



Bird Community Monitoring at Arkansas Post National Memorial, Arkansas

Importance: An important component of the park ecosystem

Birds intrigue and excite visitors, having become an important part of park interpretive programs. Beyond the pleasure that birds provide, they are a significant 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 coal 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 change¹

The Heartland Inventory and Monitoring Network monitors change in bird community composition and bird abundance to determine the health of bird communities. They accomplish this by surveying seasonal and year round resident birds in the park during the breeding season, and measuring habitat structure and composition to assess habitat integrity. Together, these data contribute to assessing responses of bird communities to changes in their habitat. Trends in bird communities across the larger Mississippi Alluvial Valley Bird Conservation Region are reported so that local trends can be compared to regional trends. Since 2007, surveys provide data on populations and breeding habitat of birds in the park.



Figure 1. Indigo Bunting and Northern Cardinal; two of the most commonly occurring species at Arkansas Post National Memorial

Status and Trends: A reference point for evaluating management actions

Scientists recorded 90 bird species during May-June site visits in the nine years after initiating monitoring. Eighty-three of those species are considered breeding birds because they are permanent or summer residents to the memorial. Seven breeding species are considered *species of concern* for the Mississippi Alluvial Valley Bird Conservation Region, the North American Bird Conservation Initiative's region in which the park is located - Bald Eagle, Dickcissel, Kentucky Warbler, Orchard Oriole, Prothonotary Warbler, Red-headed Woodpecker, and Wood Thrush. The most commonly recorded species at the monument include Blue-gray Gnatcatcher, Blue Jay, Brown-headed Cowbird, Carolina Wren, Great Egret, Indigo Bunting, Morning Dove, Northern Cardinal, Northern Mockingbird, Red-bellied Woodpecker, Summer Tanager, and Tufted Titmouse. Additionally, scientists have found that:

- A pair of Bald Eagle, although not recorded consistently during timed surveys has nested annually near the memorial since initiating the surveys.

More Information

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¹ Peitz, D. G. 2015. Bird community monitoring at Arkansas Post National Memorial, Arkansas: Status report. Natural Resource Data Series NPS/HTLN/NRDS—2015/997. National Park Service, Fort Collins, Colorado.