

Reviews

Research Guide to the Arid Lands of the World.

Stephen T. Hopkins and Douglas E. Jones. Oryx Press. Phoenix, Arizona. 391 pp.

This book resulted from a U.S. Department of Education grant to the University of Arizona Library. The purpose of the grant was to search for and acquire those publications of greatest importance to an understanding of arid lands and to make up a research guide to enable library users around the world to know which publications to turn to when researching questions concerning arid lands. The resulting volume is a disappointment to this reviewer. The title seems misleading for what the book actually does. The book is in reality a list of bibliographies, directories and similar compendiums dealing with some 40% of the earth's surface, 700 million people, and 110 national governments. Arid lands are so broadly defined that North Dakota is the most consistently or completely arid state of the United States (see Map 11, page 244). Obviously to cover some 40% of the earth's surface in 391 pages, it would be necessary to omit all but the most important of references. One might suppose therefore that the 14 references (Nos. 2141-2154) listed under the category "BOTANY" under the major heading "UNITED STATES" would list those publications of greatest significance to arid land botany of the United States as a whole. Much to this reviewer's surprise, four of the 14 entries are used up on Ponderosa Pine, a tree which most scientists do not even recognize as an arid land species! Likewise, the bibliography of understory-overstory vegetation relationships (Entry 2148) relates more to plants of mesic than arid conditions. It is hard to see what factors led to inclusion of *Atlas of United States Trees: Volume 3* (Entry 2150), *Trees and Shrubs of the United States: A Bibliography for Identification* (Entry 2151), and *Endangered and Threatened Plants of the United States* (Entry 2144), in preference to the omitted *Manual of the Grasses of the United States* by A.S. Hitchcock and A. Chase, the omitted *Legumes of the United States* series by D. Isely, *Yuccas of the Southwestern United States* by S.D. McKelvey, or for that matter the immense and encyclopedic *Botanical Exploration of the Trans-Mississippi West, 1790-1850* by the same author. The huge series on *Wild Flowers of the United States* by H.W. Rickett is likewise omitted, as is the series of more technical floras sponsored by the New York Botanical Garden. Perhaps the most appropriate of the 14 entries is the 74-reference anonymous bibliography for Creosotebush from 1905 to 1972 (Entry 2147). But anyone wanting to know what modern researchers have found about Creosotebush should turn to the state-of-the-art 1977 volume on Creosotebush (not cited!) in the US/IBP Synthesis Series which had support not only of the prestigious International Biological Program, National Academy of Sciences, National Science Foundation, and Institute of Ecology, but of numerous universities as well! Often a good up-to-date book is of much greater use in researching a subject than an old bibliography. True, the book may not replace the bibliography, but it may be eminently more

useful and informative as an entry into the subject. It is in this sense that the *Research Guide to the Arid Lands of the World* is misnamed unless "research" is arbitrarily construed to mean the successful finding of a large number of (possibly useless) bibliographies in preference to finding pertinent information and an up-to-date entry. Although this may sound overly critical, it is merely stated to illustrate a basic philosophical point. If the book were correctly titled *List of Bibliographies, Directories and Similar Compendiums Relating to Arid Lands of the World*, with a cautionary note to the effect that few specific arid land subjects have suitable bibliographies, then the user would realize that it was not intended to be a complete research guide. To be the latter it would have to create new bibliographies to fill the gaps rather than being a mere bibliography of existing bibliographies in a field where thus far there are few appropriate bibliographies. What is difficult to understand is why the *Research Guide* does occasionally list a book or article which is *not* a bibliography, directory, or similar compendium, unless it intends to list other such appropriate titles. Perhaps it is attempting to be a research guide. If so, its gaps are of a Grand Canyon dimension!

For example, under "ARIZONA" in the subcategory "BOTANY" the reviewer finds a listing for *The Cacti of Arizona* (Entry 2245) by L. Benson, but no entry for the broader and more useful *Arizona Flora* by T. Kearney and R. Peebles which is the flagship volume for the entire botany of the state, a volume consulted daily by scores of researchers. True, *A Catalogue of the Flora of Arizona* by J.H. Lehr supplements the book by Kearney and Peebles (although not at all replacing it) by updating the nomenclature. It is not listed either, however! Perhaps it was erroneously supposed that *Vegetation and Flora of the Sonoran Desert* (Entry 2252), which partially geographically overlaps *Arizona Flora*, made the latter volume obsolete. The authorship of the publication at Entry 2252 is incorrectly stated and the annotation that it "ignores" the Mohave Desert leads one to believe that the bibliographer thought that "the Sonoran biotic province of California, Arizona, Baja California, Sonora" included all portions of those states. In any event, the inclusion of only 9 references for the botany of Arizona is perplexing when three turn out to be bibliographies treating only Jojoba (largely dealing with world-wide attempts to exploit the plant as a crop) and most of the significant publications for learning about the botany of the state are omitted!

Distressing too is the absence of any listing in the *Research Guide* for journals or periodicals which specialize in subjects relating to arid lands. If it is present anywhere in the book, the reviewer was unsuccessful in finding any entry for *Journal of Arid Environments* or other similar periodicals, including even *Desert Plants* which is published by the same university at which the authors of the *Research Guide* were working. If the authors indeed had no intention of including periodicals then there is even more reason why "research guide" in the title is incorrect and misleading.

To further check on the completeness and accuracy of the *Research Guide*, a few other topics chosen more or less at random were "researched" using the guide: Under the heading "TROPICAL MEDICINE" are 8 entries, two of which deal with

Reviews

continued from page 12

coccidioidomycosis, a regional but generally *nontropical* disease! The University of Arizona Press book on this disease (Entry 3142) is incorrectly cited as to title. Under the tropical medicine heading this reviewer looked in vain for a listing of an up-to-date textbook of tropical medicine. Instead, and contrary to practice elsewhere in the *Research Guide*, a periodical is actually cited: *Tropical Diseases Bulletin* (Entry 3147). Cited for no apparent reason is a 72-page *Foreign Travel and Immunization Guide* (Entry 3145). Is the *Research Guide* somehow trying to provide amenities for persons planning to travel to foreign countries? If so, it should have included such indispensable listings as a first-aid guide or a booklet on coping with snakebite or even more importantly, "M.R." Throughout the guide it is hard to see a consistent approach relating to the classes considered for inclusion.

Glancing to the page after "TROPICAL MEDICINE" the category "LANDSCAPING" caught this reviewer's eye under the major heading "ARCHITECTURE." It was dismaying to find only one entry here, a 4-page bibliography on consumptive water use! Here one would have expected to find the book *Plants for Dry Climates* by M.R. Duffield and W.D. Jones, which has already become a classic since publication in 1981 and which reflects much of the research and thinking of the Program in Landscape Architecture at the University of Arizona. It is not cited. Neither is the *Sunset Western Garden Book* by the editors of *Sunset Magazine*, a sourcebook used for landscaping information daily by professionals and amateurs alike! Also useful would have been the monumental compendium *Australian Native Plants* by J.W. Wrigley, useful in many arid parts of the world because of its emphasis on landscaping plants.

The introduction to the *Research Guide* states that it is intended to be a "sourcebook" of greatest value to researchers outside of their professional specialties. Although this relieves it somewhat from the necessity of citing superfluous detailed technical material that would be of interest only to a specialist, it often seems to give such information in preference to the kind that would be of more use to the general user: Under the major heading "NEW MEXICO" is a subdivision "ZOOLOGY." Only a single entry appears there! Assume for sake of an example that an anthropologist with limited zoological background picks up the *Research Guide* to gain entry into the literature dealing with the zoology of arid regions of New Mexico. Will this person find relevant material? No! The single entry turns out to be an esoteric list and bibliography of mosquitoes, intelligible indeed to a mosquito expert, but of no earthly good to 99.99% or more of the persons inquiring about zoology of the arid regions of New Mexico!

The authors of the *Research Guide* clearly disliked citing mere books. One searches in vain for a reference to the authoritative and handy 1881-page *Manual of the Vascular Plants of Texas* by Correll and Johnston and finds instead an entry for a 36-page pamphlet *Natural Vegetation of Texas and Adjacent Areas, 1675-1975* (Entry 2429). Why isn't the recent 1,025 page *Flora of Baja California* by I. Wiggins cited? Why isn't the 1978 volume *Nitrogen in Desert Ecosystems* cited? It

is authoritative, compendious, and cites over 500 references! Why isn't Dunbier's book on the Sonoran Desert cited? — Or for that matter the present reviewer's more recent treatment of the Sonoran Desert based on 1,362 cited references? The 2-volume treatment of *Desert Biology* edited by G.W. Brown, Jr., is not cited. How easily can such important works be located by using bibliographies or other compendiums cited in the *Research Guide*? Unfortunately the best and most comprehensive books for any subject usually post-date the average bibliography. A bibliography of bibliographies is therefore doubly behind the times. For example, the 1980 *Flora of Baja California* will not be found in the 1964 bibliography of Mexican botany cited in the *Research Guide*. The monumental 1982 book *Agaves of Continental North America* by H.S. Gentry cannot be found using the guide. Likewise, the book *Fruits of the Desert* by S. English, although appearing in print well before the *Research Guide* went to press, has thus far defied being located using any of the bibliographies cited. Perhaps *The Cacti of the United States and Canada* by L. Benson and *Biotic Communities of the American Southwest* edited by D.E. Brown appeared too late to be included. But would they have been included if they had been published a few months earlier? After paging through the *Research Guide* one has a feeling that the authors not only failed to discover some of the most important publications, but that they were really not familiar with the relative importance of the various publications which they did find and which competed for inclusion. Although the *Research Guide* used up-to-date "on-line" sources, computerized data-bases, essentially state-of-the-art information retrieval methods, it seems to have thrown the baby out with the bathwater.

Haworthia and Astroloba. A Collector's Guide.

John Pilbeam. Timber Press. Portland, Oregon. 1983. 167 pp. \$32.95.

This very excellent book represents a successful attempt to mesh names used by *Haworthia* enthusiasts who grow the plants as a hobby with the names accepted by professional plant taxonomists working with natural populations and herbarium specimens. The "species" names generally used by collectors for plants of the genus in recent years are presented alphabetically in boldface type at the heads of paragraphs throughout the book. Their presence in boldface, however, does not necessarily mean that they are taxonomically accepted by the author. It is necessary for the reader to digest the commentary under each species name to determine if the taxon is accepted in specific rank, reduced to a variety of another species, considered merely a "forma" of a variety or species, suspected of being a hybrid, treated as a cultivar, or outright rejected and treated as a synonym. The format therefore is that of a commentary rather than a formal taxonomic treatment. Photographs and line-drawings are generously included adjacent to the names of accepted taxa with the result that most kinds of *Haworthia* in cultivation can be readily identified without the use of keys and without a knowledge of technical characters. Since the small genus *Astroloba* (the former *Apicra*) is so closely related to *Haworthia*, and sometimes included in it, commentaries of the species are provided following those of *Haworthia*.