ENVIRONMENT AND GOOD SENSE. By M. J. DUNBAR. Montreal: McGill-Queen's University Press, 1971. 5<sup>1</sup>/<sub>4</sub> x 8<sup>1</sup>/<sub>4</sub> inches, 92 pages. Cloth bound \$4.50; paperback \$2.25.

As we would expect of anything to which Dr. Dunbar puts his mind and energy, this little book is a delight to read. The English is impeccable. The author has happily turned his back on the modern trend to produce a 400-page rhetorical millstone and has said what he wants to say in 83 pages with a reading time of 2 hours. The McGill-Queen's University Press is to be congratulated on the choice of paper, type and layout.

As the preface of this book indicates, it is an introduction to environmental damage and control in Canada and is to be followed by a series of specialized monographs by wellknown Canadians with Dr. Dunbar acting as general editor. I can but hope that the other authors will have the good sense to keep their environmental contributions similarly short and that the McGill-Queen's University Press will have the good sense to maintain the high standards of production. If together with this the clarity of the presentation can be maintained at the level set by Dr. Dunbar he, his author colleagues and the Canadian Society of Zoologists will have made a major contribution to public understanding of environmental damage and control in Canada.

The book is divided in the traditional way into chapters dealing with the air, fresh water, land and the sea with the author's own special interest in the north given a separate chapter, all tidily sandwiched between an Introduction and a Conclusion. A section on "References" one wishes had been expanded into a bibliography (a reference to the Montreal Star does not goad me to great intellectual vigour). The index is well done and most welcome.

Having been sincerely and thoroughly complimentary let me now express a few disappointments with the present book. I realize that it is far easier to criticize than to write and I also know that the writings of a critic are often more revealing of the character and the shortcomings of the critic than of the author. Let me help this perception by stating first than I am an incurable optimist. Second, I react strongly to ignorance whether it is my own, self-determined or pointed out by my friends, or in others. I see both as a real challenge to continuing education. We can always do better if we have the will and we cannot afford not to be optimistic.

My main disappointment with the book is that Dr. Dunbar did not seize the opportunity really to describe what we mean by an ecosystem in all its beauty and complexity and how a toxic substance injected into such an eco-system from the outside gets caught up and then is manipulated by and reacts on the system. Dr. Dunbar came close to doing this in Chapter 5 on the north but I am afraid that the significance will be seen only by the relatively sophisticated whereas with the author's beautiful command of the English language I am sure he could have done the complete job well for the general reader.

Another general omission, but of less importance, is any admonition of people who still feel that man stands on top of his world aloof from the workings of the eco-systems and through the magic of the technological fix can accomplish anything he wants at any time. There are too many of these egocentrics and I wish the author had admonished them and told them to go and talk to a black fly or a mosquito to see if they saw humans in quite that exalted a role.

The book tends to be a collection of horror stories. I wish it had had a bit more cohesion. If Dr. Dunbar has chosen this technique more or less to awaken his readers with a charge of buckshot to prepare them for the later books in the series, then I hope he will close the series with another book of his own where he presents the synthesis that we find in nature rather than the disconnected highlights of our environmental stupidity.

The first chapter is a good introduction and fails only when the author engages in special pleading for the ecologist, as he does on page 5 and again on page 6. I really do not think that the life scientists have much to fear from the economists, the physicists or the chemists. University enrolments certainly point to the popularity of biology among the students, and the establishment of various environmental entities at the federal, provincial and municipal levels shows that what is necessary is that the ecologist speak with authority, not with apology.

The author makes a good point, which incidentally should be read and pondered by members of the Sierra Club, when he states on page 7, "Cooperation is essential; we should at all costs avoid the 'we' and 'they' attitude. It is not a question of setting up the battle-lines but of assuring continuing industrial development together with the maintenance of our environment."

Chapter 2, on The Air We Breathe, is disappointingly short, identifies water as an atmospheric pollutant without qualification, but is otherwise good.

Chapter 3, River and Lake, deals at considerable length with the South Indian Lake controversy in Manitoba but curiously omits mention of the change of government at the

critical time which provided the political opportunity for a major reassessment and of David Cass-Beggs who wrote the report which provided the alternatives and staved to give them effect. I quarrel with the author on only two points, both on page 29, where he says that "... (and Canada is one rare country which would benefit rather than suffer from more people) . . .", and that the cooling water of nuclear power plants will always be a problem. With regard to the former I would suggest we already have a population problem; we just happen to call it unemployment. The fantastic rate of growth of our labour force is not an inconsequential factor in this problem. With regard to the latter I think it remains entirely unproven that the retreat of the glaciers at the present point in time of our long scale climatic changes is producing optimum temperatures for all our fresh and salt water in and surrounding Canada. I am sure that there are many marginal eco-systems figuratively hanging on by their eyebrows in a hostile environment which would welcome a little more heat injected into their systems. What we have to do is complete our ecological homework before we commission the engineers to start building.

In Chapter 4, Forest, Field and Mountain, on page 37 the author infers that man is responsible for all the erosion. I wish he had taken another sentence to put man-made erosions in the perspective of what has been going on during the whole course of geological time.

On page 46, where the author deals with roadside spraying of weedkillers and defoliants, I do not know where he got his information but I really do not believe that such spraying goes on to reduce the extent of drifting snow. By the time the snow blows, the weeds are dead and the deciduous brush has been naturally defoliated by the onset of winter.

Again, on page 57 where the author begins to chastise the operators of provincial parks for permitting industrial development within their boundaries, I wish he had given recognition to the fact that man by the mere setting up of a provincial park initiates a serious intervention with "wilderness" or "natural" conditions. One of the first things that is imposed is a rigid forest fire prevention service and if the park is in the mountains this will ensure that in due course all the winter range for the large mammals will be taken over by trees. The naturally occurring forest fires play a particular role in this regard, and I suggest it is a management decision whether you set fires to restore minimum winter ranges or take the trees out in some other way. However, I agree with the author that there has been a tendency to go far beyond this kind of readjustment.

Chapter 5, dealing with the North is very good and here of course we have the author thoroughly at home talking about his first love. I take issue with him a bit on the statements he makes on page 55 with regard to oil spills. I think the generalizations he makes about the hazards of oil spills in the Arctic being greater than in the temperate zones remain unproven; and in fact the situation is so complicated that I do not think such generalizations are useful. The one spill that has taken place in the Arctic since our Chedabucto Bay operation was in Hudson Strait and there firmly anchored shore ice kept the oil away from the water so that it could be burned. Again the cancellation of Humble Oil's plan to build arctic tankers does not remove the danger of oil fouling the Arctic Ocean, because if the alternative chosen is a pipeline and the pipeline crosses or runs along a major river, a break in the line at a critical point could dump substantial oil into the river and hence into the ocean.

I cannot let the quote from my brother on page 62 go unchallenged. I am all for cleaning up the north as we go along but surely we want to leave a few artifacts around, unless of course one wants to work for the extinction of the archaeologist. Think how dull his life would be had the earlier people in the north cleaned up everything and left without a trace.

I found Chapter 6 dealing with the sea very well done except that the author was too kind with regard to Chedabucto Bay. It should be remembered that before I was appointed and the clean-up started, oil from Chedabucto Bay had moved over 100 miles out into the Atlantic and fouled the shores of Sable Island from end to end with a bird kill of several thousand. The inhabitants of Black Duck Cove in Nova Scotia still have a problem with the Arrow's oil. The Arrow was really a very small tanker compared to the 200,000 to 400,000 ton giants now coming into general use, and yet the world's shipping interests seem determined to resist any form of en route control and the other procedures which have served aviation well and contributed substantially to its considerably better accident-free performance. Ships are still driving down the wrong side of the road in the English Channel. One would almost conclude that the shipping companies were determined to maintain their record as the most accident prone form of international transportation.

Finally in Chapter 7, Conclusions, I would question the author when he implies that the

solution to our present industrial pollution problems is to apply the management principles of Artemis to the present day. I do not think it is quite as simple as that because the economists in Greek mythology had not developed the GNP deity nor had they forced externalities into the vision of the gods. I feel that now the economists have been caught with their externalities showing. The dumping of wastes over the garden wall into the industrial compound is too simplistic a solution and the economists really have to start thinking about alternatives to the continual worship of the growth of GNP in our society and to examine far more closely than they have up until now the real anatomy of the internalities and externalities so that we, not they, can make some judgements. I love economists but I object when they start telling me how to run my business. However my biases are beginning to show again so let me close by saying that notwithstanding my disappointments and criticisms I recommend this little book to everyone who has good sense, a concern about the environment, and wishes to put the two together. Surely that means all of us.

## P. D. McTaggart-Cowan

ETHNOHISTORY IN SOUTHWESTERN ALASKA AND THE SOUTHERN YUKON: Method and Content. Edited by Margaret Lantis. Studies in Anthropology, 7. Lexington: The University Press of Kentucky, 1970. 5½ x 8¾ inches, 311 pages. \$9.75.

This two-part volume is primarily a compilation of ethnohistory papers which were originally presented at the 1967 annual meeting of the American Society for Ethnohistory held at the University of Kentucky in Lexington. In Part I, after a brief introduction by Lantis on what ethnohistory is, and is not, are four papers by Robert Ackerman, James VanStone, Joan Townsend, and Catharine McClellan which deal with different methods and approaches to cultural problems in northwestern North America. Lantis concludes this part with a short critique of the papers, then, in Part II, she presents her own earlier study of the reconstruction of Aleut social culture based on historic sources.

Ackerman's paper, "Archaeoethnology, ethnoarchaeology, and the problems of past cultural patterning," is an exposition of the rationale and methods he and his associates used and the results they obtained from their combined archaeologic-ethnographic study of Eskimo culture change at Cape Newenham and Goodnews Village, Alaska. He has effectively used the results from these two methods to compare the contemporary culture with the prehistoric culture in the area and has supplemented his findings with additional information from historic reports. He says, "Regarding the methodological approach advanced here, we feel . . . that the ethnographic studies . . . have resulted in the acquisition of a body of data that archaeologists in the Eskimo area and perhaps also in other areas can utilize immediately . . . Furthermore, . . . the discoveries made by the archaeologists can have more meaning to ethnographers" (p. 42).

The next two papers, those of VanStone, "Ethnohistorical research in southwestern Alaska: A methodological perspective," and Townsend, "Tanaina ethnohistory: An example of a method for the study of culture change," share similar methods. Both authors have used the three disciplines of archaeology, ethnography, and ethnohistory in their studies of cultural persistence and change, respectively, for the Eskimos in the Nushagak drainage and the Tanaina Indians at Lake Illiamna. VanStone's paper, however, is primarily a discussion of the philosophy of his work and a discourse on methodology, whereas Townsend's is more didactic and presents a synopsis of Tanaina acculturation.

The final paper in Part I is McClellan's, "Indian stories about the first whites in northwestern America," which presents a rather unique and more esoteric approach to assessing native impressions of the first whites in the Yukon and southeastern Alaska. She has used ethnographic methods to elicit Indian oral traditions about early white contact. In this paper, she focuses primarily upon two problems: 1) to indicate the range of documents with which the native testimonies intermesh, and 2) how a few findings about classification, function, style, and content may relate to their traditional bodies of literature. McClellan has made careful use of exploration reports and other documents to compare native impressions with actual happenings in an attempt better to understand how these Indians have repatterned historic events to fit into their existing framework of oral tradition.

In Part II, the longer portion of the book, Lantis presents her paper, "The Aleut social system, 1750 to 1810 from early historical sources," which she calls the "stuff of ethnohistory." She suggests that the ethnography of Part II "... is seen as a compilation of primary ethnohistorical materials, organized for much readier use by ethnologists than are the original old, often rare publications ... Explanation, where it appears to be needed