

## BOOK REVIEW

**Nathanael Pilla & Scott Namestnik. 2022. *Wildflowers of the Indiana Dunes National Park*. Indiana University Press, Bloomington. x + 447 pp., paperback \$35.00. ISBN 978-0253060-41-9; ebook \$34.99. ISBN 978-0253060-42-6.**

At roughly 16,000 acres (6,475 hectares) the Indiana Dunes National Park (hereafter, the Park) contains high plant diversity for its relatively small size as a national park and is the most botanically rich area in the Great Lakes region of North America. Two ecotones account in part for this diversity; the transition between the western prairies and eastern deciduous forest, and the transition between southern and boreal floras. Another factor contributing to this high plant diversity is the unusually rich diversity of plant habitats, which are well described in the introductory portion of this book, *Wildflowers of the Indiana Dunes National Park* by Nathanael Pilla and Scott Namestnik. Not since the publication of Peattie's *Flora of the Indiana Dunes* (1930) has an up-to-date floral guide of the Indiana Dunes been published. Given the long history of national park wildflower guides, I looked forward to the publication of a modern field guide to the wildflowers of the Park. This excellent and useful volume fulfills that goal.

The authors of this book, as with any popular wildflower guide, had two principal decisions to make, what plants to include and how to arrange them. The authors highlight 169 plant species (which constitutes about 10% of the 1,698 native and nonnative (482) plants) known from the Park (Pavlovic et. al. in press). These represent common species that the visitor to the Park is likely to encounter and represent 59 plant families of which the largest is Asteraceae (40 species). Twenty-eight families are represented in this book by a single species. The treatment for each of the 169 species presents a morphological description, the bloom period, what plant communities it inhabits, species notes, an etymology of the scientific name, and, for most species, an account of one or more look-a-like species. The authors mention approximately 209 look-a-like species, which brings the number of species treated in this guide to a total of 378, or 22% of the total flora of the Park.

The book is divided into ten sections: an introduction, a brief history of the Indiana Dunes National Park, a lengthy discussion of how to use this guide, descriptions of the several plant communities found in the Park, and the core of the book, six sections of species treatments arranged by flower color. Flower color is a popular method for arranging plants in national park wildflower guides (e.g., Hammer 2014, Janke 1963), but others use plant families (e.g., Beidleman et al. 2000) or flowering season (e.g., Hutson et al. 2006). A nice touch is that these headings are uniquely colored for each flower color section. I was disappointed that white and green flowers had to be combined. Within each color section,

plants are arranged alphabetically by scientific genus and species names. The morphological descriptions of the plants are accurate and thorough. Descriptions of the look-a-likes are variable in their length but focus on the key distinguishing characteristics. The book ends with a glossary of technical terms, a list of recommended reading and references, and an index.

A couple of minor things about the format of the individual species entries frustrated me. First, the family name is in a font larger than that of the scientific name of the species, leading one to wonder if this was to emphasize the family names. Nowhere in the book is the novice wildflower enthusiast told that learning family characteristics, a tool too lengthy for this guide, can be an important short cut to identifying plants. Second, the common names which are given parenthetically after the scientific names, are bolded as if to emphasize the common names, even though the species are organized by their scientific binomial names. While common names have their perils in that many species can have the same common name, use of bold print for the common names may confuse the novice reader. Which name is the novice to learn?

The conversational nature of the text and interesting notes and etymologies help make this book accessible and entertaining to the general reader. The interested reader not only learns Latin and Greek in reference to the scientific names but also learns interesting mythological stories. However, in places this style leads to some inaccuracies in the text. Counter to standard editorial practice of defining terms on first use, the Doctrine of Signatures is mentioned in *Cardamine concatenata* without definition and then finally defined under *Eupatorium perfoliatum*. This minor problem could have been solved by referring the reader to the *Eupatorium perfoliatum* explanation where the doctrine is mentioned in the *Cardamine concatenata* treatment. A few times literary references are obscure as in the entry for *Angelica atropurpurea*, where the world of Malacandra is referred to without explanation. C. S. Lewis described this world where trees and mountains were tall and thin, like *Angelica*, in his science fiction *Space Trilogy* (1990). Nevertheless, this information is interesting and useful. For the general reader, another inadequacy is that several technical terms used in the species descriptions are not defined in the glossary, e.g., introgression, hibernaculum, sessile, hermaphrodite, tubercle, haustoria, and umbellets.

The high-quality photographs of the flowers and plants add greatly to the usefulness of this book so that the reader can recognize the characteristics described in the text. The photographs of the plant communities will help the reader to recognize the habitats they find in the Park. Pilla and Namestnik's "Wildflowers of the Indiana Dunes National Park" will be a popular and classic introductory guide to the wildflowers of this area of high plant diversity.

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