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2008

Book Review: *Managing Biodiversity in Agricultural Ecosystems* Edited by D.I. Jarvis, C. Padoch, and H.D. Cooper

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Baydack, Richard K., "Book Review: *Managing Biodiversity in Agricultural Ecosystems* Edited by D.I. Jarvis, C. Padoch, and H.D. Cooper" (2008). *Great Plains Research: A Journal of Natural and Social Sciences*. 969.
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vast body of material relating to the broad category of “agricultural biodiversity.” This subject is of increasing importance across the Great Plains of North America as we strive to ensure that our planet is able to meet the needs of the present generation without compromising the abilities of future generations to meet theirs. As such, the editors have sequenced and categorized the contributions so as to ensure that treatment of a wide range of topics—crop genetic resources; livestock genetic resources; aquatic biodiversity; pollinator diversity; soil biodiversity; diversity and the management of pests and diseases; farmer management of diversity; the contribution of diversity to diet, nutrition, and human health; and the value of genetic resources and of the ecosystem services provided by biodiversity in agricultural ecosystems—is well documented and clearly presented. Thus, the volume provides an impressive and broad listing of management areas discussed by an array of global biodiversity specialists. Although the depth of coverage is unfortunately somewhat wanting and therefore disappointing in places, the editors have done an excellent job of at least raising important questions that need to be considered as society attempts to manage biological diversity in agricultural ecosystems. The book, therefore, should be considered a useful addition to the toolbox of practitioners in the Great Plains region.

The volume opens with a thoughtful and careful assessment of biodiversity in the context of agricultural ecosystems and the societal services these systems provide. Clearly the role of supplying food to the Earth’s burgeoning population is of paramount importance, but the editors nicely describe how this function is complemented by a variety of considerations closely affiliated with the concept of biological diversity. I expect that most would be surprised in a first reading, as was I, by the innovative thesis provided in the introductory chapter, which, simply put, is that agriculture does contribute significantly to the planet’s biological diversity. Many might have expected a more somber depiction of the negative effects on biodiversity that ecosystems altered in favor of agricultural production are typically seen to cause. But after a fuller consideration of the arguments, I was drawn to the conclusion that since these agricultural systems are required for society as we know it to survive, the many benefits agriculture can bring to issues surrounding biodiversity need to be appreciated and properly managed.

And that essentially is what the remaining chapters attempt to do in a case-study approach. Each chapter describes unique agricultural management situations in an apparently deliberate sequence describing the

Managing Biodiversity in Agricultural Ecosystems.

Edited by D.I. Jarvis, C. Padoch, and H.D. Cooper. New York: Columbia University Press, 2007. xviii + 492 pp. Tables, figures, references, index. \$77.50 cloth.

Managing Biodiversity in Agricultural Ecosystems is a series of 18 edited contributions that investigate a

impacts and influences that genetics, aquatics, pollinators, soils, pests and diseases, farmers, human health, and, perhaps most importantly, (agricultural) ecosystem services may have on biological diversity. The many and varied management strategies and solutions provided are the volume's real strength. However, the complex array of examples, geographic locations, and assertions also leaves the impression that so much more needs to be considered. In particular, opposing views on various topics are generally not presented, although some of the literature cited in fact offers alternative commentary. The chapter sequence also seems somewhat random; a more structured and logical approach might have been warranted. Finally, many of the chapters deal with issues outside of North America and the Great Plains region in particular. As such, the book clearly offers an interesting and timely analysis, but the linkage to the specific needs for this local audience might be lacking.

Despite these shortcomings, the book does make a significant contribution to providing an array of management considerations for biological diversity in agroecosystems and should be added to the libraries of contemporary agricultural specialists. **Richard K. Baydack**, *Department of Environment and Geography, University of Manitoba*.