

The World's Protected Areas: Status, Values, and Prospects in the Twenty-First Century.

Author: McNeely, Jeffrey A.

Source: BioScience, 59(7): 623-624

Published By: American Institute of Biological Sciences

URL: https://doi.org/10.1525/bio.2009.59.7.14

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

But make no mistake: this book takes no prisoners. It will be a challenging read for many who are directly involved in this field of research. It may be daunting enough even to dissuade potential students from the notion that studying vertebrate social structures is a pretty neat idea (especially if megafauna, oceans, and sailboats are not on the menu). I suspect I'm not alone in wishing while reading the book that I'd paid more attention during math and stats courses. But Analyzing Animal Societies will amply reward those who take up its challenge. Contrary to the publisher's blurb on the back cover, this book will not give studies of vertebrate social behavior a "kind of quality standard." It will do something far more important: it will give much needed quantitative insights into vertebrate social structures. In so doing, it will help the field to move on from the use of qualitative descriptive labels, such as the ubiquitous (and therefore ultimately unhelpful) phrase "complex fission-fusion societies." I hope many readers are motivated to take up the challenge.

PETER McGREGOR Peter McGregor (e-mail: peter.mcgregor@cornwall.ac.uk) is a reader in applied zoology at Cornwall College Newquay in the United Kingdom.

DOES NATURE STAND A CHANCE IN A HUMAN-DOMINATED WORLD?

The World's Protected Areas: Status, Values, and Prospects in the Twenty-first Century. Stuart Chape, Mark D. Spalding, and Martin D. Jenkins, eds. University of California Press, 2008. 376 pp., illus. \$54.95 (ISBN 9780520246607 cloth).

With more than 100,000 protected areas now covering nearly 12 percent of Earth's land surface, it is timely

doi:10.1525/bio.2009.59.7.14

to have an overview of how protected areas are doing, what the geographical variations may be, and what challenges remain. The World's Protected Areas: Status, Values, and Prospects in the Twenty-first Century intends to provide such a global overview. Its three editors, all of whom have been associated with the World Conservation Monitoring Centre in the United Kingdom at one time or another, draw on expertise from all parts of the world to give the book outstanding authority. The book provides an authoritative perspective on the numbers, extent, and types of protected areas. It also offers an introduction to the multiple approaches to managing protected areas in various parts of the world, examines the critical role of protected areas in conserving global biodiversity, and gives a reasonable indication of where gaps remain in the global network of protected areas (especially in the marine environment).

Even though these numerous areas are under legal protection, virtually all of them face significant threats, including human settlement and incursion, changes in fire regime, the development of infrastructure such as dams and roads, the growth of tourism and recreation (very much a mixed blessing), resource extraction (from mining operations and wildlife poaching, e.g.), the impacts of nonnative species, and climate change—one threat that will certainly affect all of the others just enumerated.

The World's Protected Areas reflects the latest thinking about protected-area management, recognizing, for example, the importance of developing more sensitive relationships with people living in and around the protected areas. Indigenous peoples often feel aggrieved when protected areas are established on lands traditionally considered to be their ancestral domain, but some countries are finding ways of ensuring that indigenous peoples earn their fair share of the benefits that accrue from the establishment of protected areas.

The obvious way to respond to the challenges that protected areas face is to improve the effectiveness of management. To this end, the book usefully

examines the various approaches that are being applied around the world, in the marine environment as well as on land. The coverage of all of these topics is relatively brief and presented in language the nonspecialist can easily understand. All of the introductory chapters are well illustrated with photographs, tables, and boxes, making the overall package extremely attractive. The photographs are invariably of very high quality.

As the human population soars toward nine billion and pressures on natural resources intensify, it will become increasingly important to ensure that protected areas are well managed and strongly supported by the general public.

Books like The World's Protected Areas will help to justify the necessary investments.

The second half of the book is devoted to a regional perspective on protected areas, broken down by country or island. Nearly 120 contributors helped to ensure the authority of these regional overviews. Each of these passages tends to be relatively brief, however, and the maps are impressionistic rather than literally accurate—North America, for example, occupies only a single page, and it appears as if most of the western United States is a giant protected area. But the maps also help to illustrate, among other important facts, that many protected areas are located on sensitive national borders, and a large number of protected areas are in biologically rich mountainous terrain. Still, the maps can sometimes be slightly misleading, as in the case of Ukraine: the map seems to indicate that about half of the territory consists of protected areas, while the actual figure is only around 3.5 percent. The fact that this 3.5 percent comprises almost 5200 protected areas suggests that most of those areas are too small to be well mapped at the scale adopted for The World's Protected Areas. It is up to the reader to calculate that Ukraine's protected areas average only about 4.3 square kilometers in area, as the tables cover only land area, total protected area, and total number of sites. It would have been helpful to have such information available as percentage figures for those who want to make comparisons between countries. For example, in contrast to Ukraine, India has just 662 protected areas, but the average area of each is nearly 270 square kilometers.

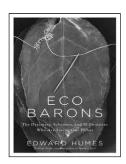
This volume left me with the impression that a monumental effort is being made in many parts of the world to save what remains of wild nature. Compromises between biodiversity conservation goals and pressing human needs are inevitable, but new approaches are being strongly promoted, especially approaches that seek to promote transboundary protected areas and to link protected areas with compatible forms of land use, thereby providing potential migration corridors as climates inevitably change in the future. With more than half of the world's population now living in cities, it is even more important that we conserve samples of wild nature so that people can retain a measure of contact with the world in which our species evolved. As the human population soars toward nine billion and pressures on natural resources intensify, it will become increasingly important to ensure that protected areas are well managed and strongly supported by the general public. Books like The World's Protected Areas will help to justify the necessary investments, though those involved professionally in protected-area management will want more specific advice and maps at a more informative scale. These undoubtedly will become available as a consortium of leading conservation organizations further develops the World Database on Protected Areas.

JEFFREY A. McNEELY
Jeffrey A. McNeely (e-mail:jeffrey.
mcneely@iucn.org) is a chief scientist at
the headquarters office of IUCN, the
International Union for Conservation of
Nature, in Gland, Switzerland.

WHEN MILLIONAIRES AND ZEALOTS SAVE THE PLANET

Eco Barons: The Dreamers, Schemers, and Millionaires Who Are Saving Our Planet. Edward Humes. Harper-Collins, 2009. 384 pp. \$25.99 (ISBN 9780061350290 cloth).

he author of *Eco Barons*: The Dreamers, Schemers, and Millionaires Who Are Saving Our Planet, Edward Humes, is a Pulitzer Prize-winning journalist, nonfiction novelist, and writer-at-large for Los Angeles magazine. In this book he applies his journalistic expertise to the stories of present-day notables who, unlike the robber barons of yesterday, use their wealth and skills to preserve the environment. The topic and content is surprisingly optimistic, given the usual gloom, doom, and panic of most current environmental reports. The book reads easily and has the simplicity and positive outlook of one of those human-interest stories that tend to close airings of local television news, but it also includes facts, figures, and research that heighten its credibility.



The purpose of the book is simple: to highlight a few notable people who have dedicated immense quantities of wealth or time toward the preservation of the environment. The narrative is most heavily weighted toward the exploits of Doug Tompkins, chief executive officer of the fashion brand Esprit during the 1970s and 1980s; he now owns vast swaths of Patagonia (the land, not the brand, although a nexus of all three is detailed in the book). But other eco

doi:10.1525/bio.2009.59.7.15

barons are included too, such as Kieran Suckling and Peter Galvin, who started as lowly owl hooters in the Southwest and then went on to establish the Center for Biological Diversity, which is more or less a little green organization that wields an environmental lawsuit the way that Yoda swings a light saber. Roxanne Quimby amassed her fortune selling natural-products cosmetics under the Burt's Bees brand, sold her interests to Clorox, and now focuses on saving the Maine woods. Andy Frank's electric and hybrid car designs may lead us to better ways of driving. Terry Tamminen, former pool-cleaner turned adviser to Governor Schwarzenegger, positions California to lead the nation in a war on climate change, and the sea turtle fanatic Carole Allen shepherds the Ridley back from the brink. And of course, no book about barons of industry who buy lots of land would be complete without a short chapter on Ted

Eco Barons is most interesting to me for its well-researched figures, good notes, and details of even very current events. Being a scientist, as I suspect most readers of this review are, I am mostly enthralled by the technical solutions to logistical, legal, and economic problems and the facts and figures that suggest, for instance, the conspiratorial delay tactic of the promise of hydrogen. But for someone reading this book out of love for the environment, it is inspiring to read the stories of mavericks who have dedicated their lives and significant sums of money to the protection of wild places and wild things. It's the story of lone wolves and little Davids such as HEART (Help Endangered Animals—Ridley Turtles) and not a tale of the mainstream environmental organizations who are matched in corporate size to the Goliaths they battle.

It's a feel-good book and meant to inspire, like a *Lives of the Saints* for environmentalists, often with the characteristic back story of a misspent and sinful youth that ultimately led to complete conversion and dedication to the Earth. These eco barons have the same religious zeal and are typically, as Humes points out, convinced of their