Book Review: *The Flora of Nebraska: Keys, Descriptions, and Distributional Maps of All Native and Introduced Species That Grow Outside Cultivation: With Observations about Their Past, Present, and Future Status* By Robert B. Kaul, David Sutherland, and Steven Rolfsmeier

James R. Estes
BOOK REVIEWS

The Flora of Nebraska: Keys, Descriptions, and Distributional Maps of All Native and Introduced Species That Grow Outside Cultivation: With Observations about Their Past, Present, and Future Status. By Robert B. Kaul, David Sutherland, and Steven Rolfsmeier. Lincoln: Conservation and Survey Division, School of Natural Resources, University of Nebraska–Lincoln, 2006. vi + 996 pp. Maps, illustrations, photographs, table, glossary and gazetteer, index. $60.00 paper.

Floras are guides for the identification of the plants of a specific region—in this case, the Cornhusker State. A flora is best judged after seasons of using it for field identification, several semesters teaching the identification of plants using its keys and descriptions, or over the years as a close companion faithfully beside your dissecting scope in the herbarium. Alas, I was denied the luxury of decades, and this review was undertaken in the dead of winter, miles south of Nebraska, and out of reach of a herbarium. Even so, it is abundantly clear that in a few years The Flora of Nebraska will be well-worn with dog-eared pages, a frayed cover, and muddy spots staining the pages. This treatment stands out because the keys and descriptions are based on the authors’ examination of a vast array of herbarium specimens and forays into the field, rather than relying on the descriptions of others. Check anther color for Chamaecrista fasciculata (p. 290). If the anthers are listed as “yellow,” then the author(s) followed an error of transcription made more than four decades ago and replicated in many subsequent floras. If, however, they are described as “purple,” as in this Flora, then the author(s) checked the color for themselves!

The most useful print keys are dichotomous, making use of a series of yes/no comparisons. Authors of keys are also faced with a number of dichotomies in the design of the flora: (1) Should the taxa be listed in alphabetic order or in a phylogenetic sequence? (2) Should the descriptions be diagnostic or comprehensive? (3) Should the treatments be based on morphological variation among locally occurring individuals or follow larger, phylogenetic analyses? In general, these three botanists chose alternatives that make life easier for taxonomists who use their Flora. Distribution maps are clear and crisp—one per species. Detailed discussions explain taxonomic decisions, and they make sense, e.g., Buchloë versus Bouteloua (651).

The inclusion of taxa that probably occur in Nebraska, but have not yet been discovered, is clever, if not exactly scientific. The indication of where these “aliens” might occur will perhaps lead to new discoveries in the flora of this floristically interesting state.

I recommend this treatment for students of the flora of Nebraska. It greatly surpasses the Flora of the Great Plains (1986) for the identification of the state’s plants.

However, I do have a few quibbles. An index of genera following the main index and concluding on the inside back cover is potentially useful, but it should have appeared on two facing leaves instead of being separated by several blank pages. I so wish species names had been included in the index. The inclusion of color photos of select plants is nonutilitarian. The book uses heavy paper, large print, and an 8”×11.5” format, so its heft greatly reduces its utility as a field guide.

My favorite discovery in the Flora came from reading the last sentence in the description-discussion of the
last species of the last family (897). Bob Kaul and his coauthors kept their wry wit to the very end. James R. Estes, Burkburnett, Texas.