LINKING UP WITH NATURE Kimberly S. Erusha United States Golf Association, Green Section Far Hills, New Jersey

Since the 1980s, nearly 2,000 golf courses have been built in the United States. Assuming a conservative average of 150 acres of land for each golf course, the total acreage is quite substantial. Although many golf courses have been built on abandoned agricultural lands, commercial sites, or other degraded areas, many have also been built on natural areas. No matter where the location, golf courses have an impact on local wildlife and the ecosystem.

How golf course superintendents, course officials, and golfers take care of this land is paramount to the many questions that face the industry regarding environmental responsibility. In many cases, golf course superintendents have done a superb job of responsibly managing their course's property. Unfortunately, many of these golf course superintendents have not effectively shared the environmental maintenance practices that go into maintaining their golf course. A result has been a good deal of misinformation about how golf courses are maintained. A few of the main concerns are public worries about pesticides harming nontarget plants and wildlife, the potential for products to contaminate water supplies, and overuse of public water supplies.

Through innovative programs and active participation in the following programs, golf courses can successfully improve public education about golf courses and their interaction with the environment.

AUDUBON COOPERATIVE SANCTUARY PROGRAM FOR GOLF COURSES

Audubon International has taken an innovative approach to land management through its direction of the Audubon Cooperative Sanctuary Program for Golf Courses. They conduct similar programs for corporate properties, schools, and home backyards.

In 1990, Audubon International teamed up with the United States Golf Association to establish the Audubon Cooperative Sanctuary Program for Golf Courses (ACSP). Since then, nearly 2,000 golf courses have joined the program. One of the key objectives of the ACSP is to enhance wildlife habitat on golf courses and encourage active participation in conservation programs by golf course superintendents, course officials, golfers, and the public.

No restrictions are placed on a golf course as a condition of participation. Golf courses pay an annual \$100 participation fee. People involved in the program receive one-on-one assistance from Audubon International in devising personalized environmental projects and strategies for their golf course property.

Participation in the program requires the completion of a resource inventory form describing the property and its existing features. Audubon International then responds with ideas and technical information about what the participating course can do to enhance wildlife habitat and improve the environment. The golf course develops a plan of action and then implements its plan. The goal is to become certified in all six categories by completing the plan and submitting documentation of the achievements to Audubon International personnel. Certification can be achieved in six categories:

- · Environmental Planning
- Member/Public Involvement
- · Wildlife and Habitat Management
- · Integrated Pest Management
- · Water Conservation
- · Water Quality Management

To date, 64 golf courses have achieved certification in all six categories. Michigan ranks third behind Illinois and Florida as having the most fully certified golf courses. The following five Michigan courses have become fully certified: Egypt Valley Country Club, Ada, MI; Fox Hills Country Club, Plymouth, MI; Gull Lake View Golf Club, Augusta, MI; Tournament Players Club of Michigan, Dearborn, MI; and Treetops/Sylvan Resort, Gaylord, MI.

The long-range goal is to have substantially more golf courses commit to the program and share their experiences with their local communities. Not only has the program successfully gotten people involved, but more importantly, thousands of people involved in golf are educated about issues related to wildlife and the environment, and participate in conservation programs that benefit both. In return, participants achieve recognition in their communities for the work they do on behalf of the environment.

WILDLIFE LINKS

Another USGA initiative in the environmental arena is a new program, begun in 1995, called Wildlife Links. When the book *Golf Course Management and Construction: Environmental Issues* was published in 1990, it was identified that very little research work had been conducted concerning the specific issue of wildlife and golf courses. As part of the Environmental Research Program, the USGA sponsored a study of the effects of golf course activities on wildlife at the Ocean Course at Kiawah Island, SC, in cooperation with The Institute of Wildlife and Environmental Toxicology (TIWET) at Clemson University. This study marked a beginning, but many more questions need answers.

The USGA Executive Committee earmarked research dollars to support wildlife research. The Wildlife Links Program will be carried out in cooperation with the National Fish and Wildlife Foundation (NFWF). This organization is based in Washington DC, with a mission to organize and help fund conservation projects that benefit wildlife and the environment. The NFWF will provide technical expertise to help establish objectives and identify worthwhile research projects concerning wildlife and golf courses.

As part of the program, an advisory panel of experts representing various environmental organizations has been established. Members are involved in such organizations as the U.S. Environmental Protection Agency, U.S. Forest Service, U.S. Fish and Wildlife Service, Audubon International, and the USGA Green Section. The panel will help devise strategies to achieve the goal of protecting and enhancing the wildlife and plant resources found on golf courses through proper planning and management.

One example of some of the research priorities would include determining how golf courses can be maintained as biologically productive sites for wildlife; providing solid recommendations that can be incorporated into long-term management strategies; and educating golfers and the general public about these issues. These research goals will be expanded as the program develops.

The first Wildlife Links initiative will be the production of two publications. The first one will target golf course superintendents and provide guidance about how to enhance golf course habitat for bird species. The second publication will be dedicated to wetland issues, namely how to maintain creeks, streams, and ponds and to provide better wildlife habitats.

The USGA has contributed \$100,000 to launch the Wildlife Links Program. It is hoped that other organizations in golf will donate, too, and become partners in the program. The strength in this research program will be through the commitment of the golf industry to advance our knowledge base concerning wildlife issues to benefit all of golf.

INFORMATION SOURCES

· Audubon Cooperative Sanctuary Program for Golf Courses:

Audubon International, Route 2, Box 131, Selkirk, New York 12158, 518-767-9051

· Wildlife Links Program:

Dr. Peter Stangel, National Fish and Wildlife Foundation, 1120 Connecticut Avenue NW, Suite 900, Washington DC, 202-857-5676