

them down. As the controversy involving the African explorations of John Hanning Speke and Richard Francis Burton clearly proved, while the media often act as mythmakers, they are likely as not also to act as mythbreakers.

While Riffenburgh has done an admirable job of depicting the most notable personalities — both journalists and explorers — during a period replete with such larger than life figures, if this thoroughly researched book has one principal character it is James Gordon Bennett Jr, the proprietor of *The New York Herald* and its European twin, the Paris edition of *The New York Herald* (today known as the *International Herald Tribune*). As *The myth of the explorer* makes abundantly clear, Bennett, who was as shrewd a judge of talent as any who ever owned a newspaper, became the godfather of sponsored exploration. In the process, seemingly interchangeable *Herald* correspondents, such as Henry Morton Stanley, Januarius A. MacGahan, and William Henry Gilder, became household names, and Bennett, who already enjoyed the benefits of his father's wealth, became even wealthier.

The author correctly credits Bennett with feeding the public's appetite for adventure and exploration, be it sub-Saharan or polar, a fact that led to the birth of a great many Bennett-like clones throughout America and England. Such success, of course, engendered a great deal of jealousy from his competitors, who, besides personally attacking Bennett and his explorer champions, frequently wound up sponsoring their own explorers — often the very same ones. (Realizing what valuable commodities their bylines were, many explorers, taking their lead from the inconstant Bennett and his colleagues, were not above selling their services to the highest bidder.) Once this cycle began, it became difficult to stop. Indeed, scant years after attacking his first expedition, London's *Daily Telegraph* found the intrepid Stanley in its own employ, feeding it 'the same kind of thrilling accounts he had become famous for at *The New York Herald*' (page 68). As a consequence, says Riffenburgh, newspaper sensationalism became 'an active part of the English press' (page 68).

And so it remains.

The principal virtue of *The myth of the explorer* is that in providing its readers with an understanding of how this journey to the present unfolded, it manages to be both fun and scholarly at the same time. Given its time frame and a focus that appears far more narrow than reality proves it to be, this is quite an accomplishment. (Jonathan Kotler, School of Journalism, University of Southern California, Los Angeles, CA 90089-1695, USA.)

CONFRONTING CLIMATE CHANGE: RISKS, IMPLICATIONS AND RESPONSES. Irving M. Mintzer (Editor). 1992. Cambridge: Cambridge University Press. xiv + 381 p, illustrated, soft cover. ISBN 0-521-42109-8. £19.95, US\$34.95.

The recent discovery of greater than expected ozone depletion over mid-northern latitudes has once again demonstrated that we still have much to learn concerning the

behaviour of ozone and polluting gases in the atmosphere. This should act as a warning that there will be surprises to come as the much more complex story of greenhouse-gas-induced climate change unfolds. If we are to be prepared for these surprises, then we need a thorough understanding of the underlying science and the political implications. *Confronting climate change* attempts to provide some of this understanding.

Mintzer has assembled 23 papers by scientists, economists, politicians, and diplomats stemming from a conference organised by the Stockholm Environment Institute. With more than 350 A4 pages, the book is a solid read, and I doubt if many individuals will manage to read it in its entirety. The book is divided into five sections, beginning with an overview by the Editor. The first section looks at the observations and models that provide a framework for attempting to detect the signal of a change in the world's climate in the morass of noise created by the weather. Papers in the next section assess some of the likely consequences and impacts of climate change, often focusing on the problems that will affect the Third World. The middle section looks at energy and ways to use it more efficiently in order to reduce greenhouse-gas emissions. The concluding sections look at some of the economics and politics that will be involved in taking any significant action and the necessary dialogue and cooperation that must take place between the developed world and the Third World. A final chapter gives a glossary of some of the terms encountered in the book. The editor begins each chapter with a laudatory overview and introduction of the author.

I was initially rather put off from treating the book seriously, because the first chapter includes remarks such as '...nothing definite can yet be proven about future climate change — but something makes the changes feel different this time.' Not very scientific. However, the following chapters not only provide a sound overview of the doubts and uncertainties in observing and detecting any change in climate, but also make it quite clear that change will come. It is up to us to decide if we want to adopt the 'wait and see' policy, and hope that any change is not too bad, or to take up a 'no regrets' policy that may actually bring economic benefit even if any change is small.

The chapters focusing on the political implications of climate change often give a very different viewpoint to those of the scientist working in the field. Burning a gallon of petrol to give 19 lb of CO₂ seems very much worse than a 0.5% per annum rise in atmospheric CO₂ concentration. Maybe this is how the NGOs should focus attention on the problems of climate change — by putting them into a human context. For many Third World countries, even those likely to be adversely affected by climate change, it is more important to address the issue of expanding population than a rising sea-level. The developed world must also show that it is taking the issues seriously. A casual look from space at the brightly lit cities on the nightside of our planet shows that so far there is little real interest in energy conservation.

The glossary is written *for* non-specialists, and, unfortunately, seems to have been written *by* non-specialists, who, *inter alia*, have no knowledge of Latin. We have glaciers forming in Ireland during the Little Ice Age, confusion between ions and radicals, a curious derivation of insolation, the implication that all trace gases are radiatively active, and many others. This spoils what would otherwise be a very useful concluding chapter.

I found the book to be a beneficial read, giving me a fresh viewpoint from those involved with climate change on the economic and political side. I would recommend it as a source that can give scientists a picture of the human side of climate change and that can give economists and politicians a balanced view of the current state of scientific understanding. (Jonathan Shanklin, British Antarctic Survey, High Cross, Madingley Road, Cambridge CB3 0ET.)

ARCTIC WARS, ANIMAL RIGHTS, ENDANGERED PEOPLES. Finn Lynge. 1993. Hanover, NH, and London: University Press of New England. xiv + 118 p, illustrated, hard cover. ISBN 0-87451-588-2. US\$16.95.

During the 1970s, Inuit watched from a distance as animal-rights groups waged an aggressive campaign to stop the commercial harvest of harp seals on the east coast of Canada. In 1983 the European Community banned the import of skins from harp and hooded seals for two years. The ban was extended in 1985, and in 1989 the boycott of sealskins was extended indefinitely. Virtually overnight, the single most important source of income for many Inuit disappeared — with a devastating impact on their economy and culture. The animal-rights groups then turned to other issues, such as trapping and the harvest of whales.

As aptly stated in the foreword, this rather slim volume is a passionate book by a passionate advocate of environmental protection and the rights of indigenous people. The author contends that the animal-rights movement reflects the growing alienation of urban dwellers from the realities of nature. The introductory section contrasts the traditions and values of hunting cultures with those of urban societies. The next three chapters examine specific examples — the Newfoundland seal hunt, commercial whaling, and the anti-trapping movement — of animal-rights groups infringing on the culture and economy of northern hunting societies. The final chapter explores the implications of these developments and the possibility of reconciling these opposing views.

The author presents a northern aboriginal perspective on hunting, and attempts to redress the misinformation and misunderstanding of aboriginal cultures that he feels have been fostered by animal-rights groups. He analyses the history of each anti-hunting movement and describes the political and public relations tactics used to advance their agendas. The moral and ethical arguments expounded by the animal-rights groups are effectively rebutted, and a number of Inuit myths and traditions are presented to demonstrate their respect for the animals that they harvest. The author argues for a similar respect among human beings and a rejection of the cultural imperialism inherent

in the animal-rights movement. His arguments are presented in a simple, straight-forward manner that will be understood by a wide audience.

Although the author presents a good case in philosophical terms, it could be strengthened by discussing the impact of animal rights in tangible terms. Animal-rights groups have argued that commercial aspects of hunting are not consistent with a subsistence lifestyle. Hunting and culture are largely synonymous in northern aboriginal societies. Money earned from the sale of seal skins, as a by-product of the hunt, allowed Inuit hunters to purchase the equipment and supplies required to maintain their subsistence culture. If Inuit cannot afford to hunt, how can they afford the much more expensive and nutritionally inferior foodstuffs from southern origins? This book is a welcome addition to the debate about animal rights — and aboriginal rights — from a perspective that is all too often overlooked. (Kevin J. McCormick, Canadian Wildlife Service, Box 637, Yellowknife, NWT X1A 2N5, Canada.)

CLIMATE SYSTEM MODELING. Kevin E. Trenberth (Editor). 1992. Cambridge: Cambridge University Press. xxix + 788 p, illustrated, hard cover. ISBN 0-521-43231-6. £35.00.

The widespread ramifications of human activities impacting the global environment necessitate improved understanding of the workings of the global climate system, encompassing the atmosphere, ocean, cryosphere, biosphere, and biogeochemical cycles. Up to now, such topics have been treated either in specialist reviews or popular works. Kevin Trenberth, deputy director of the Climate and Global Dynamics Division at the National Center for Atmospheric Research in Boulder, Colorado, has coordinated the contributions of 27 leading specialists to document the state of knowledge about the components of the climate system, their modeling, and future research directions. The book is aimed primarily at an academic, graduate-level audience, but secondarily at scientists who are addressing issues arising from the environmental and societal impacts of climate change.

The book is divided into six parts. Following an introductory section on climate modeling and human effects on the climate system, Part 2 contains six chapters on system components (atmosphere, ocean, land, terrestrial ecosystems, atmospheric chemistry, and marine biogeochemistry), detailing the physical principles underlying the processes within each system and their interactions. Eight chapters in Part 3 treat parallel aspects of modeling the component processes; Part 4 has two chapters on coupled atmosphere–ocean models; Part 5 (four chapters) presents the applications of models in analysing past, present, and future changes in the climate system; and there is a final chapter (Part 6) on modeling prospects. There is an extensive combined reference list and a subject index.

The subjects treated have an impressively wide scope, as illustrated by a scan of the diversity of terms in the index. Many of the chapters provide excellent, up-to-date ac-