The Audubon Cooperative Sanctuary Program for Golf Courses: Promoting Environmental Stewardship

Where we've been and where we're going.

by RON DODSON



mentally friendly solution. After visiting the course, and several others in the area, it became clear to me that golf courses needed a program that directly addressed environmental issues specific to golf courses, and that there must be some way to merge course management with environmental stewardship.

Since I went to college on a golf scholarship and majored in wildlife biology, I was intrigued with the idea of working proactively with golf courses. Surely, golf course superintendents could improve their management practices in ways that would benefit both the wildlife on their golf courses and the environment as a whole. So I wrote a

Above (before): Wetland areas provide habitat for a wide variety of wildlife. Right (after): Establishing a wetland corridor creates a more varied habitat (C.C. of Florida, Village of Golf, Fla.).

In THE BEGINNING . . . a little more than ten years ago, the golf industry was under intense scrutiny from the environmental community. Governmental agencies and non-profit groups alike felt that golf courses were polluting the environment, and those who designed, built, and managed them were the culprits. Golf courses were denounced for loss of wildlife habitat, over-use of limited water resources, and excessive use of toxic chemicals. The golf course industry appeared unresponsive to criticism and suspicious of anyone with an environmental agenda.

About the same time, as President of the Audubon Society of New York State, I created a program to work with communities – reaching out to homeowners, schools, and businesses – to engage landowners and land managers in environmental stewardship. Although the program was designed to work with entire communities, I came to realize that a more effective approach might be to involve one property at a time as a



"grassroots" movement by developing programs for specific types of properties. I called it the Audubon Cooperative Sanctuary System.

During the process of developing educational materials for the program, I received a call from a golf course superintendent in upstate New York. He was having trouble with skunks tearing up turf to get to grubs and was looking desperately for an environletter to the USGA explaining that my organization was interested in exploring opportunities to work cooperatively with golf courses. A few months later I received an invitation from the USGA to speak at an educational session during the GCSAA conference.

After the conference, I met with Jim Snow, National Director for the USGA Green Section, to discuss the development of the Audubon Cooperative Sanctuary Program for Golf Courses and funding for membership development. During 1991, with the USGA's support, I spent the year on the road talking at USGA regional seminars, learning about the golf industry, developing a process and educational materials for the program, and encouraging people to join. By the end of the first year, we had surpassed our membership goals, launched the program nationally, and subsequently created the parent organization, Audubon International, to reflect the national scope of the programs and the growth of the organization.

It has been ten years since those modest beginnings, and I have again been invited to speak at the USGA's educational session to talk about what we have accomplished and what future lies ahead. I am pleased to say that the USGA is still the sponsor of the ACSP for Golf Courses and has continued to support our efforts. We believe that the USGA's support for the ACSP for Golf Courses, as well as their other environmental initiatives, has been instrumental in changing the environmental perspective of the game of golf.

After Ten Years, Where Are We Now?

Since the beginning of the program, more than 2,400 golf courses have registered in the ACSP for Golf Courses, comprising more than half a million acres of human and wildlife habitat. During the ten years, we have awarded more than 2,600 certificates of recognition for environmental initiatives for Environmental Planning, Integrated Pest Management, Education and Outreach, Water Conservation, Wildlife Habitat Management, and Water Quality Management. More than 240 members have been awarded certificates in all six environmental areas and have been designated Certified Audubon Cooperative Sanctuaries. But what's more important than the certificates themselves is what they represent.

Do courses that participate achieve the program's desired goal of enhancing and protecting the environment? To answer this question, Audubon International conducted an environmental survey in April 2000 to assess the impact of program participation on a number of key environmental priority areas. The survey was sent to all of our golf course members, from which we received a 14% response rate. We believe the results of the survey demonstrate strong environmental outcomes for participating courses. Following are a few highlights of the survey.

Wildlife and Habitate Management Results

The ACSP provides significant educational information and resources to help land managers enhance and protect habitat for native wildlife species. Results of the survey show that the majority of participants are implementing a variety of measures to enhance and protect wildlife habitats. Since joining the ACSP for Golf Courses:

- 73% added gardens for birds/wildlife;
- 79% decreased the amount of managed turfgrass;
- 49% removed exotic invasive plants;
- 44% are currently involved in an ecological restoration project;
- Average increase in acres devoted to providing wildlife habitat increased from 40 acres per



The beauty of flowers not only adds to the golf course, but also plays an important role in providing a food source and habitat for native pollinators (Aurora C.C., Aurora, Colo.).

"A golf course never stands alone — it is always part of a larger context. It is part of a community made up of humans, wildlife, plants, watersheds, and natural resources, and, to survive, it must ensure that all of those parts are healthy."



Golf courses can provide natural or man-made transition areas or corridors between habitat types. This transition area is important to allow wildlife to move from one area to another (Semiahmoo Golf & C.C., Blaine, Wash.).

course before joining to 70 acres after joining – a 75% increase;

- Average increase in naturalized shorelines around water features increased from an average of 2,197 feet per course before joining to 3,820 feet after – a 74% increase;
- Average increase in forest understory was allowed to grow from an average of 28 acres per course before joining to 42 acres after – a 54% increase;
- Members maintaining an inventory list of plants and wildlife on the property grew from 16% before joining to 64% after joining;
- Members conscientiously choosing native plants when landscap-

ing grew from 45% before joining to 90% after joining.

Water Quality

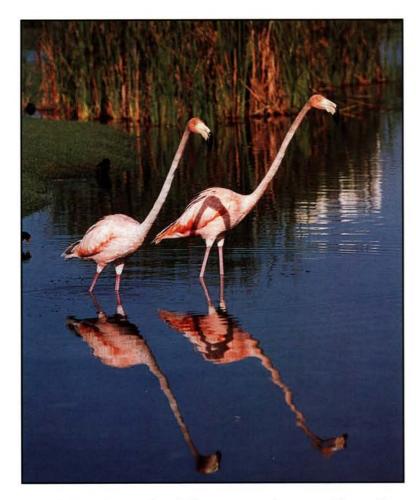
The ACSP aims to help land managers protect water quality for irrigation, drinking water supplies, and aquatic habitats and wildlife species. Responses to the survey suggest that managers increasingly are taking steps to protect water resources from potential pollutants. Since joining the ACSP for Golf Courses:

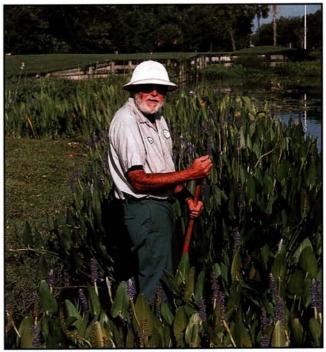
- 51% increased the amount of emergent vegetation in ponds;
- 56% increased the width of "nospray zones" around water features;
- 21% increased the number of drains that are daylighted or emptied into vegetative swales.

Chemical Use Reduction and Safety

Helping members to reduce the use of pesticides and fertilizers as well as safely using, storing, and handling chemicals is a key priority of the ACSP. Results of the survey show that people have been able to achieve that goal without sacrificing golf course playing quality or member satisfaction. Since joining the ACSP:

- 86% reduced pesticide use;
- 92% used pesticides with a lower toxicity level;
- 90% decreased chemical use by improving cultural control methods;
- 66% reduced fertilizer use;
- 84% increased the percentage of slow-release fertilizers used;
- 78% increased the percentage of natural-organic fertilizers used.





Left: Maintaining healthy aquatic habitat is important for the wildlife using these naturalized areas. During the past decade, golf courses participating in the Audubon Cooperative Sanctuary Program on average have increased the space devoted to wildlife from approximately 40 to 70 acres. Above: Establishing a buffer strip of vegetation in and along the banks of streams, lakes, and ponds is an excellent means of controlling erosion, creating new aquatic habitat, and adding interest to the golf course.

We believe the results of this survey provide a snapshot of the types of environmental awareness and improvement that have occurred as a result of participation in the ACSP for Golf Courses, and we are heartened by the enthusiasm and commitment of our members. We applaud the courses who responded to the survey and who participate in the program. Not only are they contributing to improved environmental quality on golf courses, but also they are helping to spread the word that golf course superintendents can be excellent stewards of the environment. Nevertheless, there is more we can all do.

Where Do We Go From Here?

We have made great strides with the support of the USGA, but we still have a long way to go. Our members make up only a small portion of all the golf courses across the United States. Given current population growth, increased development, and subsequent demand for natural resources, golf course superintendents, developers, and architects will be subject to intense criticism if they do not voluntarily and actively address environmental issues. Audubon International remains enthusiastic about working with superintendents and the golf industry and helping them to address those environmental concerns.

During the past year, we have worked to streamline the certification process for the ACSP for Golf Courses to encourage superintendents to implement and document their environmental activities. We have produced additional educational materials to provide them with more and better environmental information. We have continued our membership development and outreach efforts, as well as research efforts, to provide golf course superintendents with conservation projects that will benefit the golf course, the greater community, and the environment. We intend to continue those efforts.

Environmental stewardship on a community-wide basis, not solely on golf courses, has always been the ultimate goal of Audubon International. We believe that golf courses have the opportunity to assume leadership positions in their communities. They can serve not only as demonstration sites of environmental stewardship, but also as catalysts for community-wide stewardship. We know that many of our members have reached beyond the golf course – involving community members and organizations in their projects and activities and making their own resources and expertise available to local schools and community organizations. A golf course never stands alone – it is always part of a larger context. It is part of a community made up of humans, wildlife, plants, watersheds, and natural resources, and, to survive, it must ensure that all of those parts are healthy.

The game of golf is rooted in history and tradition, a part of which is its connection to nature and the environment. It is this connection that positions golf to be a catalyst for environmental stewardship action in the 21st century. Audubon International remains steadfast in its commitment to help people help the environment and to help the golf course industry be a catalyst for nationwide environmental stewardship – one community at a time. We hope you will join the USGA and Audubon International in making that happen.

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