

## Golf Courses and Bird Conservation: A Management Manual

Colorado Bird Observatory

Scott Gillihan

Start Date: 1996

Number of Years: 3

Total Funding: \$48,760

The Colorado Bird Observatory is creating a practical guide for golf course architects and superintendents to improve golf course habitat for bird species. *Bird Conservation on Golf Courses* will be available for purchase through USGA and Sleeping Bear Press in 1999. It is the first book that brings together the latest information on bird and bird habitat management as it applies to golf courses and similar settings.

The hands-on manual covers everything from general concepts, to specific techniques, and vital information on:

- Design and management for habitat conservation
- Management techniques for specific bird species
- Artificial nest structures
- Plants beneficial to bird populations
- Birds and golf course maintenance
- Dealing with *problem* birds

## Wetlands Management Manual for Golf Courses

MACED

Don Harker

Gary Libby

Start Date: 1996

Number of Years: 3

Total Funding: \$35,000

Objectives:

*Develop an illustrated wetlands management manual for golf courses that uses a general narrative overview, drawings, case studies, key restoration techniques and indicator species to walk managers through a process of understanding wetlands.*

This project will create an illustrated booklet of key wetlands restoration techniques and case studies for golf course superintendents. A new revision of *Wetlands Management Manual for Golf Courses* is expected during the summer of 1999. The booklet should be available for purchase through USGA in early 2000.

The approach is to use a general narrative overview, drawings, case studies, key restoration techniques and indicator

species to walk managers through a process of understanding wetlands, leading to the ability to conserve, create/restore, and manage wetlands. The booklet will be as brief as possible and still cover the necessary material.

A reference method for the golf course manager to follow when working to conserve, restore, or construct a wetland was designed for the booklet. That method combines drawings with a plant species matrix. The drawing depicts (in aerial cross-section) different wetland conditions for the wetland types. A matrix contains the key species for that type and gives information about where in the wetland to plant a particular species, what restoration techniques to use, some wildlife value, flower color and size, and bloom period information. This easy reference approach is new and should prove to be a useful approach for land managers. †

## Data Management System for Information on Wildlife Habitat on Golf Courses

Audubon International

Ron Dodson

Start Date: 1996

Number of Years: 3

Total Funding: \$77,500

*Develop a computer-based system that accesses present and future wildlife and habitat information gathered from participants in the Audubon Cooperative Sanctuary Program.*

Audubon International is computerizing its database of information gathered through its Cooperative Sanctuary System, a voluntary program for golf courses interested in creating and enhancing wildlife habitats and conserving and sustaining natural resources. The database will be open to golf course managers and others in the near future. Accessing data in this manner will help Audubon International staff to better direct members of the program in regard to conservation activities. In addition, it will establish a foundation from which wildlife research can be generated and give a clear picture of the resources presently under management by program members.

The creation of the *Managed Lands Database System* began in late August 1995. A review of all the *Resource Inventory Information* contained in hard copy at Audubon International headquarters was first completed. All member golf courses of the Audubon Cooperative Sanctuary Program System that completed a resource inventory form since 1991 were broken down into quantifiable information. This information was then transferred onto a standard form from which the data could easily be placed into a database. There are close to 950 bird species, 600 different species of reptiles and amphibians, and 100 species of mammals contained within the database.

A model was designed to help make entries into the database. This model included a very limited and general species list for birds, reptiles, amphibians, mammals, trees, and