



Bird Monitoring at Arkansas Post National Memorial

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 in and around Arkansas Post NM. 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.



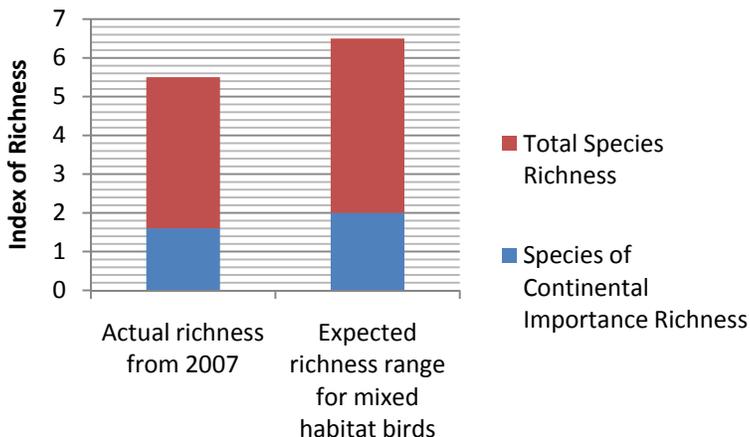
Great Egret – HTLN photo

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 community. They accomplish this by surveying seasonal and year round resident birds in the monument 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 2007 survey provides baseline data on populations and breeding habitat of birds in the monument.

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 and bottomland hardwood habitat over time. Changes in populations of common and widely distributed species will contribute to assessing woodland 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



1. Results of the survey will allow managers to manipulate specific elements in the habitat and to prioritize areas for habitat improvement for the benefit of *species of continental importance*.
2. The diverse mix of woodland, field/prairie, lawn, riparian, wetland and woodland edge habitat beneficially influenced species diversity.
3. The species richness, diversity, and distribution (evenness) in the mixed habitat at the monument fall into the expected range of values.

Comparing actual values and expected ranges for mixed habitat bird richness indicates that actual richness falls within the expected range for total species richness in this habitat type. Expected values for species of continental importance are an interpolation based on total species richness and percentages seen in the data.

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

... protecting the habitat
of our heritage



¹ Peitz, D.G. 2008. Bird Monitoring at Arkansas Post National Memorial, Arkansas: 2007 Status Report. Natural Resource Technical Report NPS/HTLN/NRTR—2008/099. National Park Service, Fort Collins, Colorado.