NOTE

LISTS OF POTENTIAL HYDROPHYTES FOR THE UNITED STATES: A REGIONAL REVIEW AND THEIR USE IN WETLAND IDENTIFICATION

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Abstract: The U.S. federal government has developed lists of plant species that occur in wetlands. The initial purpose of these lists was to enumerate plants that grow in wetlands and that could be used to identify wetlands according to the U.S. Fish and Wildlife Service's wetland classification system. The first list was generated in 1976 by the Service, and since that time, the list has undergone several iterations as more information was reviewed or became available through field investigations and scientific research. Two lists are currently published and available for use: a 1988 list and a 1996 draft list. The latter list represents an improvement based on nearly 10 years of field work by the four signatory agencies plus comments from other agencies, organizations, wetland scientists, and others. The national list was generated from 13 regional lists. These data have not been summarized previously; this note provides an interregional summary of vital statistics. The 1988 list included 6,728 species, while the 1996 list has nearly 1,000 additions for a total of 7,662 species (a 14% increase). Roughly one-third of the nation's vascular plants have some potential for being hydrophytes—plants growing in water or on a substrate that is at least periodically deficient in oxygen due to excessive wetness. Each species on the list is assigned an indicator status reflecting its frequency of occurrence in wetlands: 1) obligate (OBL; >99% of time in wetlands), 2) facultative wetland (FACW; 67-99% in wetlands), 3) facultative (FAC; 34-66%), 4) facultative upland (FACU; 1-33%), and 5) upland (UPL; <1%). From 1988 to 1996, the regional lists of potentially hydrophytic species increased by more than 39 percent in three regions: Caribbean, North Plains, and Central Plains. The percent of OBL, FACW, and FAC species on the lists decreased in the Northeast and Hawaii. The percent of OBL and FACW species also decreased in the Southeast and Northwest. The number of OBL species declined in all but three regions, whereas the number of FACU species added to the lists increased in all regions except Hawaii. The regional "wetland plant" lists have been used to help identify plant communities that possess a predominance of wetland indicator plants (i.e., a positive indicator of hydrophytic vegetation) and to identify wetlands that can be recognized solely based on their vegetation.

Key Words: wetland plant lists, hydrophytes, hydrophytic vegetation, wetland ecotypes, National Wetlands Inventory, prevalence index, wetland identification, wetland delineation

INTRODUCTION

When the U.S. Fish and Wildlife Service (FWS) initiated its National Wetlands Inventory Program (NWI) in the mid-1970s, one of the first tasks was to develop a wetland classification system to serve as the standard for mapping wetlands across the country. The classification system went through a few versions and field testing prior to its publication as "Classification of Wetlands and Deepwater Habitats of the United States" (Cowardin et al. 1979). This classification system has been used for wetland mapping for over 25 years. On December 17, 1996, it was adopted by the Federal Geographic Data Committee as the national

technical standard for wetland classification (FGDC-STD-004) when reporting on wetland status and trends and for geospatial data entered into the national geospatial database (http://www.fgdc.gov/standards/status/ swgstat.html; http://www.nwi.fws.gov/fgdc/certificate. pdf). The FWS's wetland definition listed the predominance of hydrophytes and undrained hydric soils as two main indicators of wetlands. Moreover, the document referenced that the FWS was preparing a list of ''hydrophytes and other plants occurring in wetlands of the United States.''

The initial list compiled in March 1976 by the FWS contained only 1,626 species and was considered "ob-