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# Review of *Nature's Heartland: Native Plant Communities of the Great Plains* by William Boon and Harlen Groe

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**Nature's Heartland: Native Plant Communities of the Great Plains.** William Boon and Harlen Groe. Ames, IA: Iowa State University Press, 1990. xxvi + 361 pp. Maps, photos, and references. $44.95 cloth (ISBN 0-8138-1163-5).

This is an attractive "coffee table" book that could add to the reference library of the non-professional or, to a limited extent, the professional who has a tangential interest in plant communities. It is not a technical volume on flora nor does it appear that it was intended for field use. Both authors hold degrees in landscape architecture, and the emphasis appears to be on species that could be used in a natural design setting.

Hardiness zones and vegetation types are referred to, and a limited glossary, divided into sections, such as "flower parts" and "plant form" is included. Eleven community types are described, represented by photographs, and complemented by distribution maps showing the extent of each community in the US. Two hundred and two selected species, found in these

communities are the focus of this book. Each is identified by latin and common name, and it's range is depicted on a distribution map. General descriptions, including information on habitat of occurrence, general characteristics, and use in landscaping, are provided, along with more detailed technical descriptions, to assist in identification. All of the species are illustrated by color photography showing close-ups of plant parts and seasonal change.

There are many shortcomings noted in this volume. The title, which seems to indicate that the book is focused on the Great Plains, is quite misleading since many of the communities and most of the species are more characteristic of the eastern mixed deciduous forest than of the Great Plains. Additionally, the use of the regional title of "Mid West" interchangeably with "Great Plains" is geographically incorrect. The authors' use of "community" is somewhat arbitrary, eg. the "Woodland Flower Community." The number of species examined is relatively small and generally limited to the most conspicuous species. Some communities that are exceedingly important are given little attention at all: The Marsh-Pothole Prairie Community is represented by only 12 species.

The technical descriptions, which are intended to help the reader identify individual species, are not well developed and much of the terminology used in them is poorly defined for the level of expertise that the book seems to be intended. The divided glossary, which defines terms used in the descriptions, is clumsy, not well integrated with the preliminary text, and replete with errors. Photographs are mislabeled: eg. (p. 346) a double samara is identified as a "follicle"; (p. 343) pinnate leaf venation is identified as "parallel"; (p. 337) exfoliating bark is identified as a "samara-key"; (p. 344) a raceme is identified as a spike. Other photos serve no useful purpose in clarifying a definition: eg. habitat (p. 333), association (p. 334); or do not visibly show the trait described: eg. pubescent (p. 343), resinous (p. 338). Some of the definitions include technical terms that are not defined elsewhere: eg. petal (p. 345), uses the term corolla. Other definitions are incorrect: eg. follicle (p. 346), is a dry (not fleshy) fruit type that does not always occur in clusters and certainly does not resemble a cucumber (pepo fruit type); net-veined (p. 343), does not have to have a midrib and includes pinnate, palmate, and 3-nerved venation.

Although there are many shortcomings to this book, positive attributes are evident as well. It does present a colorful format which is useful for the untrained. Many species are presented in a seasonal series of photographs which would aid in identification regardless of the individual specimen's

phenological state. The photography, in general, is excellent although it would have been preferable if fewer of the photographs had been of specimens on the Iowa State University Campus and more in the natural plant community setting. **John W. Wyckoff and Ann M. Wyckoff,** *University of West Florida, Pensacola, Florida.*