

## Partners for the Environment

Cooperation is the name of the game when it comes to the Audubon Cooperative Sanctuary Program (ACSP). Not only are our programs founded on proactive partnerships to improve the environment, they also advocate that our members collaborate with neighbors, local organizations, and community members.

Through the Outreach and Education component of the ACSP, we share project ideas and approaches to working partnerships to help members build support for their stewardship efforts and reach out beyond their property borders. Time and again, we've been amazed by the dedication of ACSP members to sharing their enthusiasm and promoting good stewardship. The positive results they've achieved in terms of environmental quality improvement and community building is truly remarkable.



Liberty Elementary School, IN

Five hundred students, staff, and community members turned out to plant a prairie at Liberty Elementary School in Chesterton, Indiana. The school received a grant from the Audubon Stewardship Fund and their ACSP sponsor, Sand Creek Country Club, to cover part of the cost.

### School Community Joins Together to Plant a Prairie

Restoring native prairie to fields overgrown with exotic weeds is no small task, but when Liberty Elementary School in Chesterton, Indiana, decided to pursue such a project on two acres of its school grounds, it found an entire community inspired by the task. A local botanist surveyed the site, consultants donated expertise, and a local farmer tilled the land. Five hundred students, staff, and community members turned out for a planting day last fall. A local boy scout planted an additional acre and a half of lupine seeds to provide habitat for the endangered Karner blue butterfly.

And that was just the beginning. This winter, first graders planted native seeds indoors and transplanted them into the prairie in the spring.

Students will be involved in ongoing planting and monitoring as the community watches and waits for its new prairie to grow.

Behind the scenes, Audubon International's Stewardship Fund, through money donated by the Michiana Golf Course Superintendents Association, as well as NiSource and the Duneland Foundation, provided funding for seeds and other planting materials, landscaping, and the contractors that mapped out the shape of the plot. In addition, Audubon International provided plant lists and guidance for undertaking the prairie project and other environmental activities when the school achieved certification in Environmental Planning in 1999. Liberty Elementary's participation in the ACSP since 1996 has been sponsored by Sand Creek Country Club, a member of the ACSP for Golf Courses.

"Even large projects such as this start with just the seed of an idea," says Audubon International Ecologist Joellen Zeh, "but they require cooperation and coordination to make them grow. We salute the students, faculty, maintenance staff, and local community who made Liberty Elementary School's prairie planting a success."

### Neighbors Reach Across the Fence to Foster Good Stewardship



As part of their outreach efforts through the ACSP, Saddle Rock Golf Course in Aurora, Colorado, fostered community relations and good stewardship by mounting nest boxes in cooperation with neighboring property owners.

Photo by: Jeannine Fitzgeralds

ACSP golf course member Saddle Rock Golf Course, a municipal course in Aurora, Colorado, has always made a concerted effort to protect and increase its wildlife population. Approximately 130 acres of the property receive minimal maintenance and provide natural habitat areas containing stands of Ponderosa pines, native grasslands, large shrub masses, wetlands, ponds, and creeks. Yet Saddle Rock Horticulturist Jeannine Fitzgeralds, Superintendent Joe McCleary, CGCS, and others wanted to do more.

(continued on page 2)

# Audubon International Vision

## “Cooperative” Is Our Middle Name

We all know that practicing individual environmental stewardship is the first step down the path to a better environment. The second step, sometimes more daunting, is reaching out to others in a positive manner and offering to help them take positive environmental stewardship action.

Too often, it seems easier to lay blame when we express our concern about environmental problems. As in many other aspects of life, however, creating partnerships, collaborating with others who share our concerns, and teaching others to care will ultimately benefit the environment much more than pointing a finger of blame.

Take just a moment and look around your property and think of ways that you can “connect” with your neighbors. Perhaps you can extend a habitat area you have created, broaden your efforts to improve water quality by offering to work with adjoining property owners, or join with others to identify and protect the unique natural resources of your community.

The cooperative aspect of the Audubon Cooperative Sanctuary System is fundamental. Each program is founded on the concept that individually and collectively we can improve the quality of life and the environment.

We hope that this issue of *Stewardship News* will provide you with ideas, examples, and encouragement to reach out to others in your community, to form collaborative relationships, and to instill in others an environmental ethic that will benefit us all.



Ronald G. Dodson  
President and C.E.O.

## Neighbors Reach Across the Fence

(continued from page 1)

Seeking to facilitate an interest in the nature and wildlife all around them, they looked to their own golf course neighbors and came up with a plan to get people involved. Trouble was, they first had to find out who their neighbors were. Unable to obtain mailing lists from sales offices or homeowner's associations, Fitzgeralds and McCleary drove around the neighborhood and listed names and addresses of neighboring property owners.

A letter sent to these addresses invited Saddle Rock's neighbors to adopt a nest box for songbirds for seven dollars and monitor it throughout the nesting season. Within two weeks, Fitzgeralds and McCleary had succeeded in hearing from 20% of their list. They set up appointments to meet people, share information, and mount the boxes on a fence between properties and the course.

“While we were visiting with our neighbors,

they asked questions about bird feeders, water sources, local bird identification, pet interactions, wildlife, local development, and lawn care,” reported Jeannine Fitzgeralds. “Neighbors were impressed that the superintendent would take the time to come to their homes himself and answer their questions.”

Each resident was given a letter explaining how to monitor and clean a nest box, a monitoring form, and a brochure for the ACSP for Backyards. Throughout the spring and summer, Fitzgeralds and McCleary will touch base with those involved, continuing to build upon the neighborly relations they have begun.

In the end, Saddle Rock succeeded in so much more than making new contacts and placing 20 nest boxes. By simply reaching across the fence, Fitzgeralds and McCleary peaked interest in wildlife and extended the practice of good stewardship within their community.

## Golf Course Superintendents Facilitate Environmental Education for Florida Students

Since 1994, the **Treasure Coast Golf Course Superintendents Association (TCGCSA)** in Florida has raised more than \$70,000 earmarked for environmental education projects at local schools. Much of the money has supported the involvement of local schools in the ACSP and funded grants for environmental projects. By teaming up with Audubon International and local schools, TCGCSA has been the driving force that has enabled schools to accomplish numerous projects, including:

- **Crystal Lake Elementary School** in Stuart built a nature trail on campus.
- **Hobe Sound Elementary** built a native plant nursery/slat house, installed hummingbird and butterfly gardens, built an enclosed butterfly sanctuary, purchased books for an environmental reference center, and purchased binoculars and other supplies.
- **Hidden Oaks Middle School** constructed an outdoor classroom.
- **Palm City Elementary School** purchased 30 sets of computer programs on both oceans and rainforests.
- **Sea Wind Elementary** purchased “Planet Partners,” a multi-disciplinary teaching unit, created its own butterfly field guides, and installed a butterfly garden.
- **Stuart Middle School** installed a butterfly garden.
- **Pelican Island Elementary School** received a check for \$20,000 from TCGCSA to help



Hobe Sound Elementary, FL

Financial support provided by the TCGCSA continues to spark enthusiasm for environmental education at numerous Florida schools. Here, students at Hobe Sound Elementary School record nature observations in their “Earth journals” as part of their involvement in the ACSP.

the school purchase adjacent lots that provide habitat for the endangered Florida scrub jay.

- **South Fork High School** installed a butterfly garden and was awarded \$10,000 toward a matching grant from the USGA to purchase equipment for its golf course turf program.
- **Martin, St. Lucie, and Indian River County High Schools** received \$5,000 in support of an *Envirothon* competition for high school students.

By funding environmental and ecological awareness programs in grade schools, TCGCSA hopes to inform and educate not only students, but teachers, administrators, and parents. So far, it's succeeding every step of the way. (Information in this section adapted from: *The Florida Green*, Winter 2001)

# Audubon International Wins EPA Region 2 Environmental Quality Award

The United States Environmental Protection Agency, Region 2, has awarded Audubon International its 2001 Environmental Quality Award. This award was presented to Audubon International specifically for the efforts that the organization has made promoting environmental stewardship on golf courses through the Audubon Cooperative Sanctuary Program for Golf Courses. The presentation ceremony was held in the US EPA Region 2 Headquarters in New York City on April 16, 2001.

Robin Holland



On behalf of Audubon International, Ron Dodson accepts the 2001 EPA Environmental Quality Award from EPA Administrator Christine Todd Whitman and William J. Muszynski, acting regional administrator for EPA Region 2.

“Programs such as this represent the types of positive partnerships that need to be created across the country. This type of an effort is the only way that we can positively deal with the many, serious environmental issues that we face

as a nation,” stated EPA Administrator Christine Todd Whitman, who presented the award to Audubon International’s President, Ron Dodson.

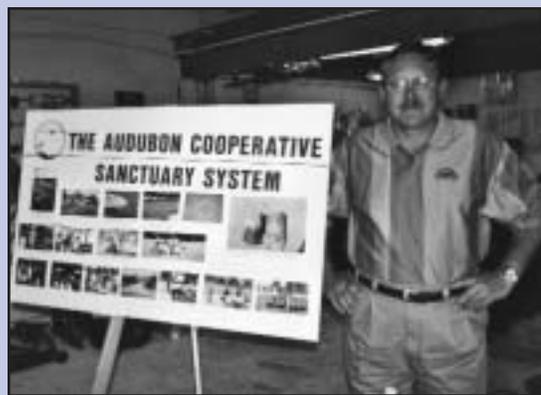
“We are indeed pleased to be recognized in this manner by the EPA. However, we are equally proud of the environmental gains that have been made in the golf course industry over the past few years by working in partnership with our organization,” remarked Dodson. “We are now able to quantify that it is possible to curtail the use of expensive and often environmentally damaging course management practices and still maintain excellent quality playing conditions for the golfing public. Those golf course superintendents who have adopted environmental stewardship as part of their course management efforts are as deserving of the EPA 2001 Environmental Quality Award as Audubon International.”

The EPA 2001 Environmental Quality Award was given to a number of organizations and individuals this year. Audubon International was one of six winners in the Environmental Education category.

## You can do it!

Your efforts to promote, educate, and invite participation in stewardship activities will go a long way toward building long term support and involvement in your cooperative sanctuary. You can achieve certification in the Outreach and Education (golf courses, businesses) or Environmental Education (schools) component of the ACSP by forming a resource advisory team and completing several educational and outreach activities. Consider these activities:

- Set up a display with project plans or updates, photos, and general information. Encourage people to submit their own photos or sketches of wildlife for the display.
- Include an article in your newsletter about environmental practices and current projects.
- Host a walking tour of the property, stopping from time to time to point out natural areas and explain environmental practices.
- Encourage employees, golfers, or school classes to participate by recording all wildlife they see on the property.
- Call a local bird club and set up a talk on local birds.
- Identify people in the local community who may have an interest in sharing their expertise on specific projects, such as composting, gardening, water quality, or wildlife monitoring.
- Develop a curriculum over the summer that can combine environmental stewardship activities with required classroom subjects.
- Partner with other Audubon Cooperative Sanctuary members in your area to share ideas and resources.



A simple photo display, like this one created by Golf Course Superintendent Terry Bolin and his staff at Colorado Springs Country Club, is a great way to showcase environmental projects.

Colorado Springs Country Club, CO

stewardship  
IN ACTION

## Under Cover

One of the easiest things you can do to enhance frog habitat on your property is to add structures where frogs can hide during the day. This is simple to do, takes little time, and won't cost you a cent. Learn how to create cover for frogs in this fourth feature in our series on frog conservation.

Frogs must stay moist to survive. That's why most spend their lives in the water or in damp places in fields or woods. Typical hiding places are down low, under limbs, rocks, logs, leaves, or even underground when it gets too dry at the surface.

Yet human habitation and manicured maintenance around lakes and other water bodies significantly reduce the amount of woody debris, such as logs and fallen trees, which are normally found in such places. Similarly, clearing downed logs, leaves, and shrubby growth in wooded areas reduces or eliminates shaded, moist hiding places for frogs.



Jean Mackay

*If you're working with kids, they may enjoy decorating clay pots with acrylic paint to serve as a "toad abode." Place a medium-sized clay pot upside-down with one edge propped up on a rock to make room for the frog to enter. Place a saucer of water nearby. Tucked into a corner of your garden, the pot will give frogs something to hide under.*

### Take action!

*First, think habitat.*

Where are frogs most likely to be on your property? Stream banks, wetlands, pond margins, woods and shrubby areas, shady gardens, even damp places near a dripping garden hose are good bets. These are the best places to add structure. Placing your shelter in or near damp places will be most useful to frogs.

*Build it so they'll come!*

You can add structures for frogs to wetlands and ponds, as well as on land. Add a log or downed limb in shallow areas of streams and ponds. These will be used for shelter and as places to lay eggs. Likewise, build a brush pile, rock pile, or small wall, or add a log in terrestrial settings too. On land, your shelter will provide a cool, moist hiding place.



Hominy Hills Golf Course, NJ

*Build a rock pile or brush pile. Leave an entryway at the base by using larger stones or logs at the bottom and piling smaller ones on top.*

### Did you know?

Wood frogs (*Rana sylvatica*) actually breed inside the Arctic Circle? The whole population goes to the same pond within a few nights and they all lay their eggs together in one big mass so that the black eggs warm the water and help them to hatch faster. The tadpoles grow into frogs in only about a month, before hopping off into the autumn chill. In the winter wood frogs can't dig deep enough to escape the freezing temperatures, so they freeze solid and then thaw out again in the spring. Cellular damage appears to be avoided by a natural anti-freeze substance in the blood, combined with pumping fluid out of the organs into the body cavity.

# What is a Buffer?

The ACSP routinely recommends that members maintain a *vegetated buffer* around water bodies. On sites where fertilizers and pesticides are routinely used, these buffers are an important way to protect water quality, as well as habitat for aquatic creatures. “But what, exactly, is a buffer,” people often ask?



Commonwealth National Golf Club, PA

Maintaining a vegetated buffer, such as this one at the Commonwealth National Golf Club in Pennsylvania, protects water quality and improves wildlife habitat.

A vegetated buffer is an area around the edge of a water body specifically maintained with plants that will reduce storm water flow and potential pollution from runoff. A buffer may be made up primarily of turfgrass, or include a combination of grasses, herbaceous (non-woody) plants, and shrubs. The plants in a vegetated buffer take in nutrients, trap sediments, reduce erosion, and slow down water as it moves from the land into a pond, lake, or stream.

One type of effective vegetated buffer, often referred to as a *vegetated filter strip*, is turfgrass mown at a height of three inches, or as high as possible for the particular turfgrass species. In research trials, such filter strips, maintained at widths between 15 feet and 30 feet, reduced nutrient runoff from adjacent areas by 90 to 99%, respectively. Sediment removal rates are generally greater than 70% (USEPA, 1993).

## Choosing what's best for your site

In the field, the best height, width, and overall size of a vegetated buffer depend on several factors: slope, type of vegetation, land use (or, on the golf course, playability), and potential pollution from maintenance practices, including chemical applications.

Some ACSP members are able to maintain a full buffer all the way around a pond or stream bank. For sites where this is not feasible, members combine partial vegetated

buffers with specialized management zones, such as no spray zones or limited spray zones that may involve spot treatment of disease and weed problems. The use of slow release or natural organic fertilizers or spoon-feeding also reduces the potential for chemical runoff into water sources.

Because of our focus on both water quality and wildlife habitat, we also recommend that members add emergent and shoreline plants *other than turfgrass* around water bodies where practical. Taller emergent vegetation, such as arrowhead, pickerelweed, sedges, and bulrushes, help oxygenate the water and provide food and shelter for a great variety of wildlife.

This type of naturalization alters both the aesthetics and wildlife value of streams, lakes, and ponds. On golf courses, it can also affect playability, or at least the perception of playability, and therefore must be undertaken with careful consideration. Where taller plants cannot be added, a turfgrass buffer remains a valuable management strategy.

### Sources:

Baird, J.H., et. al. 2000. *Best Management Practices to reduce pesticide and nutrient runoff from turf*, in *Fate and Management of Turfgrass Chemicals*, Oxford University Press.

Madison, C.E., et. al. 1992. *Tillage and grass filter strip effects upon sediment and chemical losses*, p. 331 in *Agronomy Abstracts*. ASA, Madison, WI.

US Environmental Protection Agency. 1993. *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*, doc # 840-B-92-002, US EPA Office of Water, Washington, DC.

## Top 25

The Audubon Signature Program recently certified its 25th Audubon Signature Sanctuary. These 25 properties provide prominent demonstration sites that showcase how sustainable design and resource management can be built into a development project. We salute the outstanding commitment and dedication to high environmental standards by the ownership and management of these properties and we extend our heartfelt congratulations to them. *(List includes certified properties as of May 15, 2001.)*

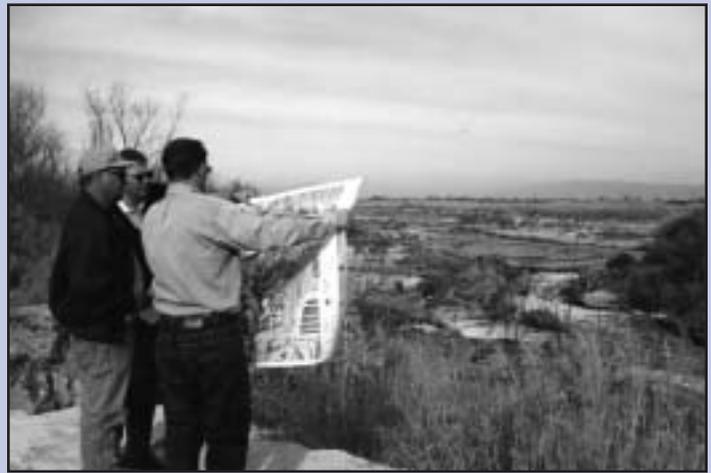
### Certified Audubon Signature Cooperative Sanctuaries

- |   |   |
|---|---|
| Bonita Bay Club East, Naples, FL                          | Pinehurst #8, Centennial, Pinehurst, NC                                     |
| Cateechee Golf Club, Hartwell, GA                         | Red Hawk Golf Club, Sparks, NV  |
| Collier's Reserve, Naples, FL                             | Sanctuary Golf Course at WestWorld, Scottsdale, AZ                          |
| Cypress Ridge Golf Course, Arroyo Grande, CA              | Sand Ridge Golf Club, Chardon, OH   |
| Granite Bay Golf Club, Granite Bay, CA                    | Stevinson Ranch—Savannah Course, Stevinson, CA                              |
| Haymaker Golf Course, Steamboat Springs, CO               | Tierra Verde Golf Club/ Martin Luther King Jr. Sports Center, Arlington, TX |
| Indian River Club, Vero Beach, FL                         | ThunderHawk Golf Club, Beach Park, IL                                       |
| Legacy Club at Alaqua Lakes, Longwood, FL                 | Top of the Rock Golf Course, Ridgedale, MO                                  |
| The Legacy Courses at Cragun's—South Course, Brainerd, MN | Turning Stone Casino Golf Course, Verona, NY                                |
| Longaberger Golf Club—The Hills Course, Nashport, OH      | West Bay Golf Club, Estero, FL  |
| Lost Key Golf Club, Perdido Key, FL                       | World Wide Sportsman, Inc., Islamorada, FL                                  |
| Oak Grove Golf Course, Harvard, IL                        | Wuskowhan Players Club, West Olive, MI                                      |
| PGA Golf Club, Port St. Lucie, FL                         |   |

## Building Solutions to Environmental Concerns

The Audubon Signature Program provides opportunities for a landowner to build solutions to environmental concerns into the design of a project. Audubon Signature staff work closely with the development team to:

- Identify significant natural resources, potential environmental problems, and opportunities for sustainable resource management on site;
- Design new developments that fit with existing land features, thereby minimizing disturbance to wildlife habitats;
- Use native vegetation in the landscape design to preserve the unique biological diversity of the project locale;
- Limit the use of turfgrass and plant only the appropriate turf species for the region;
- Restore degraded areas to attractive natural landscapes;
- Create vegetative buffers around water bodies to prevent pollution and enhance wildlife habitat;
- Plan drainage that filters water from all managed areas at the facility;
- Use a prescription irrigation system;
- Use a sustainable approach to structural design and product use;
- Educate employees, community organizations, and the public about how and why a sustainable approach is being employed;
- Showcase the project as a certified Audubon Signature Sanctuary.



*By identifying significant site features and carefully reviewing design plans, Audubon International and Audubon Signature Program members work together to showcase sustainable design and natural resource management at each Signature property.*

# Congratulations to Our Newest Certified Signature Sanctuaries!

## First Certified Signature Sanctuary in Illinois Restores Habitat and Preserves Threatened Species

**ThunderHawk Golf Club** located in Beach Park, Illinois, is a 243-acre public golf course developed by the Lake County Forest Preserves on land formerly used for agriculture. Rather than lose the site's valuable habitat and natural character to inappropriate development, the ThunderHawk project showcases how the Audubon Signature Program helped to not only incorporate, but also enhance natural landscaping and restore wildlife habitat on site. Audubon International

and open field habitats, featuring many mature American beech and oak trees. Audubon International worked with property developers to protect large blocks of habitat and ensure that the forest canopy would continue to provide refuge for many woodland birds, including pileated woodpeckers, red-eyed vireos, and scarlet tanagers.

The Arthur Hills course, first of two courses to be constructed, encompasses 500 acres, with only 180 acres disturbed during development. Of this, the development team, working in cooperation with Audubon International, was able to restore approximately 90 acres of grasslands. The grasslands will provide habitat for birds, such as bobolink, savanna sparrow, and Eastern meadowlark, which need larger grassland habitats to thrive.

## Enhancing Wetlands and Water Quality Key to Oak Grove Golf Course in Illinois

When a 230-acre private hunt club near Harvard, Illinois, was transformed into a privately owned, daily fee golf course, Audubon International's Signature team was there to help property owners retain and enhance the site's significant features. Natural habitats were incorporated into the course design, while an innovative biofilter system prevents pollution in the property's lakes, wetlands, and tributaries to the Nippersink Creek. The wetlands and creeks are part of a large marsh complex that flows to Alden Sedge Meadow, a 300-acre natural area located one mile east of Oak Grove.

"One of my goals was to make it look like we didn't move any dirt," says Golf Course Architect Steve Halberg, "like all we did was change the grass type." Though construction



*John Delgado, general manager; Brad Legnaioli, golf course superintendent; Rob Delgado, club manager; and Steven Halberg, golf course architect discuss the biofiltration system at the 230 acre Oak Grove Golf Course in Harvard, Illinois.*

involved both wetland mitigation and habitat restoration, the resulting natural landscape and golf course achieved Halberg's intent. The property now includes 68 acres of restored Mesic Prairie and 47 acres of created and enhanced wetlands.

ThunderHawk Golf Club



*Audubon International worked with the Lake County Forest Preserves staff to restore over 60 acres of native Midwestern prairies at ThunderHawk Golf Club in Beach Park, Illinois.*

worked with forest preserve staff and the design team at Robert Trent Jones II to restore over 60 acres of native Midwestern prairie, preserve 15 acres of wetlands, and create an additional 17 acres of wetlands. More than 900 oaks and maples were planted, to bring the number of forested acres on site to 84. In addition, the small sundrop (*Oenothera perennis*), a state-threatened species found on site, was protected during construction. A total of 72% of the property remains as natural habitat.

## Large Habitat Areas Protected for Birds on Longaberger Site in Ohio

**Longaberger Golf Club**, owned by the Longaberger Basket Company family, is an 800-acre property located in Nashport, Ohio. Located on the rolling hill topography typical of central and south-eastern Ohio, the property includes forest, brushland,

Nancy Richardson



*At Longaberger Golf Club-Arthur Hills Course in Nashport, Ohio, an intermittent stream's edge dotted with wildflowers provides food and cover for a variety of amphibians, birds, and small mammals moving to and from the woodlands beyond.*

Nancy Richardson

## Habitat Corridors Keep Wildlife Moving

Among the problems facing wildlife today is the fact that so much of our existing habitat is cut into small fragments and isolated parcels. This is the case on the regional level as well as on individual properties, where woods, fields, and water sources are often disconnected.

Habitat corridors, sections of undisturbed habitat that connect two or more larger natural areas, are crucial for enabling many wildlife species to access food, water, and shelter. Another significant benefit of corridors is that they increase the gene flow among populations relative to isolated patches of habitat.

Research published in the April issue of *Conservation Biology* shows that not only do corridors facilitate wildlife movement between isolated patches, but they also enable populations to interbreed. This flow of genes keeps populations healthier and more stable.

(Reference: *The Journal of Conservation Biology* 15 (2), April 2001: 467–474.)

Photo: Habitat corridors facilitate wildlife movement through a property. Here, Lost Key Golf Club in Florida, an Audubon Signature Sanctuary, retains habitat corridors and reduces fragmentation of wetlands, lakes, and upland natural areas by nesting golf holes around significant natural features.



Mike Klemme/golffoto.com



Woodway Country Club, CT

Taking care of smaller streams helps to insure that water entering larger lakes and rivers arrives clean.

## Small Streams Play a Big Role in Cleaner Water

Monitoring water quality, stabilizing stream banks, replanting eroded slopes, and maintaining streamside habitats are just a few of the stewardship activities familiar to ACSP members who have streams on their properties. New research findings are providing evidence of just how vital taking care of small streams is.

A team of researchers from more than a dozen institutions studied streams from Puerto Rico to Alaska over two years. Their research confirmed that small streams play a crucial role in maintaining water quality, removing up to 50 percent of the nitrogen that enters their waters. Some of the nitrogen removed from streams is converted to nitrogen gas, and the rest becomes nutrition for algae, bacteria, and fungi, which then become food for aquatic insects and fish.

Taking care of smaller streams helps to insure that water entering larger lakes and rivers arrives clean. Reducing the nitrogen load from the leading causes of nutrient pollution—the burning of fossil fuels, fertilizer applications, polluted runoff, and failing septic systems—is key. Sound land use practices and reducing impacts from human activities were cited as the primary ways to keep streams functioning.

(References: *Environmental News Service*, April 9, 2001; *Science* April 6, 2001: 86–90.)

## Ten Years of Support

*Audubon International–United States Golf Association (USGA) partnership keeps the ACSP for Golf Courses going strong*

We'd like to thank the USGA, our long time program sponsor, for 10 years of support for the Audubon Cooperative Sanctuary Program for Golf Courses. The USGA's commitment to working cooperatively with us to promote environmental stewardship on golf courses has been vital to our success.

"Ten years ago, the USGA took a leadership step in making a commitment to the environment by sponsoring the ACSP for Golf Courses," stated Ron Dodson, president of Audubon International. "It's been a remarkable partnership based on mutual respect and open communication. The USGA's financial support and the technical expertise of the USGA Green Section and Research Committee, in particular, have been invaluable to our organization."

Please join us in thanking the United States Golf Association for their continued support for environmental quality on golf courses.



## Citizen Involvement in Loon Conservation Makes a Difference

Audubon International, through its NYS affiliate The Audubon Society of NYS (ASNY), works with numerous volunteers and organizations to improve wildlife habitat and water quality in New York State. Each year, ASNY compiles and analyzes data from loon nesting sites in New York State's Adirondack Region. Now in its 14th year, the Loon Project is *the only state initiative* to monitor breeding loons. Data are shared with the NYS Department of Environmental Conservation, National American Loon Foundation, and the Association for the Protection of the Adirondacks.

Volunteer Loon Rangers visited 130 different water bodies in 2000. They counted 343 adults and 109 chicks—encouraging numbers considering the inclement weather and associated flooding that characterized last summer in the Northeast. During the winter, however, an outbreak of botulism along Lake Erie killed as many as 1000 loons, many undoubtedly migrants from Canada. This spring and summer our Loon Rangers are back in the field monitoring the number of adults closely to record New York State population impacts from the disease outbreak.

“The Loon Project is a perfect example of how ordinary individuals can make a vital contribution to research and conservation,” states ASNY’s Fred Realbuto. “Without these volunteers, New York State would not be gauging whether loons are thriving or dying in the Adirondacks. Though projects like this and others administered by Audubon International, individuals make a real difference to our understanding and management of wildlife and their habitats.”



Pat Grote

*Audubon Loon Rangers Pat and Cathy Grote spied this common loon nesting on a beaver lodge. Now in its 14th year, the Loon Project is the only NYS initiative to monitor breeding loons.*

## Stemming the Tide: Maintaining diversity to combat global climate change



Shari and Vince Gullo

*Planting flowers, shrubs, and trees that are native to your area is one way that individuals can help stem the tide of biodiversity loss. ACSP Backyard members, Shari and Vince Gullo in Lake Zurich, Illinois, combine coneflowers, Joe-pye weed, blazing star, and other wildflowers to showcase plants of the Midwestern prairie.*

With so much in the news about global climate change and its anticipated impacts, one can often wonder how significant individual environmental stewardship on the scale promoted by the Audubon Cooperative Sanctuary Program really is. Consider this:

“In the twenty-first century humans will live in, manage, and depend on ecosystems that are less diverse and subjected to higher carbon dioxide levels and nitrogen deposition rates than in recorded human history.” (*Nature*: Vol. 410, April 12, 2001.)

According to a recently published study in the journal *Nature*, the net result of this combination raises numerous concerns, including the possibility that the way ecosystems function and the numerous benefits they provide will suffer significant negative impacts.

Researchers found that the more diverse an ecosystem, the better it can absorb greenhouse gases, like carbon dioxide, from the atmosphere. Hence, small biodiversity losses add up to serious consequences on a global scale. Conversely, our efforts to conserve biodiversity locally are vital globally.

Our individual efforts to conserve and enhance the unique plant and wildlife diversity of our own properties are a valuable way to stem the tide of biodiversity loss. Contributing to local and regional biodiversity conservation is something tangible we can, indeed must, do—and there’s no time like the present to do it.

(Reference: *Nature* Vol. 410, April 12, 2001: 809–812)

# membership

## NEWS

### Audubon Cooperative Sanctuary Program

#### New Members

##### Golf Program

###### Arizona

Raven Golf Club at South Mountain, Phoenix

###### California

Belmont Country Club, Fresno  
Coyote Moon Golf Course, Truckee  
Desert Falls Country Club, Palm Desert  
Green River Golf Club, Corona  
Meadowood Napa Valley, St. Helena  
Meadows Del Mar Golf Club, San Diego  
Santa Barbara Golf Course, Santa Barbara

###### Colorado

Cordillera Summit Course, Edwards  
Eagle Ranch, Eagle  
Saddle Back Golf Course, Firestone

###### Delaware

Delcastle Golf Club, Wilmington  
Ed "Porky" Oliver Golf Course, Wilmington

###### Florida

Copperleaf Golf Club, Bonita Springs  
El Conquistador Country Club, Bradenton  
Haile Plantation Golf & Country Club,  
Gainesville  
Hideaway Beach, Marco Island  
The Bears Club, Jupiter

###### Illinois

Balmoral Woods Country Club, Erete  
El Paso Golf Club, El Paso

###### Indiana

Ft. Wayne Country Club, Ft. Wayne  
Sultan's Run Golf Course, Jasper

###### Louisiana

Cypress Bend Golf Club and Resort, Many  
East Ridge Country Club, Shreveport

###### Massachusetts

Ocean Edge Resort and Golf Course, Brewster  
Wellesley Country Club, Wellesley Hills

###### Maryland

Bay Club Golf Course, Berlin  
Faireway Hills Golf Club, Columbia

###### Michigan

City of Farmington Hills Parks & Golf,  
Farmington Hills

###### Missouri

Winghaven Country Club, O'Fallen

###### North Carolina

High Point Country Club, High Point

###### New York

Bedford Golf and Tennis Club, Bedford  
Brightmeadows Golf Course, Akron  
Ives Hill Country Club, Watertown  
Kanon Valley Country Club, Oneida  
Reeves Golf Course, East Quogue  
Rothland Golf Course, Akron

###### Ohio

Dornach Golf Club, Delaware

###### Oklahoma

River Oaks Golf Club, Edmond

###### Pennsylvania

Bent Creek Country Club, Lititz  
Country Club of The Poconos, Marshalls Creek  
Indian Lake Golf Club, Central City  
Scottish Glen, Carbondale  
Talamore at Oak Terrace, Ambler  
Tattersal Golf Club, West Chester

###### South Carolina

Arthur Hills Golf Club, Hilton Head  
Eastport Golf Club, North Myrtle Beach  
Palmetto Dunes Golf Courses, Hilton Head

###### Texas

Bear Creek Golf Club, Dallas  
Gleanloch Farms, Spring  
Hackberry Creek Country Club, Irving

###### Virginia

Algonkian Golf Course, Sterling  
Brambleton Golf Course, Sterling  
Dominian Club, Glen Allen  
Hunting Hawk Golf Course, Glen Allen

###### Vermont

Basin Harbor Club, Vergennes

###### Washington

Classic Golf Club, Spanaway

###### Wisconsin

Evergreen Golf Club, Elkhorn  
Lake Windsor Golf Club, Windsor

##### School Program

###### Illinois

Newport Elementary, Wadsworth

###### Louisiana

Oil City Environmental Magnet School, Oil City

##### Business Program

###### Florida

Walt Disney Worlds Old Key West,  
Lake Buena Vista

###### Tennessee

Ft. Loudon, Louisville

##### Backyard Program

###### Illinois

Joseph Gotfryd, Brookfield

###### North Carolina

Mr. & Mrs. Scott, Waxhaw

###### New Hampshire

Jane Grady, Londonderry

###### New York

Murcia Steele-Braman, Waterport

###### Texas

Jacque C. Murley, Greenville

###### Vermont

Douglas Keleher, Woodstock

### Recently Certified Audubon Cooperative Sanctuaries

##### Backyard Program

Murcia Steele-Braman, Waterport, NY

##### Golf Program

###### Colorado

Aspen Glen Club, Carbondale  
Colorado Springs Country Club,  
Colorado Springs  
Roaring Fork Club, Basalt

###### Florida

Chi Chi Rodriguez Golf Club, Clearwater  
Hammock Dunes Club  
Savannahs at Sykes Creek—IGM, Merritt Island

###### Georgia

Reynold's Plantation—Oconee Club, Greensboro

###### Illinois

Bryn Mawr Country Club, Lincolnwood

###### Michigan

Marion Oaks Golf Club, Howell

###### Minnesota

Crystal Lake Golf Club, Lakeville

###### New York

Poxabogue Golf Center, Wainscott

###### Tennessee

Hermitage Golf Course (Presidents Reserve),  
Old Hickory

###### Texas

Timarron Country Club, Southlake

###### Virginia

Golden Horseshoe Golf Course, Williamsburg

### Re-Certified Audubon Cooperative Sanctuaries

##### Golf Program

Loch Lomond Golf Club, Luss, Scotland;  
certified since 1998  
Del Paso Country Club, Sacramento, CA;  
certified since 1996  
Aspetuck Valley Country Club, Weston, CT;  
certified since 1998  
Royal Poinciana Golf Club, Naples, FL;  
certified since 1996  
Quail Ridge Country Club, Boynton Beach,  
FL; certified since 2000  
TPC at Sawgrass, Ponte Vedra Beach, FL;  
certified since 1996  
Countryside Golf Course, Mundelein, IL;  
certified since 1996  
White Pine National, Spruce, MI;  
certified since 1998  
Town & Country Club, St. Paul, MN;  
certified since 1997  
Somerset Country Club, Mendota Heights, MN;  
certified since 1996  
Newton Country Club, Newton, NJ;  
certified since 1998  
Detwiler Park Golf Course, Toledo, OH;  
certified since 1996  
Pumpkin Ridge Golf Club, North Plains, OR;  
certified since 1996  
Heron Lakes Golf Course, Portland, OR;  
certified since 1996  
Huntsville Golf Club, Shavertown, PA;  
certified since 1996  
Club at Seabrook Island, Johns Island, SC;  
certified since 1996  
Robert Trent Jones Golf Club, Gainesville, VA;  
certified since 1995

### Audubon Signature Program

##### New Signature Members

Coosa Bend Golf Club, Gadsden, AL  
Pauoa Golf Club, Kohala Coast, HI  
Lakeside Golf Resort, Gaffney, SC  
Red Cedar, Leesburg, VA

### Recently Certified Signature Sanctuaries

Longaberger Golf Club—The Arthur Hills  
Course, Nashport, OH  
Oak Grove Golf Course, Harvard, IL  
ThunderHawk Golf Club, Beach Park, IL

## Make the Most of Summer

Scott A. Martin

National Coordinator, ACSSC

I love summer! To be quite honest, I love some part of every season – each for its own special qualities. But you have to admit, summer is great. By now, the days are warm, the grass is green, the flowers are in full bloom, and the birds and bees are at their peak of activity. Now, if we could just find time to enjoy it!

By following the principles of the Audubon Cooperative Sanctuary Program, you can produce a healthy, environmentally friendly yard and garden that will naturally attract birds and other wildlife. Here are a few tips to help you spend more time sitting back and enjoying the fruits of your labours, instead of having to constantly maintain your landscape:

- Minimize the use of annuals. A few well-placed geraniums, petunias, or impatiens are colorful throughout the summer, but they do require regular watering and fertilizing to keep them looking good. Native perennials save money and labour in the long run and will help you to showcase the unique plants of your region.
- Use indigenous, native plants whenever possible. They naturally supply nectar and seed for birds and butterflies, are very resistant to local disease and insect problems, and need fewer external inputs, such as water, fertilizer, and chemicals. Should you need a plant list for your region, call our office at (705) 446-1532.
- Mow smart. Do you know people who scalp their lawn in the hope that they won't have to mow it again for another few weeks? This practice stresses the lawn, burns the plants, invites weeds to get established, and creates a vicious cycle of high inputs and poor quality lawn. Do just the opposite: mow high—between 2½ and 3 inches. This allows for deep roots and shaded soils, which helps the plants retain moisture and prevents weed and disease infiltration.
- Reduce your lawn. Now here's a strategy for mowing less. How about naturalizing along the edges of your yard, on tough to mow slopes, or seasonally wet terrain?



*Take time to get out and explore new environments or just sit back and enjoy the fruits of your labour this summer.*

Photo by: Highland Links Golf Course, NS

- Get a soaker hose or install drip irrigation to water landscape beds or gardens. Turn the hose on and walk away knowing that you've saved time and conserved water. Plus, your

plants will benefit from your efficiency. Roots and soils will be adequately watered without water loss to evaporation.

- Incorporate organic practices to ensure healthy soil and overall environmental quality. Stay current on integrated pest management techniques and best management practices. Ask for natural organic fertilizers at your nursery or turfgrass supplier.

With less time spent maintaining your property, you can get out and explore new environments, go hiking and bird watching, even take up golfing. If you have spare time to lend, consider volunteering to help your local golf course, school, business property, or neighbour become active in the ACSP. Summer comes around but once a year—why not make the most of it?

## Did you know that the most popular and fastest growing past-times in North America are gardening, bird watching, and golfing?

What better match for combining the best of each than the Audubon Cooperative Sanctuary Program for Golf Courses (ACSP). Currently, about 14% of Canada's golf courses are registered, and 22 have been designated Certified Audubon Cooperative Sanctuaries. **That amounts to more than 45,000 acres (18,000 ha)** of property that is being managed for environmental quality and habitat improvement across Canada.

The next time you are out on the links, take some time to notice the environment-friendly projects that have been undertaken. You may note nest boxes and bird feeders first, but also look for naturalized areas and the use of native plants in landscaping. Behind the scenes, but an equally important part of the ACSP, golf course members are conserving water, protecting water quality, and reducing chemical use. Thanks to ACSP golf course members, golf is truly *greener* for all.

## Membership News

### New Golf Members

#### Alberta

The Creek Golf Course, Grimshaw

#### British Columbia

Fernie Golf and Country Club, Fernie

#### Ontario

Cataraqui Golf and Country Club, Kingston  
OslerBrook Golf and Country Club, Collingwood  
Sunningdale Golf and Country Club, London

### New Business Members

#### Ontario

Clarksburg Schoolhouse Properties, Clarksburg

### New Backyard Members

#### Ontario

Valerie Burke, Thornhill  
Wendy and Dwayne Down, Brantford  
Gary Ingram, Petrolia  
Jennifer Klepadlo and Jason Kopschinsky, Whitby  
John Parker, Stoney Creek

**in this  
ISSUE**

## Partners for the Environment



Collier's Reserve, FL

Audubon International members reach out to improve the quality of the environment and strengthen community relationships. Read about a variety of outreach and education activities, plus wildlife and water quality projects, *in this issue*.

# STEWARDSHIP news

Audubon International publishes *Stewardship News* six times a year. Inquiries, contributions or letters to the editor should be addressed to:

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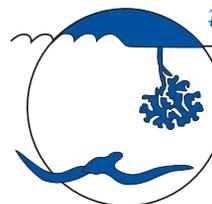
*Pass along this newsletter to a friend. Share your experiences with the ACSS and encourage others to get involved.*



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*Helping people help the environment*



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