



The status of wintering Bald Eagles in central Illinois

by Richard and Sigurd Bjorklund

Introduction

The Bald Eagle (*Haliaeetus leucocephalus*) is a common winter resident at the Chautauqua National Wildlife Refuge (CNWR) near Havana, Illinois. As participants and compilers of the annual CNWR Christmas Bird Count (CBC), we have birded the region for 32 winters. By the mid-1990s, at a time when the listed status of the Bald Eagle was being debated, we noted that the total number of eagles and the ratio of immature (juvenile/subadult) to adult eagles we were seeing suggested a growing population of this species in Illinois. A healthy population of Bald Eagles should be composed of more immatures than adults. In a 1992 survey of eagles in Illinois, only about one-third of the birds were immature (De Vore 1993). Further, by 1996 the number of Illinois counties with one

or more eagle nests had increased to 23 from one in 1981 (Herkert 1997). Interest in the status of the species led us to the following research objectives: (1) to determine whether or not the total number of Bald Eagles recorded on 30 CBCs (1973-2002) had increased significantly, (2) to determine whether or not the number of immature eagles recorded on the same CBCs had increased significantly, and (3) to determine whether or not population structure was skewed toward juveniles/subadults by examining both the CBC data and our current (1997-2002) intensive monitoring of eagles at CNWR.

The 4,488-acre refuge consists of approximately 3,750 acres of open water managed within levees, a floodplain forest along the Illinois River, and a small amount of upland timber on the bluff along its eastern side. It has been designated as an Important Bird Area by the American Bird Conservancy for its concentrations of migratory waterfowl and as a Regionally Significant Site by the Western Hemisphere Shorebird Reserve Network. A more detailed description of the refuge, including a site map, is available in DeVore (2000).

Methods

Data were obtained from two sources: (1) a traditional CBC count site (177 square miles within a circle with a radius of 7.5 miles) centered at CNWR and including parts of Mason, Fulton, and Tazewell counties and (2) censuses within CNWR which involved traversing 10.8 miles of levees weekly from the first week of November through March, 1997-2002. Eagles tallied

within the timeline were considered wintering.

Our weekly censuses were conducted in cooperation with the CNWR management and with the Forbes Biological Station of the Illinois Natural History Survey (INHS). We reported all waterbirds and their associates seen along the census route. Censuses were made using a spotting scope (15-60x) and binoculars from stops established along the levees to permit clear viewing of open water and perimeter areas. Stops began at the north pool water control and continued on the north levee (three stops); then the levee along the west side of the north pool and Melz Slough (three stops); north and south sides of the cross dike (two stops each); the levee around the south pool (six stops); the observation tower; and the Nature Trail viewing platform. The distance from the beginning to the end of our census route totaled 10.8 miles. A motor vehicle was used as a slowly moving blind between stops. Stop duration was limited to the time required to tally eagles and waterbirds present. Special effort was made to avoid double counting by keeping track of eagles disturbed by our presence. Data were recorded on preprinted forms deposited with both the CNWR and the INHS.

In keeping with most field guide and bird count formats, all eagles not fully transformed to adult plumage, i.e., juvenile and subadult of Wheeler and Clark (1995), were

Above: Adult Bald Eagle.

At Right: Immature Bald Eagle

Photos by Mary Kay Rubey.