VIRGINIA

Cuphea carthagenensis (Jacq.) J. F. Macbr. (LYTHRACEAE)—City of Suffolk: Southwest Suffolk Virginia Department of Transportation (VDOT) wetland creation site, approx. 1.6 km southeast of U.S. 58 and Route 688 intersection, along southeast perimeter of the created wetland, among Cyperus pseudovegetus Steud., Typha latifolia L., Carex vulpinoidea Michx., Juncus effusus L., Juncus acuminatus Michx., Fuirena squarrosa Michx., Dichanthelium dichotomum (L.) Gould, and Eclipta prostrata (L.) L., 17 September 2004, D. A. DeBerry 638 (WILLI).

Significance. This is the first account of Columbian waxweed in Virginia and, to the best of our knowledge, represents the northernmost location for this species in the United States (United States Department of Agriculture, Natural Resources Conservation Service [USDA, NRCS] 2006). The distribution of this species is largely tropical to subtropical – it is native to South America (Weakley 2006), but has naturalized in the United States throughout the lower southeastern states as well as Hawaii (USDA, NRCS 2006). In North Carolina, Columbian waxweed has been reported from several locations just across the state line from Virginia (USDA, NRCS 2006; Tom Wieboldt pers. comm.). On some Pacific islands such as Hawaii, Fiji, and Guam, the species is invasive and is considered a fairly aggressive weed (Graham 1989). Perry et al. (1998) discuss created wetland sites as potential points of introduction for invasive species to local floras. Although Columbian waxweed appears to be somewhat invasive in certain climes, it is not likely that this species poses such a threat at our cooler temperate latitude in Virginia (Graham 1989).

Ludwigia bonariensis (M. Micheli) Hara (ONAGRACEAE)—City of Suffolk: Southwest Suffolk VDOT wetland creation site, 1.6 km southeast of U.S. 58 and Route 688 intersection, east-central portion of the created wetland, within a nearly monotypic stand of Typha latifolia, 21 September 2004, D. A. DeBerry 639 (WILLI).

Significance. Carolina primrose-willow, previously known from the Carolinas, Florida, and Alabama, is a state record at this location in Virginia and represents the northernmost occurrence of this species in the United States (USDA, NRCS 2006; Virginia Botanical Associates 2004; Weakley 2006). This plant has a very localized distribution in the Carolinas, mostly occurring in the southeastern regions of those states (Nelson 2006, Radford et al. 1968). This new disjunct location in Virginia brings into question the mode of introduction for this species. Although it is possible that seeds could have arrived by means of animal vectors (e.g., migratory birds), we suspect that the species may have been introduced in a seed mix that was applied to the site after construction (Virginia Department of Transportation pers. comm.).

Aeschynomene indica L. (FABACEAE)—Southampton County: Franklin Bypass VDOT wetland creation site, 4 km southeast of the City of Franklin, approximately 75 m south of Route 58 Bypass just west of Blackwater River floodplain, about 50 plants growing along the fringe of a seasonal pond feature among Sacciolepis striata (L.) Nash, Ludwigia palustris (L.) Ell., Bidens aristosa (Michx.) Britt., Lycopus rubellus Moench var. rubellus, Polygonum hydropiperoides (Michx.), Panicum rigidulum Bosc ex Nees, and Juncus effusus, 12 October 2005, D. A. DeBerry 838 (WILLI).

Significance. This is a new population of Indian joint-vetch in Southampton County, previously reported as a state record in 1998 on a nearby site (Perry et al. 1998). This new location is significant because the previous site, a portion of the Franklin Bypass mitigation area north of U.S. Route 58, has recently been impacted by beaver activity, and therefore the population reported in 1998 has most likely been extirpated due to excessive flooding (pers. obs.). Therefore, it appears that Indian joint-vetch has developed a localized seedbank in new nearby locations, and perhaps the seasonal pond features created at this site provide appropriate habitat for establishment and maintenance of this annual species. The authors would like to thank Virginia Department of Transportation for partial funding of this research and permission to access the sites. We would also like to thank Holly Grubbs, curator of the herbarium at the College of William and Mary (WILLI) for verification of the specimens, Tom Wieboldt for information on the status of these species in Virginia, Drs. Donna M. E. Ware and Gene M. Silberhorn for botanical support on the overall project, and Dr. George P. Johnson and two anonymous reviewers for comments on the manuscript.—DOUGLAS A. DEBERRY AND JAMES E. PERRY, DEPARTMENT OF BIOLOGICAL SCIENCES, VIRGINIA INSTITUTE OF MARINE SCIENCE, COLLEGE OF WILLIAM AND MARY, GLOUCESTER