bring readers up to the present with respect to land use planning and the issues with which it is associated. For those with longer involvements in northern affairs, it brings together a diversity of views of land use planning not found elsewhere.

The editors have succeeded quite well in elucidating both the development of land use planning and the issues that are raised by such an initiative.

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FACTORS INFLUENCING KAMIK PRODUCTION IN ARCTIC BAY, NORTHWEST TERRITORIES. By JILL E. OAKES. Mercury Series, Canadian Ethnology Service Paper No. 107. Ottawa: National Museums of Canada, 1987. 54 p., illus., photos. Softbound. Cdn$4.00.

During the recent Canadian International Fur Fair in Montreal, fashion writer Iona Monahan wrote an unusually enthusiastic column. She urged furriers to visit the McCord Museum's new exhibit: "Ivalu — Traditions of Inuit Clothing." The Inuit, she wrote, "were centuries ahead in fur and skin design" (*Gazette*, 26 April 1988).

As examples of Inuit fur savvy, Monahan cites the use of dropped shoulders and other techniques to move seams away from areas of stress. Designs incorporated natural qualities of the fur — head skin for hoods, supple shoulder and back fur to cover human shoulders, rumps for trousers and tough leg skins to make mitts and boots. Tight stitching kept out wind and water. Current fashion techniques like the alternation of dark and light colours or fur worked in decorative mosaics were developed by Inuit seamstresses long ago.

Jill Oakes's detailed monograph on skin boot production today in one northern Baffin Island community shows that the survival and evolution of traditional design and handicraft skills are influenced by a complex web of social, economic and environment factors.

The resettlement of Inuit in larger communities thirty years ago and the availability of alternative footwear from the outside have reduced the need for, and sometimes the suitability of, kamiks. Meanwhile, changing lifestyles and the possibility of wage employment redefine the significance of time as a "cost" in the production (and maintenance) of traditional clothing. In Arctic Bay, resettlement marks a clear turning point:

> Women ten years or older at the time of this major change in lifestyles, remain active kamik sewers today. Younger females have grown up with little interest in kamik production skills [p. 49].

The factors at play behind this deceptively simple statement are, as Oakes shows, often ambiguous. The influence of Catholic and Anglican missions brings skin preparation and sewing to a halt on Sundays. But Christmas and Easter have become occasions for the production and wearing of new kamiks. More significantly, resettlement changed the channels through which skills are transmitted:

> Traditionally, girls were taught to sew by their mothers or grandmothers. . . . Steps were demonstrated and handed to the student to try. When the student ran into difficulty the teacher would work over the difficult portion and pass it back to the student. Consequently, the first kamik was made well enough to be worn. Today, girls are taught in a course called "Culture" at school. . . . The first pair of kamiks often contain many errors and are generally thrown into the garbage. Rarely does the student attempt a second pair [p. 47].

Oakes has an advantage over earlier observers since she actually sewed with the women whose skills she documents. Her admiration for their work is apparent when she describes the subtle art of using the wearer's "hand-span" to develop kamik patterns or the painstaking techniques of waterproof stitching. She comments insightfully on why more difficult techniques are sometimes avoided by individual sewers.

While threatened, traditional crafts demonstrate tenacious adaptability. Sections of formica counter tops discarded after installing modern sinks are salvaged as scraping boards for cleaning sealskins. We also learn that extra-soft, creamy-white leather may be produced by smearing pelts with "Mr. Clean." (Ad agencies take note.)

Oakes's hands-on approach results in some interesting exchanges. Younger women, she finds, fear that chewing seal hides (to prepare them for kamik production) might damage their teeth. Oakes's use of a wringer washing machine to soften soles (a technique she learned from a woman from Chesterfield Inlet) is watched with keen interest.

Another process developed by her friend in Chesterfield Inlet is revealed with the sympathetic and understated humour that pops up here and there to brighten what could easily have become a comprehensive but lifeless report:

> Once the skin is pliable she dips it into a bowl of warm water mixed with a bit of salt and dish detergent, rubs the skin with lard or goose fat, wraps it in a plastic bag and puts it under a sofa cushion overnight. It is not certain why this is done [p. 34].

When all is said, making kamiks is hard work — physically difficult, time-consuming and requiring considerable skill. Meanwhile, the hunting culture in which it played such an important role is under siege by forces still largely beyond Inuit control. In Arctic Bay, for example,

> The Nanisivick mine ships lead and zinc in early June, six to eight weeks before the ice normally breaks up. Early shipping speeds up the annual ice break-up, disrupting floe-edge hunting of narwhales and seals. . . . Shortened ice hunting seasons reduce the need for kamiks to protect hunters' feet and reduce the number and variety of skins returned to sewers [p. 46].

The ability of Inuit across the Arctic to finance their hunting activities has, meanwhile, been seriously eroded by the recent collapse of world markets for sealskins, orchestrated by "animal-rights" campaigners.

The future for traditional crafts in this context is uncertain. Oakes notes that in the late 1950s and early 1960s women began using nylon fabric for the upper portion of kamiks, to reduce their use of sealskins, which were then selling for high prices in the international market. The drop in prices after the first wave of anti-sealing protests, in 1964, resulted in a return to sealskin uppers for kamiks. Today, "more time and materials are used to create exquisitely hand crafted kamiks" (p. 48).

Still, Oakes ends her book with a plea for more research in the fields of Inuit skin preparation, design and construction of all types of skin clothing, which "must be documented before they are forgotten." Her own contribution to this recording effort will no doubt be appreciated by ethnologists, northern educators and museum curators, as suggested in her abstract.

For less specialized readers (like this reviewer), Oakes's book suggests a different order of question: are the skills she describes necessarily doomed to the dustbin of history?

To someone raised close to the Montreal fur-garment manufacturing industry, Oakes's description of the knowledge, skill and sensitivity with which Inuit women handle and sew furs sounds a familiar chord. Greenlanders are now successfully producing and marketing their own sealskin garments. With the craft skills that Canadian Inuit women obviously possess, surely some similar project could be initiated on Baffin Island?

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POSTGLACIAL VEGETATION OF CANADA. By J.C. RITCHIE. New York: Cambridge University Press, 1987. 151 p., appendix, refs., index. Hardbound. US$70.00.

J.C. Ritchie has, in his usual clear, concise and comprehensive manner, produced a book that will be an asset for all those involved in

Quaternary palaeoecology in Canada, and indeed, for many other disciplines and areas as well. Only a person of Ritchie's capabilities could undertake a project such as the postglacial history of vegetation of this large and diverse area and successfully present such a comprehensive review. Prior to my reading this volume, if anyone had claimed that the postglacial vegetation of Canada could be documented in 151 pages, I would not have believed it. Although Ritchie apologizes for not being able to cover all aspects of the postglacial vegetation in detail, he has dealt with most topics at least to the degree that the interested reader can follow up on the subject guided by the many references cited.

Ritchie outlines at the beginning a threefold aim for the book, which he then proceeds to accomplish. The first aim, "to assemble information on the history of the plant cover of Canada for the latest part of the Quaternary — during and following the most recent major ice age," is accomplished by, if nothing else, the extensive bibliography. The second aim, "to search for patterns of vegetation change and to evaluate such alternative explanations of these changes as climatic factors, varied rates of species spread from Pleistocene refugia, biological factors that may have controlled the spread and abundance of species, soil and geomorphological factors, chance events, and other influences," is achieved to the extent to which the available data allow. A third aim, "to expose interesting, useful, and challenging problems in paleoecology that might be solved by imaginatively designed searches for new data or novel analyses of the existing record," is addressed by the number and variety of problems that are proposed and discussed.

The contents are arranged in eight chapters. The introduction acquaints the reader with the central thrust of the book by referring to glacial extent, ecological provinces and geographical range maps of important floristic elements, plus the terms and abbreviations used throughout the book.

Chapters 2 and 3 deal with the pertinent background information on the biogeographical setting and autecology and pollen representation, some knowledge of which is necessary, especially for readers not directly involved in palaeoecological studies. The sections on geology, physiography and surface materials are minimal, but the reader is referred to other authors for details. Bioclimates are dealt with somewhat more extensively, and the figure with climate diagrams surrounding the map depicting bioclimatic regions is a particularly useful and concise method of presenting data. Autecology of selected representative taxa and modern pollen rain spectra are also required information for both the specialist and the interested reader.

The following four chapters deal directly with the fossil record, beginning with the records at sites from full-glacial refugia south of the main ice sheets and in Beringia. The fossil record is primarily pollen stratigraphy, not simply because Ritchie is a palynologist, but because most of the data are palynological. Where available, Ritchie uses other types of data, such as plant macrofossil and beetle analyses, to augment the pollen results.

The record for eastern Canada is outlined in Chapter 5, with diagrams representative of various areas, followed by the vegetation reconstructions proposed by the authors involved. A breakdown into late glacial and Holocene time intervals and smaller geographical regions allows for a well-organized presentation.

A similar format is followed for the western interior (Chapter 6), but subdivision of this region is based on the modern forest-grassland transition, boreal forest and forest-tundra boundary areas. Descriptions of the Pacific-Cordilleran region (Chapter 7) revert to geographical areas of North and South Pacific and Cordilleran zones.

In the introduction to Chapter 8 on vegetation reconstruction and palaeoenvironments, Ritchie notes two questions that emerge from his review: (1) What reconstructions of past vegetation can be made and with what degrees of certainty? (2) What palaeoenvironmental changes can be inferred from the record? Answering such questions is the ultimate *raison d'être* for palaeoecologists, and this final chapter addresses these questions in discussions of the origins and history of the major Canadian vegetation regions: the eastern temperate forests, boreal forest, grasslands and parklands, Pacific-Cordilleran complex, and tundra (arctic). The roles of climate (including a brief review of the Milankovitch model), fire, pathogens and paludification as palaeoenvironmental controls on vegetation history are discussed. The section "Problems for the Future," although brief, raises important and significant points, and careful reading of this section will provide direction and themes for future studies. Ritchie's cautionary note at the end of this section that "the progress of palaeoecology remains dependent on the adequacy of its database" is worth emphasizing. As he points out, computers and numerical methods cannot replace the long and careful analyses required for a quality database. An appendix of sites used for modern pollen spectra, an extensive reference list and an index round out the book.

The quality of reproduction, especially the figures, is excellent. A few minor editing errors were noted, but these are too few to detract from the text. A small point concerning the term Champlain Sea on page 68 should be noted. Champlain Sea was the body of water that occupied the depressed Ottawa-St. Lawrence Valley above Quebec City following deglaciation. The submerged area of the St. Lawrence Estuary and Gulf of St. Lawrence below Quebec City is termed the Goldthwait Sea.

Ritchie states that "the book was written for a heterogeneous readership of fairly broad background," with his chief aim being "to interest ecologists, physical geographers, geologists, foresters, archaeologists, soil scientists, and historians." In my opinion, this has been accomplished, and this book should become a standard reference for all workers grouped together as Quaternarists. It will be a must for students of palaeoecology (despite the fairly high cost), and I have no doubt that it will provide more than just "something of interest" to "the small band of active palaeoecologists" in Canada.

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CONTEMPORARY INUIT DRAWINGS. By MARION E. JACKSON and JUDITH M. NASBY. Guelph, Ontario: Macdonald Steward Art Centre, 1987. 144 p., 12 colour inserts, 96 black and white reproductions. Softbound. Cdn$15.00.

This volume is a catalogue of an exhibition of drawings, 83 in number, by selected contemporary Canadian Inuit artists. Most of the drawings came from the Omark Collection of Inuit Art, though some were loaned by others. In 1987, the exhibit received the Corporate Award of Merit from the Ontario Association of Art Galleries. The drawings were selected from archival collections, of which Cape Dorset alone has 10,000 (Nasby, Introduction, p. 2).

Twelve drawings are illustrated in colour, representing eleven artists. Of the twelve drawings, seven are untitled, but the catalogue compilers provide an exegesis in parenthesis, such as "Standing Woman in Amautiq" or "Fishing Scene." Three illustrations are numbered by plate, the rest apparently by the number in the exhibit itself. The colour reproductions are followed by an introduction by Judith M. Nasby and two articles, "Contemporary Inuit Drawings: Reflections of an Art Historian," by Marion E. Jackson, and "Reflections of an Anthropologist. Inuit Drawings: The Graphics behind the Graphics," by Nelson H.H. Graburn. Beginning with p. 32, all objects in the exhibit are listed and illustrated in black and white, beginning with 3 carved (incised) ivory, bone, and antler objects (one of each) apparently intended to illustrate Inuit representational traditions in the flat used prior to the introduction in the late 1940s of drawing on paper. The artists are identified by gender — "male," "female" — and by age (birthdates when known are given). The accompanying captions contain information on the artist and thematic content and supplemented by the curators' instructions to the viewer how and what to see in any given drawing. Figures 2 and 3 illustrate the impact of an outsider's activity