## Indigenous Peoples and the Future of Amazonia. An Ecological Anthropology of an Endangered World. Leslie E. Sponsel, editor. University of Arizona Press, Tucson. 1995. Pp. ix; 312. \$50.00 (cloth) ISBN:0-8165-1458-5.

The Amazon continues to be an area of intense debate over issues of environmental conservation, economic development, and cultural survival. This book is a review of traditional and changing adaptations of indigenous societies to Amazonian ecosystems. It focuses on indigenous adaptations to the challenges presented by the cultural and environmental impacts of Western society and the application of anthropological research to the needs, interests, priorities and rights of indigenous societies. The contributors are archaeologists, biological anthropologists, cultural ecologists and nutritionists. The text contains several figures and tables, but no photographs or illustrations.

The contents of the book are divided into a Foreword by Simeon Jiménez and Nelly Arvelo-Jiménez, an Introduction by the editor, followed by three main parts: "Environmental variation and adaptation," "Foraging, nutrition and health," and "Change, conservation and rights." Each part contains four to five chapters, the contents of which are summarized briefly by the editor at the beginning of each section. Each chapter includes an extensive bibliography. The index is exhaustive, including general subjects and specific features, names of localities and ethnic groups, or cited plants and animals.

Part 1, "Environmental variation and adaptation," examines the ways in which variation in the environment influence variation in culture, and vice versa. Chapter 1, "Judging the future by the past: The impact of environmental instability on prehistoric Amazon populations," by Betty Meggers, and Chapter 2, "The history of ecological interpretations of Amazonia: Does Roosevelt have it right?" by Robert Carneiro, focus on the temporal dimension of variation, the former emphasizing environmental changes in prehistory, and the latter changes in the course of cultural evolution. Chapter 3, "Disaggregating Amazonia: A strategy for understanding biological and cultural diversity," by Emilio Moran, discusses spatial variation in the environment, while Chapter 4, "Historical ecology of Amazonia," by William Balée, explores how the indigenous peoples changed their environment.

Part 2, which deals with foraging, nutrition and health, stresses the need for closer links between nutritional and medical anthropology and research on human ecology in Amazonia. Kenneth Good's chapter on the Yanomami of Venezuela illustrates that the Yanomami, who are primarily foragers and only secondarily farmers, adapt quite successfully in a tropical rain forest system. In the following chapter on the nutritional anthropometry of native Amazonians, Rebecca Holmes explores small stature as a reflection of the interplay of genetic and environmental factors. In Chapter 7, Darna Dufour examines the nutritional implications of bitter manioc use, specifically the process used to eliminate the toxicity of bitter manioc by the Tucanoans in the Vaupés region of Columbia. Dufour points out that the nutritional value of manioc is in part a function of the specific methods employed in processing. Due to sociocultural change, women may not have as much time to adequately process manioc, and the toxic residue that remains could lead to health problems. The section concludes with a chapter by Carlos Coimbra Jr. entitled

"Epidemiological factors and human adaptation in Amazonia," which examines the biomedical literature that indicates the existence of a multitude of parasitic and infectious diseases that, at least under traditional living conditions, are endemic at high levels amongst native Amazonians.

Part 3, "Change, conservation, and rights," offers a sample of case studies on ecological aspects of cultural change and economic development in Amazonia. Chapter 9 by Michael Baksh examines changes in Machiguenga quality of life with respect to nutrition, health, material goods, social relations, and life satisfaction and suggests that after two centuries of contact these peoples are experiencing a demographic rebound, partly as a result of Western medical assistance. Allyn Stearman discusses neotropical foraging adaptations and the effects of acculturation on sustainable resource use in Chapter 10, with a case study of the Yuqui of lowland Bolivia. Chapter 11, "Faunal resource use by the Chimane of Eastern Bolivia: Policy notes on a Biosphere Reserve," by Avecita Chicchón, describes patterns of land and resource use in forest, savanna, and river ecosystems by three different settlements of Chimane. She emphasizes that the needs of local people within and adjacent to protected areas must be considered by planners and administrators of protected areas. Chapter 12 is a study by Janet Chernela on sustainability in resource rights and conservation in the Awa Biosphere reserve in Columbia and Ecuador. It provides an illustration of the political component in human ecology and adaptation. The final chapter, written by the editor, Leslie Sponsel, concludes Part 3 and the book as a whole. It explores relationships among the world system, indigenous peoples, and ecological anthropology in the endangered Amazon. It reviews diverse aspects and factors such as deforestation, the frontier problems, paradigm shifts, political movements and environmentalists, and advocacy and human rights.

In summary, this book brings together much information on indigenous peoples of Amazonia. The text is useful for the anthropologist, ethnologist, sociologist, and anyone interested in Amazonia and Amazonian social and ecological conflicts. It will be equally at home in the libraries of universities and institutions as on the shelves of people dealing with such an exciting and controversial subject.

> Diego Rivera and Concepción Obón Departamento de Biología Vegetal Facultad de Biología Universidad de Murcia 30100 Murcia, SPAIN