

necessary for everyone concerned to better understand the entire situation. With this in mind, my boss, Earling Speer, invited everyone involved to meet on the site. Representatives from the water management districts and local and county groups attended. We made a presentation to them identifying what we were trying to accomplish.

As Golf and Landscape Manager for the project, I was charged with coordinating the efforts of the golf course architect and builder, while at the same time ensuring that all work followed government regulations. I found it helpful to get to know the people from the agencies on a personal level. This gave us the opportunity to learn from each other, and it encouraged everyone to try to understand the needs of the others. One of the best ways to develop

such a relationship was to spend time with each other "in the field." While they were learning about golf courses, I was learning about native plants. This information proved to be very useful during a subsequent drought when the water level dropped almost four feet. Had we not used the drought-resistant native grass *Spartani backerii* in the wetland littoral zones, complete re-establishment of these areas might have been necessary.

At the same time, I was concerned about maintaining the littoral zones. I felt it would require a tremendous amount of work to keep the littoral zones free of noxious weeds. After a meeting with water management district representatives, it was agreed that as long as the total square footage requirement of the littoral zones was met, the 10-foot band around the lake

perimeter was unnecessary. This allowed us to create marsh areas which provided the required amount of littoral zone while serving as hazards on the course. Throughout the project many such efforts were made. Native grasses were used extensively, hundreds of trees were transplanted, Florida palmetto groves were preserved whenever possible, new wetland areas were created, and through it all, a beautiful and challenging golf course emerged.

It is my opinion that Willoughby serves as proof that golf and the environment can coexist even in the most sensitive areas. It can be done if everyone involved is willing to contribute and cooperate with each other. For the golf course superintendent, the challenges of such a project represent an opportunity to learn and share your expertise with your community.

Audubon Cooperative Sanctuaries For Golf Course Management

by **RONALD G. DODSON**

President, The Audubon Society of New York State

WHAT do New York Audubon and your golf courses have in common? More than you might think.

New York Audubon is one of several state Audubon societies in the United States that have come together to form the Audubon Alliance. Collectively we comprise a network of more than a quarter of a million members. Each state Audubon Society is a separate and distinct organization, and is not affiliated directly with the National Audubon Society. As state focused organizations, we are able to direct our attention to state and local conservation opportunities.

Many state societies have projects that reach far beyond the boundaries of their respective states. This is where the Audubon Alliance comes into play. For example, the Alliance is sponsoring the Belize Audubon Society and the program for Belize. This project is working to conserve one of the last large tropical rain forest areas in the world. The alliance recently sponsored the publication of a critically acclaimed book entitled *Save the Birds* that focuses on the world



Ronald G. Dodson

status of birds and the global loss of significant wildlife habitat. This publication was co-authored by Walter Cronkite and famed artist and conservationist Roger Tory Peterson.

Another program spawned by a state Audubon society has national and perhaps international goals. We believe

that the true wildlife and habitat managers in the United States are private landowners. Though many people believe that state or federal governmental agencies and their staffs have sole responsibility for wildlife and habitat protection, it is clear that the largest bulk of real property is owned by private individuals or private organizations. Most state resource agencies are understaffed and underfunded and certainly do not have the resources to manage private lands. Instead, they have focused on permit and application review programs that often lead to confrontation. This is why New York Audubon has launched the Cooperative Sanctuary System. The CSS is our way of reaching out to and working in a positive way with private landowners. We are working with all types of operations, including large farms, corporate properties, hydroelectric sites, elementary schools, universities, suburban and urban backyards, and golf courses.

You may wonder why the Audubon Society spends so much time working with birds. To us, birds are a symbol of



Golf courses and wildlife habitat can co-exist beautifully.

earth's wild resources and the quality of the environment. We believe that the human capacity to conserve birds reflects our ability to save the environment.

Worldwide, there are nearly 1,000 bird species in danger of extinction. Here in the United States, three mammals, 63 birds, and no fewer than one in ten plant species are endangered. The distribution of endangered bird species by ecosystem is:

- Ocean realm — 6%
- Polar regions — 1.5%
- Oceanic islands — 38%
- Coasts of estuaries — 5%
- Lakes, rivers, and marshlands — 15%
- Mountain regions — 13%
- Seasonal woodlands — 20%
- Tropical forests — 43%
- Grasslands — 18%
- Arid regions — 1%

The principal threats to these birds are:

- Wetland drainage — 4%
- Pollution — 4%
- Habitat destruction — 60%
- Hunting — 29%
- Incidental take by fisheries — 1%
- International trade in rare birds — 9%
- Competition from introduced species — 20%

In North America, nearly 1,000 different types of birds nest and raise their young, with about 645 of these present in the United States. Of those 645, more than half spend one-half to two-thirds of their lives in Central or South America.

It should be quite apparent that most golf courses cannot provide much help for the 1.5 percent of bird species endangered in the polar regions or even the 6 percent endangered in the ocean

realm. Nevertheless, many of you are already providing important habitat areas for birds in coastal and estuarine areas, and along lakes, rivers, and in seasonal woodlands.

In many urban and suburban areas, golf courses provide a haven for many wildlife species. As someone who played collegiate golf and who is involved in wildlife conservation, I see a need for the expanding of our Cooperative Sanctuary System to include more golf courses. Many people have expressed concern about the use of chemicals on golf courses and their potential impact on wildlife and the environment. I know that some people visualize golf course managers as Rambo-like figures with hoses draped over their chests, dragging huge tanks of chemical warfare ingredients behind them and blowing away every living

creature in sight. From my experience, however, I know that the manager does not want to spray unnecessary chemical materials. This makes sense from an environmental, personal, and economic point of view.

Aside from the fact that golf courses provide an exciting challenge to a golfer's abilities, they also provide habitat for a variety of wildlife species. Those of us in the Audubon Alliance believe that by working together we can increase the diversity of habitat types, enhance wildlife and the environment, and just possibly save the turf manager some money over the long run. When a landowner or manager registers his property with the Cooperative Sanctuary System, he is *not* giving away any rights to the property. We do not mandate certain activities or insist that he stop doing anything.

The first thing we do is give some recognition to the manager for becoming part of the system and for helping to educate the public to the fact that all green spaces are important. It sends a message to other groups and citizens that much more can be gained by a pro-active relationship with land managers than the traditional reactive

and negative approach. The manager at each property registered receives a simple data handbook that has to be completed and returned to New York Audubon. The System Advisory Committee, comprised of land managers, university professors, extension agents, state agency staff and others, reviews the material and makes suggestions. Once this process is completed, the property is certified as a Cooperative Sanctuary. Cooperators are asked to send us information at least once per year involving wildlife and habitat related activities, and this information is entered into our computer data base. The Sanctuary System newsletter is distributed to all cooperators, and we have a recognition program that rewards unique and meaningful efforts.

We are currently working with a number of golf courses in creating and maintaining habitat for cavity-nesting species of wildlife, and enhancing grassland habitats that are rapidly disappearing in places like New York State, where many of our farmlands are returning to woodlands. We have encouraged and expanded integrated pest management programs that utilize organic-based pesticides, insect-eating

birds, and other options. We are learning from land managers, and they are learning from us. Some of these projects have included educational programs and nature trails for the public and club members. These activities unquestionably benefit the environment and the public, and provide public relations benefits to the cooperators as well.

Our members stand ready to work with you in this regard. I hope that you will seriously consider becoming part of the Cooperative Sanctuary Program. If we are to see an abundance and diversity of wildlife in America while meeting the expanding demands of the public to participate in the game of golf, joining the Cooperative Sanctuary System could be an important step in building a bridge between golf course managers, the public, and conservation organizations. I am sure many of you have wondered, "Why do these environmental groups fight us all the time? Why are they always negative?" Well, here is New York Audubon Society's position. We are positive that there is a lot to be gained if we work together. We may disagree on a thing or two in the future, but we can agree to disagree without being disagreeable. Cooperation is much better than confrontation.

