

considered non-indigenous. Families with the largest number of taxa were Asteraceae (159), Poaceae (147), Fabaceae (83), Cyperaceae (78), Rosaceae (38), and Lamiaceae (35).

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P109 • Alexander D. DeGenova, Andrew G. Gardner, Rachel S. Jabaily

Dispersal Modes and Areas of Origin of Invasive Species in an Old Growth Urban Forest

Overton Park is a 342-acre hardwood forest located within an urban-residential area of Memphis, Tennessee. Forests found in close proximity to urban areas are often strongly impacted by ecological disturbances, including invasive species introduction. An ongoing inventory of vascular plants for the Rhodes College herbarium (SWMT) found eighty-three plant species to be non-native, including eight known invasive species present in the park. The abundance of animal vectors (e.g. dogs, birds, and humans) increases the likelihood of plant dispersal throughout the park, resulting in the introduction and spread of non-native and potentially invasive species. Consequently, I hypothesized that the majority of invasive plant species in Overton have fruits and seeds that are dispersed by animals. Additionally, the popularity of ornamental Asian species for horticulture in the southeastern United States led me to hypothesize that the majority of invasive plant species in the park are Asian in origin. Ninety-one species were collected and categorized by geographic area of origin and fruit dispersal mode. I found that 60 percent of collected species were native, 40 percent were non-native, and nine percent of all species were invasive. Sixty-four percent of invasive species had seeds dispersed by animals, and 64 percent of the invasives were native to Asia, supporting the hypotheses. The collection and documentation of invasive species found in parks like Overton is important, because conservation strategies are often specifically tailored to deal with the invasive plants present in the target area.

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P110 • Wendy B. Zomlefer¹, Linda G. Chafin², J. Richard Carter³, David E. Giannasi¹, Cristin Walters¹

Coefficient of Conservatism Rankings for the Flora of Georgia: Wetland Indicator Species

Wetland habitats currently cover about one-fifth of Georgia and have been reduced in acreage by as much as twenty-five percent over the past two centuries due to anthropogenic activities. Accurate identification and careful study of these areas are crucial for their preservation and for compliance with federal and state environmental regulations. Several vegetation-based biological assessment methodologies have been developed to define wetlands and to assess their quality. One major wetland delineation system, mandated by federal law, incorporates the *National Wetland Plant List (NWPL)*, a classification system ranking plant species in five indicator categories according to fidelity and preference for wetlands or uplands. These rankings were recently updated via a comprehensive and collaborative nationwide effort involving four government agencies and teams of wetland specialists. Another expert-based indicator system, Coefficients of Conservatism, is the foundation of the Floristic Quality Index, a metric widely used in the United States for assessing ecological condition of wetlands (as well as other plant communities). The Coefficients are based on breadth of habitat preference(s) and tolerance to disturbance, with exotic and ruderal species receiving the lowest scores, and ecologically conservative species, the highest scores. A team of four botanists, proficient with the flora of Georgia, convened to assign Coefficient of Conservatism rankings to the 2,262 *NWPL* species for the state. The resulting Web-accessible database, which includes information such as regional wetland rankings and conservation status, is described here.

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