

BOOK REVIEW

ALAN E. BESSETTE, ARLEEN R. BESSETTE, AND DAVID P. LEWIS. 2019. **Mushrooms of the Gulf Coast States: A Field Guide to Texas, Louisiana, Mississippi, Alabama and Florida.** (ISBN 13: 978-1-4773-1815-7, flex-bind). University of Texas Press, 3001 Lake Austin Blvd., 2.200, Stop E4800, Austin, Texas 78703-4206, U.S.A. (**Orders:** www.utexaspress.com, 1-800-252-3206). \$39.95 US, 576 pp., 667 color photos, glossary, bibliography, indices, 6" × 9".

Mushrooms of the Gulf Coast States, authored by Allan Besette, Arleen Besette, and David Lewis is a welcome addition to the host of regional field guides that have appeared in recent years for the identification of macro-fungi. The Bessettes have written a number of other very useful guides. Having spent a great deal of time in these regions, they are intimately familiar with the mycology. David Lewis has devoted much of his life to understanding Texas mushrooms, especially in southeast Texas and the coastal regions of the adjacent states.

The 576 page book is written in the conventional style of field guides with mushrooms grouped in standard morphologic categories familiar to amateur mycologists. This makes it relatively easy to hone in on an identification. The straightforward keys at the introduction to each major group are also helpful in refining choices. Then comes the task of picture matching and carefully reading the excellent descriptions. Within in each large genus, the species are arranged alphabetically. The book's 3.2 lb weight makes it challenge to take into the field and since spore information is critical for some species, one suspects that most people will refer to the guide when they get home from the field.

Almost 1400 species are mentioned in the book, a prodigious number for any guide. For a significant number this is the first time they have been included in any general guide, including a number first described by David Lewis. The photography is excellent with 667 high quality color plates. Most illustrate the important feature of each species.

There are a number of standout sections, including the boletes, the chanterelles, the milky caps (*Lactarius*) and the polypores, a challenging group for most amateur mycologists.

The downside in this book cannot be pinned on the authors, but the paucity of information available to them. It relates to the ecology and the distribution of fungi in these very diverse geographic areas. Using the artificial construct of a state is not a satisfactory way to define biological processes and relationships. For example, Texas has 7 to 11 major ecological zones, depending on how one defines them, and any number of rather distinct sub-regions. The difference between the Big Thicket in southeast Texas and the Trans-Pecos is stark. There is very limited information about the mycota in many of these regions. In the future, field guides will hopefully include range maps, as do most floras today, but this requires much more extensive collecting and verification.

The descriptions of habitat are also terse, with only a few specific associations, such as *Chorioactis geaster* on dead cedar elm stumps. Many are rather generic, like 'mixed hardwoods' or 'oak and pine'. For most species there is some comment as to edibility. The provenance of this information is unclear, but probably a combination of reports from other field guides, personal bias and accumulated wisdom from years of mushroom forays. The most toxic mushrooms are well identified and illustrated.

There is a helpful glossary for the uninitiated and two indices—one of common names and the second of scientific names.

This book is a very valuable contribution to our knowledge of mushrooms from a region of the USA that has previously been largely ignored. Hopefully it will inspire more people with an interest in natural history to explore the amazing world of fungi when they are out in the field. It will certainly be of great help to those of us involved in mycology in these States.—*Denis R. Benjamin, Botanical Research Institute of Texas, Fort Worth, Texas, U.S.A.*