Review
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FLOODS OF FORTUNE: ECOLOGY AND ECONOMY ALONG THE AMAZON.

By Michael Goulding, Nigel J H Smith, and Dennis J Mahar. New York: Columbia University Press. $29.95. ix + 193 p; ill.; index. ISBN: 0-231-10420-0. 1995.

This book will be engrossing to the reader who has never visited Brazil, but has awareness of the biodiversity of Amazonian forests and the pressures from development on their natural resources. Most of us are familiar with deforestation in upland Amazonian rain forests; the floodplain forests, however, have not received the same attention from scientists or the popular press. The authors review the history of fortune hunters and devastation of native peoples along the Amazon river, and discuss the various industries that have waxed and waned at the expense of the native flora and fauna. In the pages of this book we learn of the many ways in which people make their living along the floodplain, and how they adapt to floods in different ways, including keeping livestock in floating pens and cultivating vegetables in raised beds. Although it might appear a gentler use of the forests in contrast to deforestation, livestock ranching is the most dangerous and devastating use of the floodplain forests, because grazing and trampling by cattle, water buffalo, and other domestic animals destroys the resources that might be used by fishes. Most commercial fish depend on the forest and floating meadow habitats for food and nursery habitat.

The book considers each of the important groups of animals (besides fish) in a single chapter that features the most charismatic species of land and sea, and points out the lack of knowledge about smaller, less well-studied organisms such as insects. Fish are the focus of the faunal considerations, for the authors hold that conservation of floodplain forests and floating meadows are essential to fish populations that can support sustainable industry in these areas. Plants are important in this book primarily as fish food, offering fruits and seeds to fish during periods of flooding; the plant chapter cursorily considers many other plant uses (by humans) as well.

This volume is written for a popular audience, and may leave more scientifically inclined readers wanting more information. There are no citations, and the authors mention a number of investigators for whom there are no publications included in the bibliography. Throughout the book only common names are used for organisms, although there is an appendix of common English and Brazilian names with scientific Latin names (this should be pointed out at the beginning of the book!). There are many beautiful and unusual photos; text nevertheless predominates, making this not your typical coffee table book. This attractive, modestly priced book could allow the message of the authors to reach many people and stir interest in floodplain conservation and management before these forests are entirely destroyed.

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FOREST LITTER INSECT COMMUNITIES: BIOLOGY AND CHEMICAL ECOLOGY.

By T N Ananthakrishnan. Lebanon (New Hampshire): Science Publishers. $66.00. ix + 174 p; ill.; indexes of plant names, animal names, and general terms. ISBN: 1-886106-58-4. 1996.

In the tropics, most of the leaves, fruit, and other plant parts fall, unconsumed, to the litter below. There they support a complex, fascinating fauna and flora. And unlike the equally fascinating fauna of the canopy, the litter is readily accessed and quantified. However, litter organisms are small in size and taxonomically obscure (e.g., collembola, mites, fungi and bacteria). Their interactions are hard to observe, and often chemical in nature. This is just the time for a book such as this one, that "aims at a synthesis of available knowledge of litter ecosystem [sic] in Tropical Forests" (p viii).

In 11 chapters this book reviews litter ecology process by process. It begins with the dynamics of decomposition and nutrient cycling, reviews the interactions and trophic structure of major taxa, and ends with a review of techniques. Its strengths are its capsule reviews of the major players in the litter. The reader is left with an appreciation of the complexity of litter interactions in time and space.

The book is less successful in placing these interactions in any sort of ecological context. It also (and consequently) lacks any real synthesis. This latter weakness is understandable. The current, partial state of knowledge defies broad generalizations.

More frustrating is the writing itself. The book needs careful editing: Citations are absent or misplaced; sentence fragments abound; paragraphs, full of long sentences, often exceed one page in length. Such a fascinating topic deserves better. This book would perhaps serve best as the jumping-off point to a diverse literature.

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BIOGENIC TRACE GASES: MEASURING EMISSIONS FROM SOIL AND WATER. *Methods in Ecology.*

Edited by P A Matson and R C Harriss. Cambridge (Massachusetts): Blackwell Science. $49.95 (paper). xi + 394 p; ill.; index. ISBN: 0-632-03641-9. 1995.

This book is written primarily for scientists and graduate students rather than for general reference. Selected authorities address established and