

The Des Plaines River Wetlands Demonstration Project

Improving Habitat Quality for Nesting Birds

By Dr. Scott Hickman

More than half of the pre-settlement wetlands within the contiguous United States, including over 96 percent of Illinois' wetland habitats, have been drained for agricultural and urban use. This extensive loss of wetlands affects the nesting success of birds requiring this habitat for breeding and has become a growing national concern.

These dismal statistics have also made the possibility of supporting these birds through wetland restoration of keen interest to conservationists and researchers alike. An effective wetland restoration project can improve habitat quality for nesting birds as is evidenced by the Des Plaines River Wetlands Demonstration Project (DPRWDP) in northeastern Illinois.

The project is a joint effort by conservationists, the Lake County Forest Preserve District, the state of Illinois, and the federal government. Working together, members of these organizations have restored to a 2.8-mile stretch of the Des Plaines River the water-purifying, flood-controlling, and wild-life-sustaining functions provided by the wetlands that used to border much of our pre-set

tlement river systems.

To accomplish this, a portion of the water from the Des Plaines River is pumped into a series of six man-made marshes bordering the west side of the river (Fig. 1). The water



Dr. Scott Hickman surveys the Des Plaines River Wetlands Demonstration Project in Wadsworth, where he performed breeding bird studies. (Bill Oakes photo)

flowing into and out of these marshes is carefully monitored to determine the effectiveness of the project in meeting its water-purification and flood-control goals. Research to date indicates success in meeting both goals, with the construct-

ed wetlands removing over 80 percent of the nutrients and sediments they receive.

The effectiveness of the project in meeting its goal of supporting wetland birds is assessed herein by comparing avian usage of the site before restoration with that which is occurring after restoration.

STUDY AREA AND METHODS

Before restoration, few sites for wetland birds existed within the project area. The highly disturbed restoration site consisted primarily of abandoned farm fields and grazing land, old orchards, remnants of a Christmas tree farm, a few small wetlands, a bur oak/white oak savannah choked with underbrush and saplings, and a sterile water-filled gravel quarrying pit. Much of the area was covered with non-native vegetation, and/or weedy sapling thickets including Old World meadow grasses such as Kentucky Bluegrass and non-native species such as Common Buckthorn.

Breeding bird censuses were conducted during both pre-restoration and post-restoration periods by the transect - listening stop method recommended