Book Reviews

Book Review Editor's Note: We are continuing to use the current currency codes. Thus Canadian dollars are CAD, U.S. dollars are USD, Euros are EUR, China Yuan Remimbi are CNY, Australian dollars are AUD and so on.

BOTANY

Flora of Florida Volume II (Dicotyledons, Cabombaceae through Geraniaceae) and Volume III (Dicotyledons, Vitaceae through Urticaceae)

By Richard P. Wunderlin, and Bruce Hansen. 2015. University Press of Florida, 15 NW 15th Street, Gainesville, FL, USA, 32603. 383 pages (Volume II) and 327 pages (Volume III), 69.95 USD (each), Cloth.

In 1998, Richard Wunderlin published Guide to the Vascular Plants of Florida (1998), an annotated key to the entire flora of the state. It was an important achievement, providing the first comprehensive review of one of the most floristically diverse areas of North America. But that was just the start. Two years later, a 20-year effort by Donovan Correll, Wunderlin and others bore fruit with the publication of the first part of a comprehensive state flora (Flora of Florida Volume I, Pteridophytes and Gymnosperms; Wunderlin and Hansen 2000). In addition to the treatment of 170 native and non-native species, the first volume included introductions to the physical setting and vegetation of Florida and a history of its floristic investigation. That and proposed future volumes offered great promise to investigators of this botanically extraordinary region of North America. When more than a decade passed without another volume appearing, however, it seemed that the task might have just been too big an order.

Accordingly, the publication of Volumes II and III importantly demonstrates that the *Flora of Florida* project is indeed alive and well. The authors, in fact, foresee the final seven volumes being produced by 2020, with Volume IV in press (Wunderlin *et al. in press*) and Volumes V and VI currently in preparation (R. Wunderlin, personal communication, 2016).

Volumes II and III continue the format and structure of Volume I. All three are sturdily bound, hard-cover books with small but easily-readable type. The native and non-native species of the 65 families covered in Volumes II and III are each provided with detailed, clear physical descriptions employing precise but not overly technical terminology. Most readers will find that they rarely need to refer to a botanical glossary. That's good, as no glossary is provided in these volumes. Nor are any illustrations. Representative generic illustrations are tentatively planned for future volumes, however (R. Wunderlin, personal communication, 2016). Unfortunately, there are no floristic synopses for Volumes II or III, unlike Volume I (appendix), so the number of taxa covered in each is unclear. Using the species per page coverage of Volume I as a measure, however, it seems there are approximately 460 species treated in Volume II and 400 in Volume III. Volumes I through III then, treat over 20% of the more than 4,700 vascular plants reported in the Atlas of Florida Plants to occur here. These treatments include taxa in large and/or important families such as Euphorbiaceae, Ranunculaceae, Fagaceae, Violaceae, Fabaceae, and Rosaceae. Perhaps surprising to Canadian readers, many of the species discussed are regularly encountered in northern portions of the continent as well.

Effective species identification keys taken or updated from Wunderlin's (1998) *Guide to the Vascular Plants of Florida* are placed immediately after each genus description. Alphabetically arranged species treatments follow, each beginning with a comprehensively annotated list of synonyms. The detail of some of these lists is truly impressive – like that for *Oxalis corniculata* (Volume II, page 190), which goes on for over a page. This provides a valuable history of the taxonomic/nomenclatural complexity for many taxa.

It can be difficult, however, to quickly find the treatment of particular groups. Genera are listed alphabetically within families that, in turn, are arranged 'naturally' (following the 2009 proposal of the Angiosperm Phylogeny Group III); thus, to quickly locate many (particularly smaller) genera the reader is more reliant on the index than is desirable. This could have been avoided if the *Flora* had page headers that identify the family to which that page's treatments apply.

After the technical descriptions and a brief but usually clear habitat description, a statement of the taxon's distribution within and beyond Florida is presented. The absence of Florida range maps for each taxon somewhat reduces the clarity of these distributional statements, however. That limitation is exacerbated by the absence of a Florida county map like the very helpful one appearing on the inside front cover of Wunderlin's (1998) *Guide to the Vascular Plants of Florida*. (The Index to Families on the inside back cover of the Guide is also a helpful feature that is not repeated in Volumes II and III.) Accordingly, readers are required to go 'offsite' for more detailed distributional information. Fortunately, the on-line *Atlas of Florida Plants* (Wunderlin *et al.* 2016) serves this purpose admirably. As the *Flora of Florida* authors are major participants in the *Atlas* as well, these two information sources work well together.

And that's the bottom line ... the volumes of the *Flora* "work well together". We can only hope that Wunderlin and Hansen will achieve their ambitious goal of completing the remaining seven volumes in the next four years or so. Achieving that will be important for floristic investigations across North America. Its significance applies both to questions concerning total

diversity (Florida ranks third amongst North American states and provinces) and in regards to the continental diversity of particular families and genera. The completion of this important work will also provide an invaluable tool for the identification of plants from many parts of the floristically complex and important Southeast.

References

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