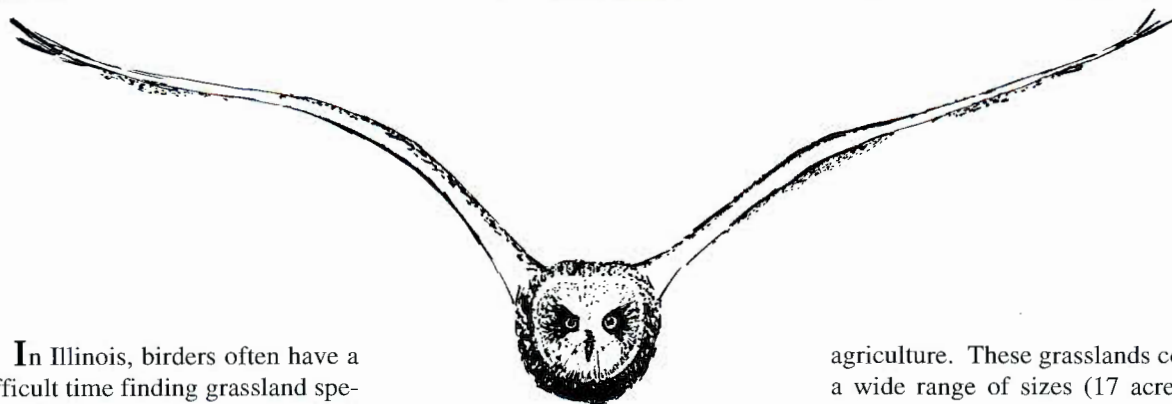


Grassland Bird Research at Prairie Ridge State Natural Area

by Jeff Walk and Eric Kershner



In Illinois, birders often have a difficult time finding grassland species during the breeding season. Small grasslands, those less than 40 acres, rarely attract the endangered species such as Upland Sandpipers, Northern Harriers, and Henslow's Sparrows to breed. Indeed, the more common species such as Eastern Meadowlark may even be difficult to find in these smaller grasslands.

Grassland habitat is at a premium in Illinois. Within the past 40 years, more than half of Illinois' pastures and hayfields — surrogate homes for many grassland species — have been lost to row crop expansion, urban development, and other land use changes.

Along with these changes have come disturbing numbers from Breeding Bird Surveys. The state is losing 3 percent to 7 percent of its grassland bird populations each year, or in less benign terms, we have lost 65 percent to 90 percent of our Dickcissels, Bobolinks, Grasshopper Sparrows, and Eastern Meadowlarks in the past 30 years. This is a major avian conservation problem for the Midwest.

We have been conducting breeding season investigations at the Prairie Ridge State Natural Area in Jasper County (formerly the Prairie-Chicken Sanctuary).

Our work tries to arm grassland managers and restorationists with reliable information for conserving these resources. Should grassland vegetation be short or tall, sparse or dense? How do prescribed burning, grazing, and mowing affect these birds? Does grassland size affect the species present? Do grassland size and surrounding land uses influence predation of bird nests? How often will birds re-nest each season? How well do young birds survive after leaving the nest? Can populations stabilize when habitat destruction stops or new habitat is created?

The site has many features, which make it interesting to study. Prairie Ridge consists of several small grasslands surrounded by intensive

agriculture. These grasslands cover a wide range of sizes (17 acres to 300 acres) and distances from one another (up to 5 miles).

Prairie Ridge also contains a wide variety of habitat types including introduced grasses such as brome, redtop, and bluegrass; restored native grasses; and areas that are either burned, mowed, grazed, or left undisturbed.

Prairie Ridge consists of about 1,600 acres. Although land managers think a site with at least 4,000 acres is required to sustain viable populations of rare grassland birds, Prairie Ridge attracts copious breeding grassland birds, some of them rare or endangered. The reserve has hosted approximately 50 Northern Harrier and 20 Short-eared Owl nests in the 1990s as well as 40 pairs of Henslow's Sparrows, 5 pairs of Upland Sandpipers, and hundreds of pairs of Dickcissels, Grasshopper Sparrows, Eastern Meadowlarks, and Field Sparrows. Greater Prairie-Chickens have been maintained on this small amount of habitat for 30 years, and after a genetic management program to al-