



# Bird Community Monitoring at Hopewell Culture National Historical Park, Ohio

## **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 change<sup>1</sup>**

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 Eastern Tallgrass Prairie and/or Appalachian Mountain Bird Conservation Regions are reported so that local trends can be compared to regional trends. Since 2005, surveys provide data on populations and breeding habitat of birds in the park.



Figure 1. Red-winged Blackbird and Eastern Meadowlark; two of the most commonly occurring species at Hopewell Culture National Historical Park.

## **Status and Trends: A reference point for evaluating management actions**

Scientists recorded 100 bird species during May-June site visits in the eleven years after initiating monitoring. Ninety-five of those species are considered breeding birds because they are permanent or summer residents to the park. Twelve breeding species are considered *species of concern* for the Eastern Tallgrass Prairie and/or Appalachian Mountain Bird Conservation Regions, the North American Bird Conservation Initiative's regions in which the park is located - Bald Eagle, Bewick's Wren, Blue-winged Warbler, Dickcissel, Field Sparrow, Grasshopper Sparrow, Henslow's Sparrow, Northern Flicker, Prairie Warbler, Prothonotary Warbler, Sedge Wren, and Wood Thrush. The most commonly recorded species at the monument include Eastern Meadowlark, Field Sparrow, Grasshopper Sparrow, and Red-winged Blackbird. Additionally, scientists have found that:

- Thirteen of the 95 resident species were recorded on the park every year of the surveys.

## **More Information**

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<sup>1</sup> Peitz, D. G. 2015. Bird community monitoring at Hopewell Culture National Historical Park, Ohio: Status report. Natural Resource Data Series NPS/HTLN/NRDS—2015/998. National Park Service, Fort Collins, Colorado