

Table 2

Percent of nests (of representative species) that produce at least one offspring.

Forest	Grassland	Shrubland	Wetland
32%	20%	25%	68%

- Forest, grassland, and shrubland values attained from S. K. Robinson et. al, Habitat Selection by Brown-Headed Cowbirds in Fragments Midwest-ern Landscapes.
- Wetland values attained from C. R. Paine, Abundance and Nesting Productivity of Wetland-Dependent Birds in Northeastern Illinois.
- Table calculated by using percent daily predation rates from Robinson et. al and Mayfield nest success from Paine.
- The reasons for so few successful nests in some of these ecosystems include predation by raccoons, skunks, mice, and other birds; abandoned nests due to Brown-headed Cowbird parasitism or disturbance; or the loss of an adult bird.

ing marsh condition by moving from marsh to marsh as conditions change between years. This was fine when much of the state was covered by wetlands. When shallow marshes dried during a drought, there was usually a deeper marsh nearby that provided suitable breeding habitat. However, as more and more marshes are drained, fewer alternatives exist for birds, particularly during drought periods. We need to understand not only what birds need now, but also what they need to get them through droughts. Paine and Stricker's work provides only an indirect measure of this need. A more direct measure can be obtained by examining between and within year movements of birds among marshes in the region.

Single Species Studies

Dr. Dave Enstrom of the Illinois Natural History Survey, Dr. Jim Herkert of the Illinois Department of Natural Resources, and I are working on a single-species study of wetland bird movements in northeastern Illinois. We selected Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*) as our study species because, unlike many other wetland species, this one is obvious when present, and the nests are easy to locate and monitor. We are also able to capture and mark birds with colored leg bands, allowing us to identify individuals from a distance without recapturing them. We banded 132 individual Yellow-headed Blackbirds during the spring and summer of 1998.

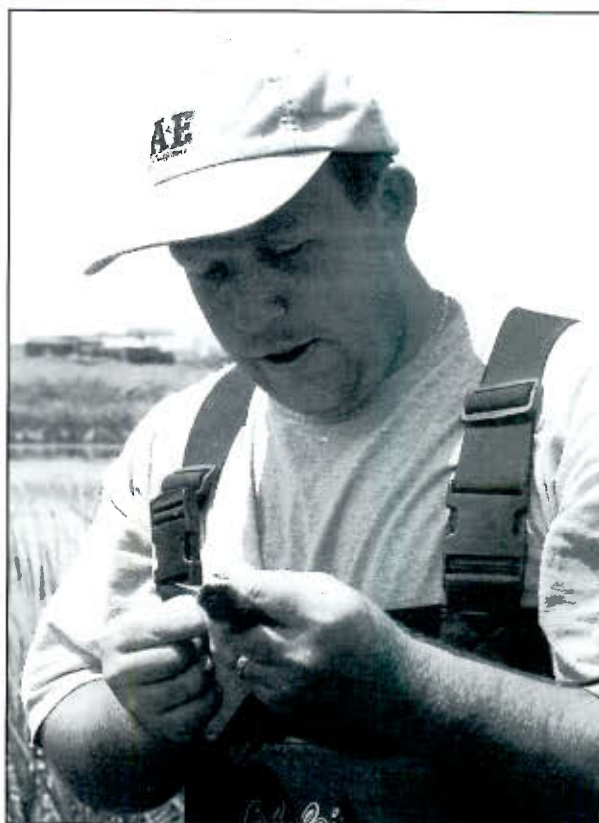
Identification of individual birds enables the study of dispersal and fidelity. We can learn whether Yellow-

headed Blackbirds can leave a site and reproduce successfully at another site within the same breeding season. We will also learn to what degree Yellow-headed Blackbirds return to the same wetlands and to the same area (northeastern Illinois) annually. By locating all of the colonies of Yellow-headed Blackbirds in Illinois (17) we can learn to what extent birds that bred or were born in Illinois one year return the next year.

With help from volunteers reporting color band sequences, we have already begun to learn how the population of Yellow-headed Blackbirds in Illinois is dispersing. All of this information will allow us to learn how Yellow-headed Blackbirds respond to changing local and regional marsh conditions, to determine their dispersal abilities, and ultimately predict the amount and distribution of habitat needed to ensure their existence in Illinois.

Our initial data concur with Paine's initial data. The Yellow-headed Blackbirds we studied in northeastern Illinois had a relatively high reproductive success. Further investigation will uncover what factors are affecting the species' population decline in Illinois.

A possible reason for the decline is habitat loss. Yellow-headed Blackbirds will not establish territories



Michael P. Ward bands a Yellow-headed Blackbird in Lake County. Photo by Sheryl De Vore.