

Floristic Sublimity

BOOK REVIEW

Flora of the Chicago Region: A Floristic and Ecological Synthesis,
by Gerould Wilhelm and Laura Rericha.

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The appeal of field botany rests within the deeply human drive to explore and understand nature; it is heuristic and phenomenological. Touching soil and roots where each greets the other, witnessing and pondering the complexity that drives phytoecological trends, and experiencing the awakening that comes from understanding place through process are as characteristically human as speech, bipedalism, and wielding fire. To fulfill this destiny, a field botanist needs only keen eyes, a compulsion to explore, and a good flora to guide them on their path to botanical and ecological enlightenment. The new *Flora of the Chicago Region: A Floristic and Ecological Synthesis*, by Gerould Wilhelm and Laura Rericha, is the most contemporary and thorough manifestation of this endeavor.

Long anticipated, the new flora came out in early 2017 as both an update and upgrade of the long esteemed fourth edition of *Plants of the Chicago Region*, by Floyd Swink and Gerould Wilhelm, published in 1994. Like its predecessor, the new flora covers the 22-county area around the southern tip of Lake Michigan and encompasses portions of Illinois, Indiana, Michigan and Wisconsin. This reboot includes over 600 new vascular plants, for a total of 3,149 taxa. It also includes descriptions of all plant taxa, nomenclatural etymology, surficial geology maps, updated distribution maps, a natural divisions map, natural community descriptions with gorgeous photographs, numerous line drawings, several color plates with close-up images of stamens, styles and nectaries of select species and much, much more.

As with the old edition, each entry includes a list of associated plant taxa for the communities in which that taxon occurs; this has long proven to be a better way of inferring habitat than simply listing a community type. The real game changer, however, is the addition of non-plant (mostly insect) associates that are provided for most plant species. This is largely the contribution of co-author Laura Rericha whose entomological prowess is unrivaled. Thus, for a

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commonly known species like *Schizachyrium scoparium* (little bluestem), one will not only learn what its associated plant species are in wet-mesic sand prairies, dry to dry-mesic prairies, and prairie fens, but also that a black leaf beetle, *Anisostena nigrita*, mines the blades, that the Eastern Towhee utilizes the tussocks for nesting and thermally regulated incubation, that numerous ant species nest in the root zone (each is listed), that a rust called *Puccinia andropogonis* infects the herbage and a smut called *Sporisorium everhartii* is frequently encountered on the spikelets. This additional information is a giant step toward the consilience and concinnity of which Dr. Wilhelm has long spoken, and furthers the precept that knowing the flora is merely a gateway into knowing an entire system.

The taxonomic treatments in the flora are unparalleled and demonstrate the level of clarity and richness that decades of studying plants as manifestations of living systems, and their names as human constructs, should entail. The treatments also exemplify intimate knowledge and wise consideration of the primary taxonomic literature; one only need examine the care and detail evident under *Dichanthelium* and *Rubus* for proof. The species concepts are lenient, robust and well argued. The numerous nomenclatural updates and innovations are not so eccentric as to alienate the professional user nor so erudite as to stupefy amateurs grown dependent on the older version. In the fashion of the previous work, the keys have been distilled to their most potent characters, with elaboration included only where necessary. The book itself is hefty, ornate, and well-constructed. This, combined with the constitution of its contents, makes it very well deserving of the rich tapestry of communities and species that make the Chicago region so wonderfully unique.

The ancillary information found in this flora reads like a field botanist's manifesto. It is dripping with a wild-honey philosophy that both asks and allows the reader to ponder not only the "lilies of the field," but the soil in which they grow, the insects that pollinate them, and the observer's place in the field itself. The preface explains that the first purpose of the flora is "to provide the student with a means to identify vascular plants." The second purpose is "to provide the user with an appreciation that plants are not stand-alone taxonomic integers in a landscape matrix, but rather, self-replicating genetic entities inextricably woven into a broader array of life adapted to a particular place, defined in part by climate, geography, soils, physiography, geologic age and history, and relationship with human culture." At a time when science is myopically focused on plants as "taxonomic integers," and overly obsessed with testing hypotheses by algorithm and computer modulation, where field botany is passed off as the epitome of antiquation, this work comes as a breath of fresh air and a much-needed confirmation that the study of organisms as they occur in nature is simultaneously existential, life-affirming, and whole-heartedly scientific.