## **BOOK REVIEW**

David Yetman, Alberto Búrquez, Kevin Hultine, and Michael Sanderson. 2020. **The Saguaro Cactus A Natural History.** (ISBN-13: 978-0-81654004-4, pbk). The University of Arizona Press, 1510 E. University Blvd., P.O. Box 210055, Tucson, Arizona 85721-0055, U.S.A. (**Orders:** uapress.arizon.edu). \$19.95 US, 208 pp., references, index,  $5\frac{1}{2}$ " ×  $8\frac{1}{2}$ ".

## Acknowledgments

- 1. A Saguaro Primer: Carnegiea gigantea in History
- 2. Cactaceae: The Cactus Family, Columnar Cacti, and the Saguaro
- 3. Ecology of the Saguaro
- 4. The Anatomy and Physiology of the Saguaro
- 5. Genomics of the Saguaro
- 6. The Annual Saguaro Harvest and Crop Cycle of the Papago, with Reference to Ecology and Symbolism *Notes*

References

Index

This book is a fantastic reference on the iconic saguaro cactus (*Carnegiea gigantea*). Chapters serving as standalone primers on its biology, ecology, biogeography, taxonomy & systematics, genomics, and ethnobotany together paint a thorough portrait of what's currently known about this species and its place in ecological space and time. Though the text leans technical in its voice and purpose, there are lots of prime trivia bits scattered throughout. Did you know saguaro spines have growth rings? Or that saguaros are like barrels of isotopically "heavy" water and that any animal that consumes part of the cactus will be isotopically labeled? How about that pollen embedded in solidified packrat urine can be used for tracking historical saguaro biogeography and climatic conditions? Did you know the genus name is an honorific for desert research benefactor (and famous steel magnate and philanthropist) Andrew Carnegie? This is not just a book about a cactus. Through a series of topical essays, this book is a remarkable examination of the complex world of the saguaro, past and present, including its associated flora and fauna.

Now, because my past experience in publishing makes me far more confident than I probably should be, I like to include in book reviews suggestions for improvement. For this book it would be to revise the ethnobotanical contribution, a reprint of a 40-year-old *Desert Plants* article by Frank Crosswhite. The section's forward by David Yetman clearly states why they chose not to revise Crosswhite's original work: it's nearly perfect as is. While I agree that the work is an invaluable and precise account of the saguaro harvest calendar and the connection to O'odham people, its voice seemed disjunct from the rest of the book when reading in a single pass. Perhaps this is an artifact of editorial excerpting. Perhaps it's a lack on my part of familiarity with the cadence of ethnobotanical communications. It's a purely cosmetic request for sure, but a revision of Crosswhite's work could allow for reorganization of the content and the inclusion of more photos. It would also allow for an update to outdated terminology, such as the use of the name Papago which Yetman himself admits the O'odham reject. Nevertheless, my unease from a meta-perspective of one section is certainly no reason to reject the book, which overall is a superb work by the authors and one I suspect will be quite popular as a go-to resource for a long while. I'd be surprised if it weren't carried in every bookstore and gift shop in southern Arizona.—*Brooke Best, Research Department, Botanical Research Institute of Texas, Fort Worth, Texas, U.S.A.*