REVIEWS

I sense three reasons why the working group chose not to meet the problems head on. The first is the large number of research units in Canada, probably more than 50, that are already involved in polar research. In nominating one as the future centre of excellence the working party would have incurred the hostility of many others. Secondly, in view of the currently-expressed native sentiment that the north is better left alone without southern intrusions, the group may have felt it untimely to present a unified scheme for northern research that might further strengthen this sentiment. Thirdly, what of the Arctic Institute of North America, which was established by Act of Parliament in 1945 to do the job that might be expected of a National Polar Institute? For one reason or another the Institute has tried to assume this role but failed. Without rescinding the Act there is no legal basis for the establishment of another institution to do the same job. Rescinding of the Act could only be a political embarassment to the Minister of DIAND, and no politician would want it.

The recommendations of the report will disappoint many, and indeed seem no more than a cop-out from a difficult political situation. Like many other Canadian scientists with a polar involvement I would have welcomed a more positive commitment toward a polar institution. If it is politically inexpedient to establish one now, let us aspire to one shortly, after a trial period in which rival institutions, including the Arctic Institute, demonstrate their suitability and weaker ones are eliminated from competition or strengthened by amalgamation. (Gee Tsang, National Water Research Institute, Burlington, Ont., Canada)

ALASKAN BOREAL FOREST ECOLOGY

FOREST ECOSYSTEMS IN THE ALASKAN TAIGA. van Cleve, K., Chapin III, F. S., Flanagan, P. W. Viereck, L. A. and Dyrness, C. T. (editors). 1986. Berlin, Springer-Verlag (Ecological Studies 57). 230p, illustrated, hard cover. ISBN 3-540-96251-4. DM128.

Taiga is a weasel-word, meaning pine forest, wet northern forest, sparsely-timbered forest edge or, as North Americans use it, simply boreal forest. This book, which originated in a conference at the Fairbanks campus of the University of Alaska in June 1983, is about the boreal forest—mostly about the ecology of the forest floor, but including insights into browsing, succession, fire and other aspects relevant to forest management. The book presents 'a synthetic overview of structure and function of taiga forest ecosystems in interior Alaska', in the form of 15 papers by individual or joint authors, grouped in three sections; the lead paper in each introduces the section.

The first section, 'Nature of taiga environment', covers the climate of the taiga; forest ecosystem distribution in the taiga environment; fire in taiga communities; and natural regeneration of trees and tall shrubs. The second, 'Environmental controls over organism activity', covers controls over growth and use of nutrients in taiga trees; nitrogen fixation; the (surprisingly competitive) role of bryophytes in nutrient cycling; and microbial activity and mineral availability on the forest floor. The third section, 'Environmental controls over ecosystem processes', deals with interactions of temperature, moisture and soil chemistry in controlling nutrient cycling and ecosystem development; application to white spruce forest of FORCYTE, a growth and yield model; associations of plants and phytophagus insects; and the effects of browsing on plant succession in the boreal forest. There is a useful index. This is a well-organized book, sensibly planned, of much interest to botanists, ecologists and foresters. (Bernard Stonehouse, Scott Polar Research Institute, Cambridge CB2 1ER.