

Guide to Texas Grasses. By Robert B. Shaw. 2012. Texas A&M University Press. 1096 p. US\$45. flexi-bound. ISBN 978-1-60344-186-5.

Background: Grasses are economically and ecologically important and in many places like Texas they represent a sizable component of the native and introduced flora. Despite their importance, grasses are often loathed for their difficulty to identify. This book demystifies the process of keying grasses by providing a highly illustrated key and useful information about the grasses occurring in Texas.

Audience: Students, practitioners, and enthusiasts of grasses found in Texas and the surrounding region.

Purpose: To provide a comprehensive guide and taxonomic key of all the grasses known to occur in Texas.

Structure and content: This book is a blending of older resources generated by the author and line illustrations from 13 talented artists with the addition of considerable new material generated by the author and supplemented with photographs taken by Paul M. Montgomery. This book starts with three introductory chapters that provide foundational information on grass importance, grass anatomy and morphology, and the ecoregions of Texas. Setting the theme for this book, these chapters are full of highly illustrative photographs, line drawings, and maps. Prior to the dichotomous key portion of this book, the author includes a short description of the rationale he used in his classification treatment of the grasses of Texas. The author chose a liberal classification of the grasses in Texas with the increase in genera being the most notable difference from other classifications. Although some may disagree with this classification, the author provides references within each genera to support his decisions.

A majority of this book is devoted to a comprehensive dichotomous key for 668 grass species and their associated varieties and subspecies known to occur in Texas. In addition, a detailed checklist is provided that includes information on each species' origin, longevity, photosynthetic pathway, special designations (e.g., endangered status), and distribution. Like most keys, it is organized by levels that include groups, genera, and species. Unlike other taxonomic keys, this key is highly illustrated with many line drawings of inflorescence and spikelet characteristics at each level, reducing the potential errors that occur with people new to keying because of unfamiliarity with grass genera and species. In the species accounts, each species is given its own page with line drawings, county distribution maps, and photographs when they were available. A short appendix describes the collection, preparation, and handling process for grass specimen, as well as how herbaria function and the roles they play. In addition, useful information is provided about the active herbaria in Texas. This book also includes a glossary.

Strengths and weaknesses: This book could be considered a model of what illustrative taxonomic guides should be today. It is well organized and the key is designed to create a clean separation among groups, genera, and species. Considering all the information that is presented with each species account, there is ample space so that the pages do not feel crowded. Complete newcomers to grass taxonomy may be a little confused while reading the first couple of chapters as the author assumes a reasonable level of familiarity with grass taxonomy. The book is inexpensive considering it is printed on quality paper with a durable yet flexible binding and contains over 1,000 pages, nearly 1,400 photographs and 650 maps, and close to 950 line drawings. One word of caution though, weighing in at over 6 pounds and measuring 7 × 10 inches, this is not the kind of book that you will want to toss into your field bag. It will, however, prove to be an excellent desk reference and keying guide.

Conclusions: If you are involved with plant identification in Texas or the surrounding region, or if you are a grass enthusiast, you will want to purchase this book. It is an impressive piece of work that I believe will demystify the challenges many people have with keying grasses because it is so highly illustrated.

Amy C. Ganguli is an Assistant Professor of Range Science, Dept of Animal and Range Science, New Mexico State University, Las Cruces, NM 88003, USA, ganguli@nmsu.edu. Ganguli is the curator of the Range Science Herbarium at NMSU and teaches courses in plant identification including Grass Taxonomy and Identification. ♦

