

of narrative material.

I find nothing wrong with subjecting this material to an analysis of themes, which can then be summarized in such a way as to reveal some central aspects of the culture. It is unclear, however, why, in order to do this, Preston argues, as he does in the last chapter, that there exists an underlying unity in all Cree narratives, and furthermore claims, in an appendix, that the distinction which the Cree themselves make between *atayohkan* 'myths' and *tebaciman* 'stories, news' does not amount to a dichotomy, but rather indicates that the types of narration of events are located on a continuum. For these, as well as for many of his other minor conclusions, the author does produce evidence, which in itself is however often unconvincing. One therefore begins to suspect that he has other reasons for these conclusions, drawn perhaps from his general background knowledge of the culture, rather than those found in the material he quotes.

The major conclusions drawn in the study are that the Cree have a cultural uniformity characterized in part, paradoxically, by a stress on a certain form of individualism; that they place emphasis on the development of competence; and that they have the idea of a love relationship existing ideally between the hunter and his prey. All of these features are both intriguing at first glance and of great help towards an overall appreciation of the Cree. Despite his sensitivity, the author has a tendency to take his narratives too seriously, and to rely too much on one major informant. It is to be hoped that this work will turn out to be in the nature of a progress report by the author in his humanistic quest for a way of making the Cree more familiar to us.

*Adrian Tanner*

**SOILS OF THE POLAR LANDSCAPES.**  
BY JOHN C. F. TEDROW. *New Brunswick, N.J.: Rutgers University Press, 1977. 639 pages, illus. \$60.00*

In this volume, John Tedrow has provided the first comprehensive view of soil conditions across the world's polar lands. Until now, soils of the polar regions have been described primarily in isolated locations and have not been examined from a circumpolar perspective. Thus, most texts about pedology provide a few soil descriptions from cold regions and only generalizations about vast areas of tundra and the lands beyond.

Professor Tedrow has summarized his own investigations of soils in the Arctic and Antarctic over twenty-five years, and has integrated his studies with the most significant findings of other pedologists who have worked in polar regions. The resulting book is a

milepost in the description of soil characteristics and associated landscapes of the cold regions of the earth. Moreover, it provides a major point of departure for refining concepts of soil genesis and classification for these areas.

The pattern of soils on the polar landscapes that emerges is one of considerable pedological variety. Although major genetic soil characteristics permit the identification of a tundra soil zone, a subpolar desert zone and a polar desert in the Arctic, and a polar desert zone and a cold desert zone in the Antarctic, soils within these zones are complicated by variations in the lithology of geological materials, differences in the age of land surfaces, variations in soil drainage, and local or widespread accumulations of salts. In addition, the characteristics of polar soils are further complicated by features normally absent in other regions: permafrost, ground ice, solifluction, frost phenomena and patterned ground.

Through an organizational framework developed in the first portion of the book, each of these factors is described and illustrated with soils from arctic Alaska, northern Canada, Greenland, Norden, northern U.S.S.R., Antarctic and selected alpine locations. Discussions of soils in the field are frequently supplemented with micro-morphological descriptions and mineralogical and chemical data.

It is interesting to note that the problem of separating the influence of climate and land-surface age on the genesis of soils is a significant pedological question in the polar regions, as it is elsewhere. This problem is specifically illustrated by the strongly-weathered reddish-yellow soils of Banks Island, Canada — soils that appear out of place in the polar environment. In addition, the distribution of soil-forming materials may complicate the regional pattern of soils in polar areas. In certain locations, aeolian sediments dominated by silt and clay appear to inhibit the development of strongly-leached mineral soil horizons that would be expected under the acid, organic surface layers of the northern forests and tundra.

Perhaps the most significant contribution of this volume is the assembly under one cover of information about polar soils and their circumpolar distribution. This perspective provides the first step in interpreting the similarities and differences in soil behaviour from one polar area to another.

Professor Tedrow's book is the major reference for future studies of the pedology of polar soils. It belongs in the libraries of polar scientists and in the duffle bags of those who study the soils of polar landscapes in the field.

*James V. Drew*