

THE WORK OF THE CANADIAN WILDLIFE SERVICE

Conservation in Canada

By W. WINSTON MAIR, Chief of the Canadian Wildlife Service

As the fourth in the series of conservation inserts for 1957, the *BLUE JAY* is pleased to publish a condensation of the address given by W. Winston Mair to the annual meeting of the Saskatchewan Natural History Society, October 19, 1957.

There are probably as many interpretations of the meaning of conservation among us as there are persons here this evening — depending upon our background, our environment and our interests. Some water conservationists believe in dams for every place or situation; some forest conservationists are against fire any place at any time; some agriculturists have encouraged us to rid our fences of bushes and weed tangles to make more soil available for grain, to save moisture or keep down weeds, others have advocated hedge rows for the same areas as good conservation practice. Wildlife conservationists, if they are good ones, tend to recommend moderation in most things. But I think I can safely say that we too are divided in our thinking, in fact perhaps too much. And perhaps herein lies part of our problem in that we are not positive enough.

There are signs that we in Canada are beginning to think more about this conservation business, and are beginning to ask ourselves what we mean by it, and what we want of it. I was interested to read recently that there is today at the Wilderness Research Centre at Basswood Lake, in the Minnesota Superior Forest and the Ontario Quetico Park, a study in progress concerning exactly how much value is afforded by a holiday in wilderness country.

And I could go on — one reads editorials on outdoor recreation and its benefits, on wildlife, on natural history activities in general. And this is good.

I should like, however, in establishing a back-drop to a short summary of our activities in the Canadian Wildlife Service, to go a bit further and comment briefly upon a problem that I consider one of the most serious facing us today in conservation. This is the development of what I choose to call an ecological conscience within every citizen, that we may face the future at least with hope if not

with complete equanimity. Ecology, as you know, is the study of the organism in relation to its total environment, and what I am trying to get at is the need for us to understand our mutual relationship with the living community, plant and animal, of which we are a part. If we do not develop this understanding now, we shall not need to think in terms of the future, for, as W. Leonard put it recently (*Pennsylvania Angler* 25 (3): 6-9), "There will be no future, at least no material future we can foresee, if we are all blown to Glory in one spectacular atomic whoosh."

"But granting that we do not blast ourselves to eternity in such a fine pyrotechnic display," Leonard continues, "there are still grounds for suspicion that our cunning exceeds our understanding. It disturbs me that the Cornucopians, in outlining their reassuring schemes for feeding unlimited population growth from the bounty of the sea or the possible mastery of the secret of photosynthesis, make no mention of what kind of life this food will sustain. I am willing to grant that future generations may be able to keep soul and body together. But the vigor of the body means little if the soul is starved."

Like Leonard, I am not at all certain that many of us can readily survive to the ultimate in development of our populations and resources. Every new fact learned regarding stress, in animals and humans, strongly supports the belief that we cannot. And I agree with Leonard that it is not at all certain that we should wish to live in a world where there was standing room only, even if our bellies were full.

Let us confine our thinking, for the moment, to the more immediate future. There is grave reason to doubt that we are presently sufficiently aware of our own place in

the web of life to utilize our natural resources intelligently. Not that I subscribe to the thought that all progress must stand aside for wildlife and so-called recreational interests. I would never suggest we should consider the era of the outdoor privy as the desirable goal in social and material progress. I enjoy electricity and all the modern benefits that accrue therefrom. But I refuse to admit that a forest of TV aerials is preferable to the normal forest that at least some of us still know. I suggest we need to consider seriously what it is we are looking for in life.

Many conflicts have been produced by technological progress. For example, the development of a multitude of chemical control agents has been one of the greatest accomplishments and at the same time the greatest dangers of the last twenty years. Malaria has been beaten back; mosquitoes have been reduced; weeds have been selectively removed; even our lawn can be controlled so it only needs cutting once or twice a year! But in our undiscerning enthusiasm for technology we have proceeded, often without a minimum of prior research, to use these tools as cure-alls for every imaginable sort of thing, ignoring the many and complex ecological factors involved, even to the extent of eliminating obviously desirable species of our flora and fauna. To quote from John Lindsay Blackford's recent article in *Nature Magazine* (49 (4): 176-180): "When we get t'monkeyin' around too much with what the Old Man put out for us we sure gets ourselves into it bad. Leastways them fellers don't never figger up what we're fixing t'lose. Mostly, I guess 'cause they'll never know."

I could go on and cite problem after problem, but would only come up with the same thought that too frequently we don't figure what we are fixing to lose, mostly because we don't know, until it's too late.

Do we really care what becomes of our wildlife, of our renewable natural resources? I wonder just how many of us mourn the passing of a species; how many care that our increasing standard of living is being bought only at a price, often an unnecessarily high price. Within the past year, I was asked this question regarding the Whooping Cranes:

"Why are you trying to save them? You can't eat them, can you?" This man spoke with sincerity, but he typified the philosophy that everything must have a dollar value.

What is to be done? That is the problem facing us today. We cannot ask, in fact would not wish, that progress should be halted, that our standard of living should be lowered. We must, then, bring to our people an appreciation of their kinship with the soil and the resources it nurtures, help them to develop an appreciation of the foundation of the good life we enjoy, and to discriminate, in this age of gimmickry, between what is essential and what is not. Only so can we hope to halt the trend that, giving us the highest standard of living in the world, threatens to leave us bankrupt and stripped bare of vital living space.

Having provided you now with some background respecting my thinking on conservation, I want to tell you a bit about the work of our Service.

The Canadian Wildlife Service is a young and active organization charged with the task of carrying out federal responsibilities with respect to wildlife, a resource of ever-increasing importance to the national welfare. Organized in 1947 to meet the growing need for scientific research in the management of Canada's wildlife resources, it is now a division of the National Parks Branch, Department of Northern Affairs and National Resources. It consists of 36 professional wildlife biologists, 29 of whom are field men, a supporting administrative staff of 32 and a further 25 part time migratory bird wardens and sanctuary caretakers. The Service employs eleven university students as technical officers to assist in the research each summer.

It would be the simplest task for me to explain our work by saying that it is essentially the same as that of your own Wildlife Branch, only diluted sufficiently to take in Canada as a whole. But this would not be quite telling the whole truth. Constitutionally, all Canadian wild creatures belong to and are managed by the province (or territory) in which they are found. The British North American Act, however, provides that the Federal Government

has all the powers required to carry out the terms of a treaty with a foreign country. Migratory birds, therefore, continue to be provincial property, but the responsibility for their protection and management under the terms of the Migratory Birds Treaty, signed with the United States in 1916, rests primarily with the Federation Government. Within our National Parks, wildlife is a direct federal responsibility, and in the Northwest Territories and the Yukon the Canadian Wildlife Service carries out all wildlife research and advises on management.

It is not possible for me to cover our activities in detail. I shall, then, generalize respecting the broad divisions of our work, and point up a few specific researches we have undertaken or are presently carrying out, to give you a nodding acquaintance with our Service.

The Migratory Birds Convention Act which we administer deals mainly with restrictions on the hunting of migratory game birds. Many of its provisions remain constant from year to year, but others, such as open seasons, change. A great deal of information is needed to make and keep the regulations up to date, and this work is carried out by our Ornithological section. The most important annual investigation for this purpose is, of course, the extensive survey of waterfowl breeding grounds carried out by teams of wildlife biologists from the Canadian Wildlife Service, the U. S. Fish and Wildlife Service, provincial game branches, Ducks Unlimited (Canada).

Many of the ornithological projects involve intensive studies of individual species—the murre in Newfoundland, the greater snow geese which rest each spring and fall at Cap Tourmente, Quebec, the blue and lesser snow geese which are a source of food for Eskimos and Indians, the eider ducks which might form the basis of a profitable eider industry for the Eskimos, and so on.

Then there are our banding operations. All bird banding activities in Canada are carried on under federal permit, and we maintain a bird-banding section in Ottawa to deal with these permits and to maintain the official bird-banding records. To avoid confusion, serially-numbered bands supplied by the U. S. Fish and

Wildlife Service are used in Canada as well as in the United States.

The methods used by private persons and organizations which participate in the work, often voluntarily, and by Service personnel, are varied and interesting. In the West, most of the waterfowl are caught by drive-trapping. The term is, I think, self-explanatory, but I assure you it does fail to conjure up a true picture of the work involved in getting young birds and frightless adults to go into a trap! A more specialized technique, used in special cases for ducks but more commonly for geese, is the use of the boom trap. A long net is carefully laid out and connected to mortars which when fired will throw the net over the birds baited to within mortar range. the last few years we in the Service have been placing more and more reliance on dogs for capture of birds for banding. A problem in the past has been to ensure that young birds were actually banded on the area where they were hatched and that all young in broods were caught. Excellent results have been obtained with dogs, and a paper has been presented on the subject by the Service. Many of you, I am certain, will be familiar with the work of Mr. Bernie Gollop and Mr. Alex Dzubin of our Service in Saskatchewan.

You will, I know, be interested in whooping cranes. Actually, I can tell you in Saskatchewan little that is new about whoopers. Twenty-three whoopers went north last spring, and we have determined from our aerial surveys out of Fort Smith this past summer that three young at least have been produced. Time does not permit a detailed expose of this whole matter, but the vital point to be considered is the absolute necessity of a positive approach to the problem. Once such a purposeful stand has been taken, the research to establish management techniques (if any) required to build up the flock, and the proper time and sequence for such management steps to be taken can and will be the subject of the greatest care and scrutiny by the committee on whooping crane management that has been formed and by the Federal Services. We do feel that on no grounds can we support a philosophy

of wait and see, bolstered only by the uncertain promise to ourselves that if things get tough (assuming they are not now) we will make plans to do something in the future. Bitter experience has taught us that such later plans, followed by much later actions, are always too late.

A second important feature of our work concerns our National Parks. Most of the National Parks provide living space for a profusion of species of flora and fauna typical of the Canadian scene. They are wonderful outdoor museums or natural zoological gardens in which we may see wildlife at its best. Our task is to keep them so. We investigate mammals, birds and fish, and advise the National Parks Service on management, helping to make our Parks serve one of their fundamental purposes—that of providing natural laboratories for wildlife research.

Since the Service was formed in 1947 we have been slowly building up our staff of northern wildlife biologists, and our range of interests has broadened more than proportionately. The wide range of species investigated in the north includes: caribou, moose, sheep, reindeer, muskrat, beaver, marten, white whales, Arctic fox, buffalo, musk ox, seals. For the officers of the Service working in the north, who travel by canoe, aircraft and dog team, with bombardiers, snow toboggans and Peterheads filling in, it is a rugged life but a challenging one.

In speaking of this research, I should like to mention especially our work on caribou. This was started in 1948 when a survey and research study of caribou in the mainland area between the Mackenzie River and Hudson's Bay was undertaken. Work has been carried on continuously since that time. Last April an 18-month research programme jointly financed by Manitoba, Saskatchewan, the Northwest Territories and the federal agencies and expected to cost about \$100,000 was begun, with the purpose in mind of staying with a caribou herd continuously from winter range to summer range.

The programme is being jointly staffed—your Wildlife Branch is providing two members of the team—and our Service has placed three wildlife biologists, a range specialist and a wildlife pathologist on this research.

I have outlined for you the work done by the Canadian Wildlife Service for conservation in Canada, and I should like to leave with you a challenge that I phrased in these words when speaking in Vancouver last year:

“We must insure that our people become intellectually and emotionally concerned with the land and water and the complex pattern of growth they support. Unless we can do this, to the end that every person, from the trapper and farmer to the business magnate and legislator, is proud to work with our living natural resources rather than ready to abuse them, we are fighting a losing battle.”

CHRISTMAS CARDS

The Saskatchewan Natural History Society has Christmas cards for sale at \$1.25 a box (postage included). There are one dozen 4" x 5" folder-type cards in each box. The card is a coloured reproduction of Doug Gilroy's kodachrome photograph of Sharp-tailed Grouse. Cards may be obtained from the following persons:

P. Pawluck, 163 Peaker Ave.,
Yorkton.

Mrs. John Gerrard, 809 Colony
Street, Saskatoon.

Mrs. John Hubbard, Grenfell.

Frank Burrill, Indian Head.

Margaret Belcher, Secretary,
Blue Jay, Regina College,
Regina.