

WEEDUS: DATABASE OF PLANTS INVADING NATURAL AREAS IN THE UNITED STATES

Jil M. Swearingen

National Park Service, Center for Urban Ecology, 4598 MacArthur Blvd., N.W., Washington, DC 20007

WeedUS may provide the most current and comprehensive compilation of invasive plant species affecting natural ecosystems that is currently available. Over 1,000 plant species that have been reported to be invading natural areas in the U.S., including Hawaii, have been entered into the WeedUS database as of November 2004. Additional species are undergoing review to determine or clarify native origin, natural range, taxonomic status, etc. before being included. Requirements for inclusion in the database are that the plant be exhibiting invasive behavior in a “natural area”, generally excluding intensively managed lands such as croplands and forestry plantations. Reports of additional invasive plant species and occurrences are welcome and will be added to the database as received.

Data for WeedUS are based on the observations and expert opinions of botanists, ecologists, invasive species specialists, and other professionals. Information is derived from a wide variety of sources (N=130) including publications, reports, surveys, and personal observations. Sources include the National Park Service (59 units), other federal, state, and local agencies, Exotic Pest Plant Councils and sister organizations, The Nature Conservancy, universities, and others. Database fields include genus; species; author; synonyms (selected);

common name; family; plant habit(s); native origin; U.S. nativity; states, national parks, and regions where reported invasive; federal noxious weed status; and source references. For consistency, taxonomy follows Kartesz (1999).

Some applications of the database include: 1) state and regional level occurrence information for use in mapping occurrences of ecologically important invasive plants; 2) improved predictive abilities for potential spread; 3) improved invasive species prevention and management abilities; 4) baseline data for invasive plant ranking and prioritization; and 5) identification of information and research gaps.

A subset of the WeedUS database (common name, scientific name, states and national parks where invasive, and references), is posted to the Plant Conservation Alliance, Alien Plant Working Group web page “Weeds Gone Wild: Alien Plant Invaders of Natural Areas” at <http://www.nps.gov/plants/alien>. Publication of the full WeedUS database is currently being investigated.¹

¹The Plant Conservation Alliance was initially established by a Memorandum of Agreement signed by ten federal agencies in May 1994. It is also supported by many non-federal Cooperators, currently numbering over 200.