dous competence of the Eskimo hunters he accompanied, the odds were not overwhelmingly stacked against the bear: twothirds of those seen were not molested, and the success rate during actual hunts was about fifty per cent. Only one of the eight bears shot was not recovered, and this occurred under somewhat unusual circumstances.

Despite its focus on polar bear hunting, "The Long Hunt" introduces several other cameos of northern living; about a third of the book in fact describes the author's experiences during a series of quick side trips made during this particular visit to the archipelago: to Craig Harbour to hunt seal and walrus, to Cape Sparbo to photograph musk-ox and Dr. Cook's elusive den, and attempts to locate musk-ox near Resolute Bay. Throughout the book Mr. Bruemmer's sense of history transforms otherwise barren locations and strange place-names into people and events long past but nevertheless hauntingly present to the knowing traveller.

There are a few reservations to be made regarding this book, though the few factual errors are of minor importance: for example, Canadian Eskimos do not use the term savssat to describe an opening in the winter sea-ice with trapped whales, nor could the behaviour of whales so trapped near Grise Fiord be accurately described as either frantic or frightful. Although for the most part the prose style is easy and even, the sudden lapses to colloquial idiom or obfuscatory description tended, for this reader at least, to break the smooth rhythm of the author's pen. More disconcerting however, was the typography and printing on high gloss paper, an effect that combined somehow to detract from the pleasure of both text and the truly excellent photographs. The most unfortunate aspect of this book is the price. Many people who would want to own this handsome portfolio might be deterred by the cost, which is all the more regrettable because Mr. Bruemmer has succeeded in presenting a warm and, for the most part, faithful portrait of an important and poorly documented aspect of Eskimo culture: hunting as an art, and the hunter as a person.

Milton M. R. Freeman

## PERMAFROST IN CANADA. By R. J. E. BROWN. Toronto: University of Toronto Press, 1970. 7 x 10 inches, 234 pages. \$12.50.

The phenomenon and problems associated with the existence of permafrost in Canada are considered in clear detail by the author, and are of particular interest to practising engineers, geographers, geologists and others involved in the development of the northern regions. The book is well written and is developed along systematic lines of consideration. In view of the present interest in northern development, the appearance of this book is most timely and valuable. The author has clearly outlined the nature of permafrost, the distribution of both continuous and discontinuous permafrost, and the major problems with regard to buildings, services, transportation and agriculture.

In Chapter One, the nature of permafrost is very well presented. Of particular value is the distribution and occurrence of permafrost in Canada. Such factors as drainage, vegetation, relief, climate etc. on the development of permafrost are considered. The addition of a section on the physiographic regions is most valuable.

Engineering considerations involving permafrost are examined in Chapter Two. An outline of the various methods for field investigation is given, and a very brief discussion of building construction is considered. The discussion on buildings is continued in Chapter Four where again outlines of initial design and types are given. The observation of performance of some representative foundations in different areas is most valuable in view of the lack of proper design and building techniques. The difficulties in generalization for design and construction make it hard to provide a detailed specification and listing of exact engineering problems. The author raises several pertinent questions with regard to the problem of construction in the North.

Services and transportation are considered in Chapters Five and Six. They provide a good review of available methods at present in use together with the performance and feasibility of both services and transport systems. The latter consists primarily of highways, and the detailed treatment of the performance history is most pertinent.

The effect of the presence of permafrost on overall mining activities in northern Canada is considered in Chapter Seven. After considering the problems of agriculture in the Canadian North in Chapter Eight, the author concludes that in the permafrost region, agriculture is only marginal and improvements in the future appear to be minimal. The physical handicaps preclude major development in agriculture.

In Chapter Nine, the author provides a summary of the book itself, highlighting the major problems. The book is well-written and is highly recommended.

Raymond N. Yong