



Invasive Plant Species at Ozark National Scenic Riverways

Importance: Invasive plants alter native ecosystems

Native plant species live in a specific place and evolve with other plants in the same ecosystem. In contrast, exotic species did not evolve with native species in the same ecosystem. The invasive designation suggests that a species poses environmental harm to native populations or communities. Human disturbance has introduced many invasive exotic species into our natural landscapes. These species fragment native ecosystems, displace native plants and animals, and alter ecosystem function. Invasive species are second only to habitat loss as threats to biodiversity.



Long Term Monitoring: Early detection and prevention ¹

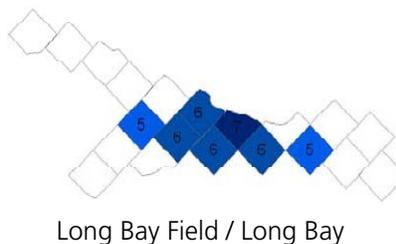
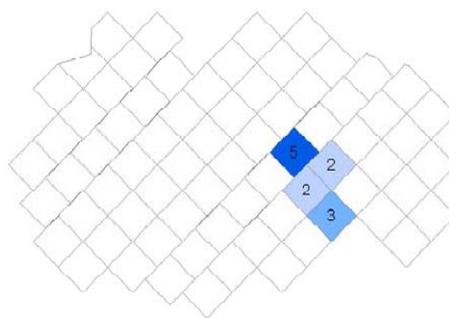
The Heartland Inventory and Monitoring Network monitors invasive exotic plants to assist parks in early detection and in prevention of invasive infestations in park natural areas. The network and Ozark National Scenic Riverways established watch lists for species known to exist in the park, and those that could establish in the foreseeable future. The network created transects to survey invasive plants in the prairie. Surveys completed in 2009 let scientists calculate invasive plant cover and frequency from data collected in transects. Scientists also assigned invasiveness ranks that represented ecological impact and general management difficulty for each invasive species encountered. The invasiveness ranks and total estimated cover assists managers in prioritizing invasive species treatment.

Status and Trends: Management actions should be effective

Scientists documented seven invasive exotic plant taxa at Big Spring Pines Natural Area and Chubb Hollow, and Long Bay Field and Long Bay in 2009. They found Johnsongrass (*Sorghum halepense*), ground ivy (*Glechoma hederaca*), and Nepalese browntop (*Microstegium vimineum*) to be the most widespread and abundant invasive exotic species. The park can expect to control most invasive exotic species in the park, particularly those of low abundance. Scientists also found that

1. Johnson grass was found only in hay fields.
2. Nepalese browntop, also known as Japanese stiltgrass, was found in moist areas with both low and high visitor use.
3. Lespedeza was found almost exclusively along hiking trails.

Big Spring Pines Natural Area / Chubb Hollow



Abundance and distribution of Johnsongrass. Cover classes are as follows:
 1=0.1-0.9 m², 2=1-9.9 m², 3=10-49.9 m², 4= 50-99.9 m², 5=100-499.9 m²,
 6= 499.9-999.9 m², and 7 " 1,000 m².

Heartland Network Inventory and Monitoring Program of the National Park Service. Visit www.nps.gov/im/units/htln/index.htm



... protecting the habitat of our heritage

¹Short, M. F., C. C. Young, C. S. Gross, and J. L. Haack. 2010. Invasive exotic plant monitoring at Big Spring Pines Natural Area, Chubb Hollow, Long Bay Field and Long Bay at Ozark National Scenic Riverways: Year 1 (2010). Natural Resource Technical Report NPS/HTLN/NRTR—2010/290. National Park Service, Fort Collins, Colorado.