertising the virtues of advertising. It also means continuing to break land, or initiating new irrigation projects, when markets are glutted with agricultural produce, and frantically searching for new oil sources in the north, when present fields in the south are only producing at half capacity. We must recognize this aspect of our nature for, uncontrolled and rationalized in various ways, it is killing us.

#### Man the Earthling

Now let us look at man the earthling, an animal infinitely trainable and adaptable, and therefore slow to recognize the limitations of that unnatural environment in which his technologic skills have immersed him. He does not really recognize that he a product of the ancient preis industrial biosphere, a mammal breathing air, drinking water and drawing sustenance from plants and animals that have evolved along with him over millions of years. It is not an article of his faith that he is of the earth and belongs to the earth.

Perhaps in the spring when the geese fly overhead, or on a soft June night fragrant with the scent of balsam poplar, he feels a longing to associate himself with nature; but such yearnings are soon squelched by the work philosophy of his daily life. So he surrounds himself with the symbols of a nature no longer experienced; potted plants, caged birds, cats and dogs, pictures of idealized landscapes. On week-ends and other holidays he mounts his "escape machine" and "breaks away" from the city, jamming the roads to the

countryside, seeking picnic spots along the fence rows and in the parks, or reliving his not-so-long-ago racial childhood by fishing, hunting, or bird watching. Dasmann paints the picture in his book A different kind of country.

"When the warmth of June brings out the roses there is a roar of motors across the land, and where once the bison roamed, the migratory hordes of tourists now surge across the plains. Into all the mountains, up all the streams, across the lakes they move. Out from their stinking cities they come to stake their claim to the wildlands of America."

In the face of the obvious attraction that nature holds for man, why does he hesitate to admit being of this earth, and by that admission accepting full responsibility for it? The hesitation has deep historical roots; the oldtime religion (that was good enough for father) instilled in him the idea that he is a "pilgrim and a stranger" here on earth, tarrying but a short time in this vale of tears, passing on soon to his true home in heaven. This antithesis between earth and heaven is pointed up, for example, in the lines from Chaucer's "Ballad of Good Counsel:"

- "What God doth send, receive in gladsomeness;
  - To wrestle for this world foretells a fall.
  - Here is no home, here is but wilderness;
  - Forth pilgrim, forth up, beast, and leave thy stall!"

It is significant that the attitude toward wild nature as "wilderness" was general until the eighteenth century when western man for the first time began to recognize beauty in the non-humanized landscape.

Even today the devolpment of a sensitivity to nature finds little in the current culture to stimulate and encourage it. What can Albert Schweitzer's philosophy of "reverence for life" signify in a world where the great nations spend the largest single share of their wealth preparing for the extermination of their neighbors? What can Aldo Leopold's ethic of land husbandry signify in a world that



An angle 1000

Beauty of rock, forest and lake at Lac la Ronge, August, 1969.

December, 1969

systematically strips and defoliates whole landscapes for profit and for war?

Unfortunately, so long as man is estranged from his native earth there is little hope for conservation. A feeling for nature, of belonging to it and being a part of it, seems almost prerequisite to an intelligent assumption of stewardship where natural resources are concerned.

### Planning against Progress

There is, then, a very real dilemma, in the conflict resulting from man's itch to tinker and develop resources, and his biological environmental needs. We have all sensed this in the familiar expression: "You can't stop progress!", usually uttered when some members of society are being bulldozed by a new techno-economic development. To the proponents of our culture, "progress" means (before everything else) "growth"; in population, in city size, in industries, in incomes, in the Gross National Product. Unfortunately, it also means depopulated farm lands, urban crowding, the careless use of energy, pollutiton of air, soil and water. It also means those impersonal "efficient" business forms against which the more intelligent student activists are rebelling; where alienated workers perform meaningless tasks to produce, advertise and sell products that are designed to be soon obsolescent.

Hopefully the young people who want "to be themselves" will continue to examine society's values and aims and to expose its many shortcomings. But they need direction. Perhaps there is help in those emerging ecological trends in education that, by treating the world as a functional ecosystem, illuminate the dependence of man on the flow of energy and the cycling of matter between the living and nonliving parts of the world.

A saner view of man and his world may come, surprisingly and expensively, from space explorations spinoff, for as Marshal McLuhan has pointed out we seldom appreciate an

environment until we get outside it. Just as the traveller returning from abroad views his native land with new appreciation, so the astronauts with astonishment have seen the earth as home, a luminous blue-green cell, a jewel suspended in black space. A trip to the moon may be the best preparation for life on earth! Some day, with luck, the planet earth may be mankind's Natural Area maintained as the primeval environment from which he came, a place of recreation to which humans return from their pursuits elsewhere in the cosmos. It is not too early to begin treating the whole world as an International Park. Perhaps we can start modestly with the slogan "Make Saskatchewan a National Park"?

The long-term answer to the problem of man's survival is a cultural revolution that will bring a new symbiosis, placing biological wellbeing and environmental health foremost among our values. I am not one who agrees with the president of the British Association for the Advancement of Science, when, in a recent issue of Science, he says: "The deterioration of the environment produced by technology is a technological problem for which technology has found, is finding, and will continue to find solution." Unfortunately, I remember that the engineer's solution to pollution is dilution! Technology will not cure man's barbarism; that will pass away, as Shaler predicted more than 60 years ago, only with the emergence of a new humaneness. "when the generations begin to feel that they rightfully have no more than a life estate on this sphere, with no right to squander the inheritance of their kin."

But practically, and in the immediate future, what can be done? Dasmann suggests that we need to do three things:

1. Plan against that kind of "progress" that is equated with the mindless, cancerous growth of population, of cities, of resource exploitation. 2. Plan to preserve the irreplaceable values of our present landscape while fragments still remain in their natural state.

Plan to preserve and create diversity in the environment, for the trend towards uniformity is inimical to human life. Indeed, Charles Elton, the British animal ecologist, has defined "conservation" as keeping or putting in the landscape the greatest possible ecological richness and variety, for beauty, interest and stability.

There is at present a ground-swell of public opinion favouring nature conservation and the maintenance of environmental variety and now is the time, as they say, for "precipitate, hasty, premature action!"

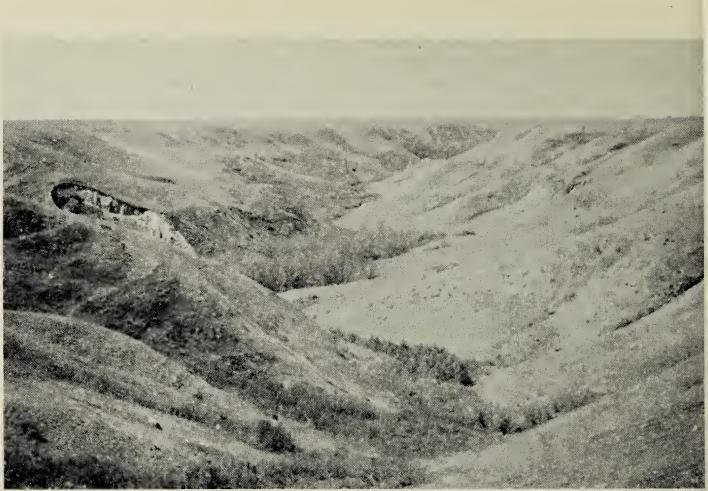
In recognition that the relationship between man and his environment is undergoing a world-wide and rapidly ntensifying crisis, the idea of an International Biological Programme erminated in 1964 and was initiated for a five-year period in 1967. The main emphasis of the IBP is on an understanding of biological productive processes in nature, a matter of some elevance to world problems of malnurition and starvation. Sections of the programme are concerned with Proluction Processes (PP), Production Terrestrial Communities f (PT), roduction of Fresh Water Communiies (PF) and Production of Marine Communities (PM). Two remaining ections supplement the emphasis on roduction, with attention to Human Adaptibility (HA) and the Conservaion of Terrestrial Communities (CT).

Reasons for the inclusion of a CT ection in IBP are the following: onservation efforts throughout most of the world have been concentrated n the larger vertebrate animals. specially birds and mammals, and n areas with striking scenery. Except vithin some European countries, the nyriad other animal and plant species and the large variety of biotic comnunities and landscapes) have not rawn the attention of conservaionists, and they have therefore

received protection only by accident as when they chanced to be included in a national park or game sanctuary. The CT Section of IBP was designed to fill this gap and provide a basis for the world-wide protection of sample specimens of biotic communities and landscapes, including water bodies.

The philosophy of preservation is this: that any part of nature, whether plant or animal species, biotic community or landscape pattern, has its intrinsic value and interest. I hope that this is a self-evident truth. Each part of the earth is the product of long periods of evolution under the influence of a unique combination of controlling factors, and when it is destroyed, it is generally irrevocably lost. If therefore the persistence of communities and landscapes is threatened by trends toward intensified land use and the progressive simplification and impoverishment of biota and environments, then we have an ethical obligation to establish sanctuaries where preservation is the prime consideration. This will give present and future generations the opportunity for enjoyment and study of the natural areas and their components.

The IBP has given the idea of Natural Areas vigorous support, in the belief that areas of biological and physiographic importance are vital for future scientific work. As Canada has officially joined the IBP (and has initiated a major project investigating the biological basis of productivity at Matador Grassland Site), the the NRC is encouraging a Natural Area programme in the provinces and territories. The aim is to compile, for all the country by 1972, a preliminary inventory of candidate areas, providing in this a body of information on which a Canada-wide system of ecological reserves can be built. I want to stress that the program can only be accomplished by stimulating and providing a focal point for those activities already underway by governmental or private units, for example by the Wildlife, Parks and Forestry



Matador Grassland Site, southwest of Beechy.

Photo by J. S. Rowe

Branches of the Provincial Government, by the Natural History Society, etc. While NRC has provided limited funds for the initial inventory of Natural Areas, the acquisition of the latter must ultimately depend on the cooperation and financial support of government and interested private agencies.

In Saskatchewan in 1968 we set up a Regional Panel of government and university people to consider how a program might be developed in this province. It was not until this year, however, that an inventory team --Misses Gwen Jones and Marilee Cranna-took to the field. Pulling their own shelter with them (a trailer provided through the good graces of Mr. Hugo Maliepaard and the Wildlife Branch of the Saskatchewan Department of Natural Resources) they studied and described a number of areas that had been suggested by knowledgeable citizens.

Where do we go from here? The following cooperative action program is needed:

1. A better definition of the areas

required for an adequate representation of Saskatchewan's landscapes and biological diversity. People who know the province and its land resources can be very helpful.

- 2. Inventory of candidate areas, to provide information on which decisions concerning preservation can be based. This is in effect a continuation of the CT field work.
- 3. Formal establishment of the areas; on crown lands using existing legislation, and on private lands perhaps using Nature Conservancy procedures.
- 4. Provision for protection, management and use of these ecological reserves.

To accomplish anything lasting, the last two points are essential. We *must* have the support of the Provincial Government; and all those individuals and organizations interested in nature preservation *must act in concert* if there is to be governmental support. This I see as the challenge of the immediate future for all Saskatchewan conservationists.