

Plant Identification Guides for Wetland Delineation in Minnesota

For most delineators a combination of easy to use field guides (generally not comprehensive and not highly technical) and authoritative taxonomic keys (generally comprehensive and highly technical) are recommended.

Guides should be obtained for all of the following categories at a minimum: sedges, rushes, grasses, forbs, ferns, trees, shrubs.

Finding a guide in a particular category that is specific to MN is difficult given the variability of ecoregions in the State. It is often necessary to obtain more than one guide to cover the entire State for a particular category of plants.

Some guides are specific to a particular type of habitat (e.g. wetland plants). Using these type of guides requires that the user know for sure whether or not they are in the habitat the guide is specific to. So, for those delineating wetlands, a guide that only covers wetland plants has less utility than a more comprehensive guide that covers both wetland and upland plants that typically occur in the transition area that the delineator is working in.

The following are some plant identification guides applicable to MN along with some comments. This list is not comprehensive and it does not imply an endorsement of any particular guide. There are some plant identification guides that are specific to a particular region of the State and those may be very valuable if the delineator is working in that specific area. The purpose of this document is to provide information on general guides that cover all or large portions of the State. With a few exceptions, it generally does not include “picture guides” that lack dichotomous keys.

Vascular Plants

Flora of Michigan by Voss & Reznicek– comprehensive, but specific to MI, many species overlap with MN, includes limited photos and drawings, technical

Manual of Vascular Plants of U.S. by Gleason & Cronquist – comprehensive, highly technical, covers a much larger area than MN, the “Illustrated Companion” to this manual provides excellent drawings of all species.

Vascular Flora of Illinois by Mohlenbrock – comprehensive and specific to IL, technical with drawings, many species overlap with prairie areas of MN, multiple volumes covering different plant groups.

Flora of the Great Plains by Barkley – comprehensive and technical, only covers plains/prairie areas of western MN.

Wetland Plants of Minnesota by Chadde – (2nd edition) extensive drawings and keys, specific to wetland and aquatic plants only, descriptions include distribution maps and wetland indicator status for each region.

Aquatic and Wetland Plants of Northeast North America by Crow and Hellquist - covers much larger area than MN, extensive drawings and keys, specific to wetland and aquatic plants only.

[*Wetland Plants and Plant Communities of Minnesota & Wisconsin* by Eggers & Reed](#) – (3rd edition) specific to key species found in different wetland communities, color photos, detailed descriptions; online only.

Just Grasses

Grasses of Wisconsin by Fassett – specific to WI, but includes many of the same species that are found in MN. Includes technical keys and drawings.

Manual of Grasses of U.S. by Hitchcock – covers a much larger area than MN, comprehensive, includes drawings

Just Forbs

Newcomb's Wildflower Guide by Newcomb – not comprehensive, easy to use, requires flowers to utilize key, drawings (some color)

Just Ferns

Ferns of Minnesota by Tyron – comprehensive and specific to MN, has keys and drawings with a few pictures.

Just Trees and Shrubs

Trees and Shrubs of Minnesota by Smith – comprehensive and specific to MN, easy to use, color pictures

Just Sedges

Field Guide to Wisconsin Sedges by Hipp – comprehensive guide to *Carex* species in WI, a lot of overlap with MN, easy to use, includes extensive drawings.

Sedges: Carex by Mohlenbrock – comprehensive guide to *Carex* species in Illinois, excellent line drawings.

Other

Plant Identification Terminology, An Illustrated Glossary by Harris and Harris

Weeds of the Northeast by Uva, Neal and DiTomaso – for agricultural weeds, useful comparison tables in the back, vegetative key in the beginning, comparisons of similar species

Weeds of Northern United States and Canada by Royer and Dickinson – specific to “weed” species, good photos and illustrations, no keys, organized by plant families.

Aquatic Plants of the Upper Midwest by Skawinski – for submergent and floating leaved plants.

Websites

Minnesota Wildflowers Interactive Key: <http://www.minnesotawildflowers.info/>

Minnesota Wetland Restoration Plant ID Guide: <http://www.bwsr.state.mn.us/wetlands/plantid/>

Univ. of WI – Stevens Point Herbarium: <http://wisplants.uwsp.edu/VascularPlants.html>

Univ. of WI – Green Bay Herbarium: <http://www.uwgb.edu/biodiversity/herbarium/>

Univ. of MI – Herbarium: <http://michiganflora.net/>

Univ. of MN Herbarium:

<http://www.bellmuseum.umn.edu/ResearchandTeaching/Collections/ScientificCollection/PlantCollection/>