



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 Network Inventory and Monitoring Program 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 NHS 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. The 2005 and 2006 surveys provide baseline data on populations and breeding habitat of birds in the NHS.

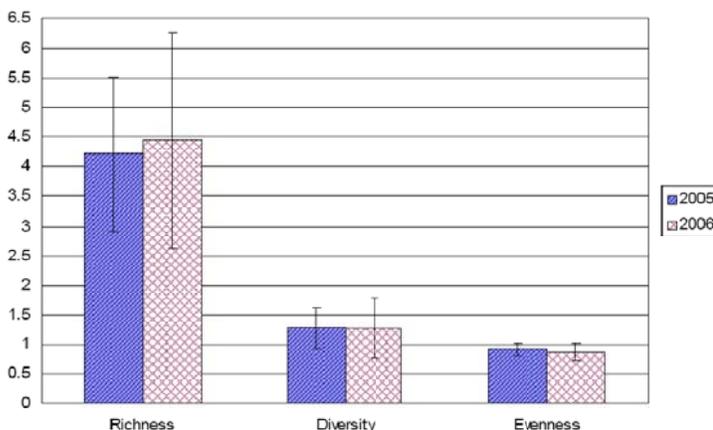


Sedge Wren – NPS photo

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

Scientists will use breeding bird surveys to assess the integrity of the prairie habitat over time. Changes in populations of common and widely distributed species will contribute to assessing changing prairie conditions. Changes in populations of species that are declining across the continent (*species of continental importance*) will also contribute to assessing the influence of habitat management on the bird community. Additionally, scientists have found that

1. Addressing habitat is key to the NHS retaining and attracting more grassland bird species. Conservation efforts should focus on species of local or *continental importance*.
2. Three NHS species are *species of continental importance*, Brown Thrasher, Dickcissel, and Grasshopper Sparrow.
3. Index values for species richness, diversity and distribution (evenness) fall into the normal ranges for a grassland habitat.



Average (\pm std dev) species richness, species diversity, and species distribution evenness values for the bird community during the breeding seasons of 2005 and 2006.

Heartland Network Inventory and Monitoring Program of the National Park Service. Visit www1.nature.nps.gov/im/units/hdn/index.htm.



¹ Peitz, D.G. 2007. Grassland Bird Monitoring at Herbert Hoover National Historic Site Iowa: 2005-2006 Status Report. Natural Resource Technical Report NPS/HTLN/NRTR—2007/024. National Park Service, Fort Collins, Colorado.