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## COMMUNITY ECOLOGY—IN SPANISH

Jaksic A., Fabián. 2000. **Ecología de comunidades.** Ediciones Universidad Católica de Chile, Santiago, Chile. 233 p. \$15.00 (paper), ISBN: 956-14-0605-5.

A dilemma that the textbook writer must face, as Charles J. Krebs once stated, is "to plot a course that will place the book serenely between the pitfalls of the past and the bandwagons of the present." This dilemma is particularly vivid for someone intending to produce a balanced, objective book on community ecology. Few branches of ecology have gone through such a shocking process of redefinition of paradigms as community ecology did in the last two decades. The edifice of community ecology as was known in the middle 1970s, a solid and compact body of concepts based on the notion of competition as the basic structuring force, simply crumbled after its building blocks were disassembled, piece by piece, by the sceptical scrutiny of null models during the 1980s. The last 15 yr have been, for community ecology, a time of vigorous reconstruction, a time for reassembling the pieces

under new paradigms based, for example, on the recognition of the importance of scale and regional processes in structuring local communities.

In Ecología de comunidades, the first text on community ecology written in Spanish, Fabián Jaksic renders a personal, first-hand view of such a complex topic. In doing so, Jaksic faces a second dilemma in addition to the one identified by Krebs. For years, Latin American ecologists have complained that little attention has been paid in the international literature to the high-quality research that is conducted in some countries of the area. In writing his textbook, Jaksic faced the challenge of presenting a state of the art view of the discipline, but without ignoring the host of interesting research projects that have been conducted by his Latin American colleagues. As one of the most prolific Latin American ecologists, and after teaching a course on community ecology for several years at the Catholic University of Chile, Jaksic certainly has the credentials to meet the dilemmas of writing a Spanish version of a textbook on community ecology.

The book is organized in 13 self-contained chapters that,

in Jaksic's words, are not arranged in a rigid sequence, thus allowing each professor to accommodate the topics according to individual preferences and the necessities of the course. The first chapter is an introduction that sets the context of community ecology in terms of its basic questions, its place in the sequence of levels of biological organization, and its methodological particularities. In this first chapter, I would have liked to find a historical account presenting the deep controversies that have shaped modern community ecology. Without this historical context, young students can get disoriented in trying to understand the importance of some concepts, particularly those related to competition.

Chapters 2–6 and 10 deal with the classical topics of community ecology. A substantial portion of this section is devoted to ecological interactions, particularly competition and predation, and to the concepts of niche and guild. Although Jaksic does an excellent job in presenting complex ideas and mathematical concepts in a compact format, I felt that the relevance of that information in regards to the central questions in community ecology is not so clearly stated. The section includes also short discussions on other interactions, such as parasitism and mutualism.

The topic of succession is covered in a surprisingly short Chapter 7. Only four pages of text are devoted to this important subject. Chapters 8–10 cover the topic of diversity and the processes that generate and maintain it. It is very surprising that the word "biodiversity" and the phrase "biological diversity" are not used at all in the book, and that the rich set of literature and ideas derived from the concept is simply ignored. Similarly, although there is a chapter on scales and another one on saturation of communities, the recent discussion on the relative role of local and regional processes in determining the patterns of ecological diversity is just superficially treated.

The final two chapters are catalogues of current ideas and future perspectives in community ecology. The author shows here a keen synthetic ability and presents a succinct list of ideas that certainly have the potential of sparking heated debates among students. However, the treatment of some of the topics is too superficial and, in some cases, skewed to the author's opinion.

Does Jaksic succeed in placing his book serenely between the pitfalls of the past and the bandwagons of the present? No, he does not. Then again, perhaps that was not the purpose of the text. In discussing pattern and process in community ecology, Jaksic argues that different authors have their own opinions regarding what is known and not known about the structure of communities. Here, a pragmatic Jaksic retorts, "I limit myself to deliver my personal view." A few lines later, the author states that "the theory that explains most of the patterns [of community structure] is the one of compe-

tition . . . with some modifications generated principally from the theories of predation and island biogeography."

Jaksic does a splendid job in producing a text on community ecology based on these premises, but in doing so he also presents a skewed vision. Null models are mentioned repeatedly, but never explained in detail or put in their central historical perspective. Laboratory experiments are dismissed and there is no explicit reference to modern experiments on microcosms, which have added a wealth of new understanding of community functioning. New concepts on the role of regional processes are not covered, and although macroecology is mentioned, only a few references to the exciting developments in this area are made. Finally, there is no discussion on the applications of community ecology or to the strategies of managing and conserving biological diversity. Jaksic's book is a personal account, certainly a very well prepared one, of community ecology.

Does the book do justice to Latin American ecology? Yes and no. Papers from the Chilean literature are cleverly integrated as study cases in different chapters of the book. Without doubt, most of these examples are world-class investigations closely related to the topics covered by the book. However, it would have been instructive for students using the book (even Chilean students) to have access to the results of ecological research conducted in other areas of Latin America. A clear and direct benefit would have been the inclusion of examples dealing with tropical communities.

A different challenge of writing a technical book in Spanish is that terminology is not standard. Jaksic, for example, uses the expression *rama quebrada* to refer to the broken-stick model, which in most Spanish texts is known as el *modelo de la vara partida*. Similarly, for the first time ever I read about *acuchillamiento de datos* (jack-knife method) or *escalada armamentista* (arms race). To circumvent the lack of standard use of terms, a glossary could have been a useful addition to Jaksic's book.

Ecología de comunidades is, no doubt about it, a welcome addition to the impoverished ecological literature in Spanish. Jaksic's expertise and synthetic ability have produced a text that will be very useful for Latin American students requiring an overview of community ecology. I would recommend, however, the use of this book in conjunction with other texts to have a more balanced and current view of community ecology.

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