



Bird Monitoring at Herbert Hoover National Historic Site

Importance: *An important component of the park ecosystem*

Birds intrigue and excite visitors, having become an important part of park interpretive programs. Bird watching has grown into a popular recreational activity at Herbert Hoover NHS. Beyond the pleasure that birds provide, they are an important component of park ecosystems. Their high metabolism and position in the food web make them indicators of change in an ecosystem – the canary in the mine, so to speak. Preserving habitat for the wellbeing of bird populations preserves entire ecosystems for the benefit of all species.

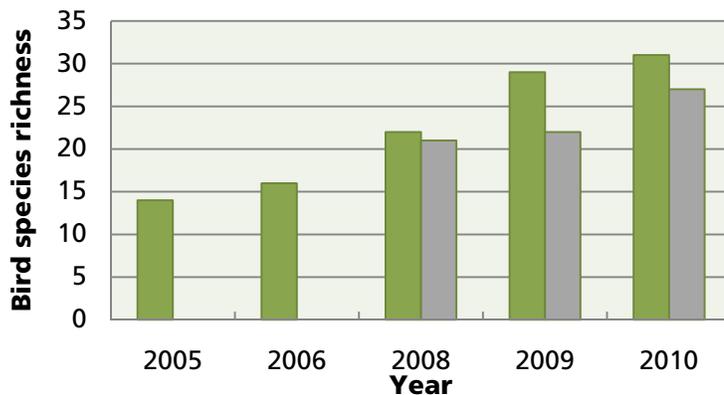


Long Term Monitoring: *Assessing change*¹

The Heartland Inventory and Monitoring Network staff monitors change in bird community composition and bird abundance to determine the health of the bird community. They accomplish this by surveying seasonal and year round resident birds in the park during breeding season. These data and an evaluation of habitat structure and composition contribute to assessing responses of bird communities to changes in their habitat, and contribute to assessing integrity of the prairie. Changes in populations of species in decline across the continent (*species of continental importance*) contribute to assessing the influence of habitat management on the bird community. Five surveys between 2005 and 2010 provide data on populations and breeding habitat of birds in the historic site.

Status and Trends: *Baseline data give reference point for evaluating management actions*

Surveys show that 55 of the 56 species recorded at the NHS reside permanently or during summer breeding, and they characterize the breeding bird community. Additionally, scientists have found that



1. Current efforts to restore and maintain mixed vegetation provide a diversity of habitats, as indicated by eight breeding *species of continental importance* and four grassland obligate species (species requiring grasslands for their breeding cycle) that appeared in surveys.
2. Four grassland obligate species—Dickcissel (*Spiza americana*), Eastern Meadowlark (*Sturnella magna*), Grasshopper Sparrow (*Ammodramus savannarum*), and Sedge Wren (*Cistothorus platensis*) -- serve as indicators of the ecological integrity of the grassland habitat.

Figure 1. Total species richness values for the bird communities at Herbert Hoover NHS, Iowa during the breeding seasons of 2005, 2006, 2008, 2009, and 2010, by habitat type; grassland (■) or developed areas (■). Developed areas on the historical site have only been surveyed since 2008.

Heartland Inventory and Monitoring Network, National Park Service, <http://science.nature.nps.gov/im/units/html/index.cfm>

... protecting the habitat
of our heritage



¹ Peitz, D. G. 2010. Bird community monitoring at Herbert Hoover National Historic Site, Iowa: 2005 – 2010 status report. Natural Resource Data Series NPS/HTLN/NRDS—2010/102. National Park Service, Fort Collins, Colorado.