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the State University of New York at Stony Brook

the suborganismal level
ating the specific causes
ion. Owing to the inher-
ages above the popula-
t measures of change in
tems remain the most
meaningful indicators

Life Sciences & Chemistry,
Hilde, Denmark

THE SOUTHERN OCEAN. *Studies in*

Cambridge University Press,
\$130.00. xiv + 444 p.;
0-521-32211-1. 1994.

contains 18 chapters, an
index. The scope of topics
by a single author. Knox's
experience of the Antarctic
person to attempt such an
opening paragraph of the book
work to synthesize informa-
field. It may be the last
on the Antarctic marine bio-
logy a new, emerging disci-

through the book I was
work attributed to Winston
very length defends itself
to the contrary, I have been
entirely for nearly as long as
the first volume that is complete
an idea of work in areas
with my own, without doing
searches.

with a basic description of the
resources. Chapter lengths
providing support for research.
devoted to *Euphausia superba*, a
epipelagic and mesopelagic
fish, the 72 + species of ceph-
topods in Antarctic waters receive only

an introductory book to the
Antarctica, and will no doubt be
unfortunately, typographical
errors are frequent, and some
All Antarcticans should read
at least, especially Chapters
results of resource exploita-
prevent mistakes of the past.
I also recommend that the
be read first, because in two pages
of early views about Antarctic
followed by 11 major conclu-

sions drawn from the last 30 years of Antarctic
marine research.

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ENVIRONMENTAL SCIENCES

TROPICAL ECOSYSTEMS: A SYNTHESIS OF TROPICAL
ECOLOGY AND CONSERVATION.

*Edited by Mundanthra Balakrishnan, Reidar Borg-
ström, and Stein W. Bie. International Science Pub-
lisher, Lebanon (New Hampshire). \$69.00. x + 441
p.; ill.; author and subject indexes. ISBN:
1-881570-24-X. 1994.*

This book's 14 chapters were contributed by 19
authors from six countries. The first four chapters
cover ecology, inshore marine systems, freshwater
communities, and tropical soils; six of the chapters
are case studies or regional overviews from India
(three chapters), Sri Lanka, Africa, and the Neo-
tropics; and the four others deal with a systems
approach to planning protected areas, interna-
tional wildlife conventions, remote sensing, and
human movement.

In reading this book, I asked myself the question
that apparently motivated its sponsorship by Nor-
wegian agencies: If I were teaching nonspecialist
students from tropical countries about ecology and
development, would this book be useful? The an-
swer, inevitably, is: in part. Would I use the first
four chapters as the basic source for ecological
principles and general overview? Probably not.
The introductory chapter gives broad coverage but
attempts, in 16 pages, to blanket the discipline;
the result is a choppy compendium of one-sentence
pronouncements that read like a sleepy undergrad-
uate's lecture notes. The two chapters on aquatic
systems would be useful references because they
are packed with potentially useful data on fisheries
and techniques, but the long (53-page) chapter on
soils is practically a stand-alone introductory
course in soil survey; it might be a useful reference,
but it is too dry for all but the most highly moti-
vated reader.

What about the regional case studies? Pretty
good. For example, Daniel's chapter on wildlife
on the Indian subcontinent, one of the best written
in the book, includes coverage of mammals, birds,
and reptiles, followed by an overview of the conser-
vation status of each. This straightforward ap-
proach contrasts with an equally useful chapter
by Prakash on Indian deserts, which tackles the
subject from a habitat and management perspec-

tive, including ample coverage of the role of hu-
man activities.

Do the remaining four chapters provide either
perspectives or tools to which most students would
not have ready access elsewhere? For the most
part, yes. More importantly, it is in some of these
chapters (e.g., the remote-sensing chapter's dra-
matic image of an island-like park in a sea of defor-
estation) that the overwhelming role of human
population growth in tropical conservation and de-
velopment really strike home.

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Honolulu, Hawaii*

BIOLOGICAL DIVERSITY: THE COEXISTENCE OF SPE-
CIES ON CHANGING LANDSCAPES.

*By Michael A. Huston. Cambridge University Press,
Cambridge and New York. \$100.00 (hardcover);
\$34.95 (paper). xix + 681 p.; ill.; index. ISBN:
0-521-36093-5 (hc); 0-521-36930-4 (pb). 1994.*

Yet another book on biodiversity might not seem
to be the highest priority for many readers, espe-
cially a hefty tome like this one. Huston has pro-
vided a thorough explanation of his interesting
views on species diversity, views that are not al-
ways well represented in other recent volumes on
the topic. Much of the volume is dedicated to ex-
plaining his "dynamic equilibrium" theory of spe-
cies diversity and to demonstrating the predictive
power of a two-dimensional model in which growth
rate (\approx rate of competitive displacement) is plotted
against frequency or intensity of disturbance. This
model is based on data indicating that diversity is
low where either disturbance is rife or productivity
is high. This ostensibly simple model is used to
interpret and predict species diversity at commu-
nity and landscape levels, community susceptibil-
ity to invasion, life histories of invading species,
types of keystone species, plant-life form represen-
tation in relation to fire frequency, and species
diversity in marine ecosystems. After 570 pages
of text replete with evidence of the model's validity,
I was convinced of its potential utility.

I admit to not having kept up with the onslaught
of new books, journal articles, computer bulletin
boards, and even entire journals dedicated to bio-
diversity issues. It causes me some consternation,
therefore, to find that I was familiar with many
of the most often cited references in Huston's book,
most of which were published in the 1970s and
1980s by North American researchers. As another
plant ecologist of the author's vintage, I worry that
we might share a similar parochialism. I am not
familiar enough with the biodiversity literature to
be too critical but, for example, I was surprised
that of the 695 citations (98 pages worth!), less