

Yellowknife (and other settlements) only appears on the third map. I think this information should have been provided earlier for the reader unfamiliar with the area. The text is end-noted throughout; these end-notes are cross-linked to the reference list. The book is well-produced with very few typos. At only \$20.00, it represents extremely good value for money.

Bastedo writes in a simple, straightforward style that should be easy to follow for readers unfamiliar with the subjects discussed. For the most part, Bastedo manages to avoid technical jargon and where he uses specific terms, he does explain them.

Bastedo writes particularly well when describing his own experiences.

As are many potential readers of this book, Bastedo is a southern transplant to the taiga shield. If you are contemplating a visit to Yellowknife or if you are living in the region already, this book will serve as a good introduction to the fascinating Canadian landscape around you.

ALWYNNE B. BEAUDOIN

Provincial Museum of Alberta, 12845-102nd Avenue,
Edmonton, Alberta T5N 0M6

Large-Scale Ecology and Conservation Biology

Edited by P. J. Edwards, R. M. May, and N. R. Webb.
1994. Blackwell Scientific Publications, Cambridge,
Massachusetts. 375 pp., illus. Cloth U.S. \$75; paper
U.S. \$29.95.

Large-Scale Ecology and Conservation is a collection of selected papers from the 35th annual symposium of the British Ecological Society. The symposium, and one assumes the book, had three objectives. "The first was to examine the nature of large-scale ecological processes, and the adequacy of ecological concepts and models to describe and understand these processes. The second . . . was concerned with practical problems of working at a large scale, and with special tools. . . . Finally, the social, economic, and political issues associated with the application of ecological ideas in decision making and policy were also considered." The editors arranged the chapters in much the same order the objectives were listed.

All papers were technical in nature and mostly based on studies undertaken by the authors of the

individual papers. As a result the book provided a great deal of detail of methods used for collection, analysis, and presentation. Most authors made a point of mentioning potential future utilizations of techniques and information provided with an emphasis towards conservation biology. The final chapter had a message which is not new to ecology or the sciences as a whole. In this chapter the author stated scientists need to greatly improve their communication skills.

The book provided a good description of research and issues in large-scale ecology and how the knowledge can be applied to problems found in the field of conservation biology. The book met all objectives. I would recommend *Large-Scale Ecology and Conservation Biology* to those in, and interested in, the conservation and resource management fields of study and application.

M. P. SCHELLENBERG

434 4th Avenue SE, Swift Current, Saskatchewan S9H 3M1

Biodiversity in British Columbia: Our Changing Environment

Edited by Lee E. Harding and Emily McCallum.
1994. Environment Canada: Canadian Wildlife Service,
Pacific and Yukon Region, Vancouver. 426 pp., illus.
\$29.95 in Canada; U.S. \$29.95 elsewhere.

This book should be welcomed by all British Columbia naturalists. The heart of the book is Part II: Species Diversity. Its 14 chapters give authoritative accounts of the current status in British Columbia of the whole realm of living organisms visible to the naked eye. The topics (authors, names in parentheses) are terrestrial and freshwater invertebrates (Syd Cannings); butterflies and moths (Guppy and Shepard); marine invertebrates (Lambert);

Bryophytes (Schofield); lichens (Goward); macrofungi (Redhead); vascular plants (Roemer, Straley, and Douglas); seaweeds (Hawkes); reptiles (Orchard); amphibians (Orchard); freshwater fish (Peden); mammals (Nagorsen); birds (Dick Cannings); exotic species (Harding et al.) The last seems, at first thought, out of place but it is not. People should know which species should count as *non-species* when biodiversity is being assessed. The notion that weed species should be included in the calculation of biodiversity on the grounds that to exclude them is, somehow, "unscientific" needs to be exposed as preposterous.

The chapters listed above emphasize, as they should, rare, vulnerable, threatened, and endangered species, and their conservation. Conservation and biodiversity are, of course, inextricably bound. No doubt it is too late to abolish the ambiguous word *biodiversity* whose very existence is harming the cause of conservation because a few naïve ecologists have it muddled with *diversity*. The latter is a statistical parameter, invented in the 1940s, to aid the study of taxonomically restricted groups of species in small, homogeneous environments; it has nothing to do with conservation. The newer word, *biodiversity*, applies to the totality of living species in the whole world, and does have to do with conservation, that is, with the prevention of species being inadvertently driven to extinction by human action. The similarity of the words, and the sloppy abbreviation *diversity* for *biodiversity* perpetuates the misunderstanding; it is used in the titles of two of this book's parts and four of its chapters.

The book contains much else of interest. In Part I,

Rowe writes a philosophical introductory chapter. Harcombe et al. deal with conservation terminology, explaining *red lists* and *blue lists*, and defining such terms as *vulnerable*, *threatened*, and *endangered*. Miller and Scudder explain the complexities of taxonomic nomenclature.

Parts III and IV, titled, respectively, "Ecosystem Diversity" (that word again!) and "Prospects for the Future" contain interesting "discussion" chapters, providing food for thought and argument. A conclusion I disagree with strongly is the editors', on page 236. Writing of declining caribou numbers, they say: "loss of old growth forest to timber harvest is permanent because [of the length of] planned harvest rotation periods . . ." Why *permanent*? Surely books such as this provide both the background information and the motive for abolishing unacceptable past practices.

E. C. PIELOU

Denman Island, British Columbia V0R 1T0

Principles of Conservation Biology

By Gary K. Meffe and C. Ronald Carroll. 1994. Sinauer Associates, Sunderland, 600 pp. U.S. \$46.95.

Although they pursue similar objectives, applied ecologists and wildlife managers have generally worked in parallel, with little understanding of each other's methods and priorities. The discipline of conservation biology has contributed to the establishment of links between the traditionally theoretical perspectives of ecology and the applied traditions of forest and wildlife management. Conservation biology is a rapidly growing discipline, with its own scientific journals and now its own textbooks. The appearance of conservation biology courses in biology curricula is a sure sign of its increasing impact. Meffe and Carroll have compiled a comprehensive textbook to assist university professors in teaching this new discipline. The book is also accessible to naturalists interested in the concepts upon which conservation biology is based.

The book is divided into four sections: (1) introductory concepts, (2) population-level and (3) system-level theory, and (4) applications of conservation biology in land use and species management. In each chapter, essays by guest authors inform the reader on specific case studies, socio-economic issues or broad societal debates stemming logically from the subject-matter. Chapters end with discussion questions and an annotated list of suggested readings. The book also includes a fairly complete glossary of technical terms.

The authors have surrounded themselves with twelve guest contributors who provide a more in-

depth treatment of specific areas. The tone of the book is decidedly holistic. The authors adopt a multidisciplinary perspective, tracing the philosophical issues that led to the development of conservation values and ethics. They discuss at length the interactions between ecological and socio-economic issues related to themes such as biodiversity conservation, nature-reserve design, policymaking, and global environmental change.

Meffe and Carroll provide a very thorough review of current issues such as policy implications of hybridization, spatially-explicit modelling of population dynamics, and the reestablishment of connectivity among nature reserves. However, several chapters could have been improved by a broader geographical perspective. For example, the chapter on ecological restoration ignores recent work conducted in western Europe, notably in the Netherlands, to recreate functional ecosystems. Policy issues are also strongly focused on United States, which is understandable considering that only one of the 14 authors or chapter contributors is based outside the United States. This geographical bias is somewhat offset by the short essays found in each chapter, but the focus does not extend far beyond the Americas. Another weakness involves the illustrations used in the book. The contrast in many of the black-and-white photographs is poor, reducing their effectiveness. However, graphs and maps are generally of high quality.

Advanced biology majors and masters students will greatly benefit from reading this book. It fits



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