

# Wetland Bird Research in Northeastern Illinois

by Michael P. Ward

The wetlands are being drained and altered across North America at an alarming rate. In Illinois alone, approximately 90% of the native wetlands have been lost (Suloway 1991). Given the magnitude of these losses, it is not surprising that many of our wetland-dependent birds appear to be in trouble. Today, wetland birds comprise half of the 42 bird species listed as threatened or endangered in Illinois (Herkert 1992, 1995).

The state's largest remaining concentration of wetland species and emergent wetland (marshes) on which they depend, can be found in the five-county region (Lake, Cook, Kane, McHenry, and DuPage) of northeastern Illinois (Table 1). This region is undergoing

rapid growth and development, and wetland loss continues. Further declines in wetland bird populations are likely unless greater efforts are taken to preserve the wetlands on which these birds depend.

Unfortunately, efforts to preserve wetland bird populations are hampered by a lack of basic information on these species — abundance, distribution, and habitat requirements. One of the reasons is that most wetland birds are secretive, which makes detection and observation difficult. The logistical challenges of working in wetlands also makes studying these bird species difficult. Essential data such as reproductive success, which can provide an excellent measure of the health (viability) of a population, are difficult to collect in dense wetland habitats. We need better information on the habitat requirements of wetland birds if we are to prevent further declines in their populations.

The first step is to determine what habitat conditions attract birds to a particular marsh, but that alone is not enough. Scientists have found that many bird species of Illinois forests and grasslands are not producing enough young to replace the individuals lost every year to natural mortality. In some cases, populations of Illinois birds are only maintained by influxes of birds that were raised in adjoining states (Robinson et al 1995). For this reason, it is essential to determine not just the habitat conditions that attract birds, but also what is required for birds to breed successfully. Determining whether birds are breeding successfully helps predict whether a population will persist in an area, and understanding the factors that affect reproductive success can help identify the critical needs of the species and identify conservation priorities.

In the case of wetlands, some of the habitat characteristics that may affect bird abundance and reproductive success include a wetland's size and vegetative composition as well as the number and type of other wetlands nearby. The way land surrounding a wetland is used (i.e., agricultural versus a housing development) may also be an important factor.



*Adult male Yellow-headed Blackbird at the Des Plaines River Wetlands Demonstration Project in Wadsworth, Lake County, one of the sites being studied by Michael P. Ward. Photo by Vic Berardi.*