

2.1 Introduction to the Plant Monographs

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A small percentage of the thousands of plants introduced to the United States in the past three centuries have become problematic. Corn, soybeans, peanuts, potatoes, citrus, rice and many other introduced species are invaluable to human society. Regardless, all of the weeds described in this Section have one thing in common: they were introduced from other geographical areas by humans. Some native plants such as phragmites and bananalily have hybridized with introduced varieties or species to become more aggressive (see Sections 2.15 and 2.9 for more information). These weeds have caused significant economic and ecological damage to our aquatic resources. Millions of dollars are spent annually to reduce these impacts and similar efforts will continue into the foreseeable future. Lake homeowners associations and other concerned citizens should learn to recognize these invasive weeds and make every effort to prevent their introduction.

The authors of the plant monographs have devoted years to studying the biology and management of these plants. Each plant has distinct ecological and physiological characteristics that causes it to be invasive and some are more aggressive than others. A better understanding of how and why they are invasive may allow scientists to make better recommendations for how to prevent other invasive plants from being introduced into the US. If this manual was being written in 1950 it would likely include only five or six species: Eurasian watermilfoil (Section 2.3), curlyleaf pondweed (Section 2.4), waterchestnut (Section 2.10), waterhyacinth (Section 2.11), waterlettuce (Section 2.12) and possibly egeria (Section 2.5). At that time, these were regional problems (some still are) and did not occur over large geographical areas like hydrilla (Section 2.2), watermilfoil, phragmites and purple loosestrife (Section 2.16) do today. Starry stonewort (Section 2.7), monoecious hydrilla and floatingheart are relatively new and are likely to become more widespread in the future, while other plants such as waterlettuce, waterhyacinth, curlyleaf pondweed and phragmites have likely reached their geographical limits pending future climate change.

There are an infinite number of websites and other sources of information on invasive weeds available to the public. State natural resource agencies, county extension offices, local NGOs such as The Nature Conservancy, Sierra and Audubon Clubs and others usually have local members or staff with knowledge of invasive plants in your area. There are aquatic weed management companies throughout the US with expertise in plant identification and lake or pond biology.

The following websites are good sources of information; additional resources for each Section of this handbook are listed in the “For more information” Section beginning on page 205.

National scope

North America Invasive Species Management Association: www.naisma.org

University of Georgia: www.bugwood.org

US Army Corps of Engineers: <https://apcrp.el.erdc.dren.mil>

US Department of Agriculture The Plants Database: <http://www.plants.usda.gov>

US Environmental Protection Agency: <http://www.epa.gov>

US Geological Survey: <https://nas.er.usgs/taxgroups/plants>

Regional scope

University of Florida Center for Aquatic and Invasive Plants: <http://plants.ifas.ufl.edu>



North Carolina State University: <https://aquaticweeds.wordpress.ncsu.edu>

Texas A & M University: <https://aquaticplant.tamu.edu>

University of Minnesota: <https://www.maisrc.umn.edu>

Submersed



Floating-leaved



Floating



Emergent



Algae

