

## Protecting the Environment Is Up to All of Us

**H**elping People Help the Environment. Those five words of Audubon International's tagline distill what we do and who we are into a catch phrase that is understood and remembered easily.

But five words have their limits. What we want to convey is that one of the best ways to protect our environment is by how we live and care for the places we call home. After all, the choices we make every day influence water, wildlife, natural resources, and, indeed, entire landscapes locally, regionally, nationally, and internationally.

Think about your local community and the natural landscapes that shape it. What are the plants and wildlife species that make your part of the world unique? What mountains, rivers, or plains distinguish the landscape?

Where does your water come from? Where does your waste go? How are growth and development in your local community affecting the natural systems and open spaces that sustain life? What will the place where you live look like in 10 years; 100 years? Will natural resources be healthier and more abundant than they are now or will they be diminished for future generations?

“  
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”

Audubon International's goal is to help people use, maintain, and develop their local (and, by association, regional and national) landscapes to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. Essentially, we are working to achieve sustainability.

To reach that end, Audubon International partners with individuals and organizations that want to work cooperatively with us to maintain their land as “sanctuaries” that will be managed for environmental quality. We partner with communities that are striving to achieve sustainability. By providing educational programs, sound information, and technical assistance, we help people sustain the environment in the places they care about—and realize that the sum of our individual efforts adds up to make a real difference. Essentially, we are *teaching good environmental stewardship*.



*Tangible, positive results are the rewards for participation in good environmental stewardship.*

### Getting started

Whether you begin with your backyard, schoolyard, workplace, golf course, or entire community, starting close to home and extending your efforts outward in ever widening circles makes good sense. How else can we hope to “save the environment” if we lose wildlife habitats, stress water resources, or contribute to pollution in our own homes, neighborhoods, and communities?

*(continued on page 2)*

# Audubon International Vision

## Paying for Nature's Services

The only thing certain in life is death and taxes, right? Wrong. Another certainty: we depend upon the natural world to sustain us. Yet, we don't fully pay for nature's services.

When was the last time you wrote a check to your local honeybee cooperative to pay for pollinating 80% of the world's food crops? Or paid for water purification provided to you by the local soil and vegetation utility? What would the full price of oil be if we included full exploration costs, oil spill clean-up charges, air pollution costs, or public health bills resulting from poor air quality (e.g., asthma outpatient bills) into the final price per gallon? Such is the inherent weakness with our current economic system.

Our natural environment exists well beyond the borders of nature preserves, sanctuaries, parks, and zoos. Likewise, environmental protection can't be confined to saving furry creatures or exotic rainforests. It also must include "paying" for nature's services through our own local stewardship activities. Unless those honeybees unionize, we'll have to continue to repay our debts to nature by bartering our time and effort.

Creating habitats on the golf course, reducing energy use in the home, or reducing groundwater runoff from your company's parking lot are tangible ways we can pay back nature. We'll keep giving you the tools, information, and motivation to take action in your own backyard, neighborhood, and community. In return, we simply ask that you don't lose sight of life's certainties—death, taxes, and our reliance on nature.



Kevin Fletcher  
Director of Programs and Administration

## Protecting the Environment

*(continued from page 1)*

To be effective in helping the environment, think about specific things that you can do something about: reducing water and energy consumption, fostering wildlife and protecting their habitats, generating less waste, preventing pollution, and so on. Audubon International's programs are broken down into specific focal areas—including, wildlife habitat management, water conservation and water quality management, waste management, and outreach and education—to enable you to take concrete steps to improve the environment and measure the success of your efforts.



Bonita Bay Club—Marsh Course, FL

*Take a closer look at the wildlife and plant communities that make your part of the world unique. Incorporate natural areas into your landscape and work to protect larger preserves in your community.*

## Wildlife and Habitat Conservation

We share the earth with a spectacular variety of living things. From almost any perspective—economic, environmental, ethical, aesthetic—it makes sense to keep the earth's ecosystems and wildlife species healthy and fully functioning long into the future. Yet a combination of factors places the earth's great biodiversity at risk: habitat loss and fragmentation, introduced invasive species, environmental degradation, over-harvesting, and interactions among all of these.<sup>1</sup>

Protecting habitats and improving the way we manage our landscapes are key to preserving biodiversity. Audubon International stresses wildlife and habitat conservation on privately and publicly managed lands so that we can create an increasingly connected network of natural communities across North America.



TPC Summerlin, NV

*Your efforts to conserve water and protect water quality benefit people, wildlife, and the natural systems that sustain all life.*

## Water Conservation and Water Quality

Everyday, our individual and collective actions affect the quality and quantity of water in streams, lakes, wetlands, and groundwater. The U.S. has the highest freshwater usage in the world—the average American family consumes nearly 300 gallons per day just at home.<sup>2</sup> Yet less than one percent of the world's water is groundwater or freshwater that can be tapped into. Practicing water conservation and protecting water quality are vitally important ways we can keep water resources renewable and aquatic habitats thriving.

1. *Conserving Earth's Biodiversity* by Edward O. Wilson and Dan L. Perlman, Island Press
2. *Biodiversity and Your Water Supply*, Center for Biodiversity and Conservation, American Museum of Natural History, NY

## Energy Conservation

Burning fossil fuels—coal, oil, and natural gas—accounts for 85% of U.S. energy consumption. The U.S. consumes more energy per person than any country in the world; with only 6% of the world's population, it uses almost 30% of the world's energy.<sup>3</sup>

Reducing our consumption, increasing the use of renewable energy sources, and using energy efficiently are concrete ways we can contribute to a better environment. Energy conservation reduces emissions that contribute to acid rain, global warming, and air pollution, and decreases soil and water pollution caused by spills and energy production. Energy conservation also limits the need for new oil and natural gas exploration.

solid waste. Simple practices, such as two-sided copying of paper, reducing the use of disposable or one-time-use products, and backyard composting, help to prevent emissions of many greenhouse gases, reduce pollutants, save energy, conserve resources, and reduce the need for new landfills and incinerators.



Spanish Hills Golf & Country Club, CA

*Involve family members, local schools, or community groups to expand your efforts and spread the word about the benefits of environmental stewardship.*

## Outreach and Education

Results of a recent survey commissioned by Ducks Unlimited revealed that 82% of Americans said they are not members of nor do they contribute to organizations that protect and conserve our natural resources. Sixty-three percent could not even name a single non-governmental organization that helps conserve wildlife and natural resources. It's not that people don't care about the environment—76% reported a medium to high interest in wildlife—it's just that many Americans are unsure how to help.<sup>5</sup>

Teaching others about practicing environmental stewardship widens your sphere of influence and encourages others to participate in conservation activities. This is one of the most critical aspects of Audubon International's programs, since the more people actively see themselves as stewards of the environment, the more good that can be accomplished.



Imbrook Resort and Conference Center, MO

*Keep it simple! Starting an office paper recycling program can be as easy as labeling existing waste containers and letting people know what goes in them.*

## Waste Reduction

In 1999, U.S. residents, businesses, and institutions produced more than 230 millions tons of trash, which is approximately 4.6 pounds of waste per person per day, up from 2.7 pounds per person in 1960. Currently, 28% of that waste is recovered and recycled or composted, 15% is burned at combustion facilities, and the remaining 57% is disposed of in landfills.<sup>4</sup>

Reducing how much waste we generate is the best way to lessen problems associated with solid waste. Recycling—especially of paper and yard waste, which together make up 50% of total waste generated—is also critical to reducing

3. Biodiversity and Your Energy Use, Center for Biodiversity and Conservation, American Museum of Natural History, NY

4. U.S. EPA Office of Solid Waste, Washington, D.C.

5. Ducks Unlimited, TN

## Share your story!

Throughout 2002, we'll include articles, case studies, and project information in *Stewardship News* to help you further your stewardship efforts in each of these focal areas. If you have a story to share about how you've improved habitat, saved water or energy, reduced waste, or extended good stewardship beyond your property, please pass it along. E-mail [jmackay@audubonintl.org](mailto:jmackay@audubonintl.org) or call Jean Mackay, Director of Educational Services at (518) 767-9051, extension 13.

## Gaining a Sense of Accomplishment: Second-Year Survey Shows Results of Participating in the ACSP

For the second consecutive year, *The Managed Lands Survey for Golf*, a survey of Audubon Cooperative Sanctuary Program (ACSP) golf members, indicates areas of great success, as well as areas for improvement. The survey, with responses from over 470 of the 2000-plus golf courses enrolled in the program, once again focused on three critical environmental areas—Chemical Use Reduction and Safety, Wildlife and Habitat Management, and Water Quality and Water Conservation—as well as examined participant attitudes (*i.e.*, the effects of the program on the golf experience and job satisfaction). Once again, the efforts of golf course superintendents, managers, and course staff have proved to be worthy of praise and recognition.



Bonita Bay Club, FL

*The Managed Lands Survey provides a good snapshot of how Audubon International is helping golf courses improve environmental management.*

### Positive Results

The survey revealed the following in each of the key study areas:

- **Chemical Use Reduction and Safety:** 82% reduced pesticide use, including 75% that also reduced pesticide costs. 92% of respondents used pesticides with lower toxicity levels.
- **Wildlife and Habitat Management:** 89% of respondents now choose native plants when landscaping, compared to 49% before joining the program. The average number of acres devoted to providing wildlife habitat increased by 50%, from 45 acres to 67 acres per course on average.
- **Water Quality and Water Conservation:** 89% of courses that responded had improved their irrigation system or the way that water was applied to the site. As a result, they saved an estimated 1.9 million gallons of water per year per course since joining the ACSP—totaling over 500 million gallons per year. Likewise, 86% of golf course managers and superintendents have increased efforts to monitor water quality.
- **Participant Attitudes:** Environmental strides were taken without compromising the quality of the game itself. Nearly 100% of courses surveyed reported increased or maintained golf quality and both golfer and superintendent satisfaction.

Both the increase in wildlife habitat areas and the reduction in water use are positive signs of environmental stewardship in action. “Golf courses offer a unique open space in the human landscape for wildlife to exist and thrive. Ongoing stewardship actions and education efforts lead to habitat protection and natural resource protection, as well as a reduction in the overall impact of golf management practices on the surrounding ecosystem,” states Joellen Zeh, Staff Ecologist.

### Areas for improvement

The survey also shows places for improvement in the upcoming year. “It’s clear we need to continue work with courses to reduce runoff, employ BMPs in the maintenance facility, and monitor stream water quality,” says Jean Mackay, Director of Educational Services.

“In the upcoming years, we plan to do the same survey with all of our members—backyards, businesses, cemeteries, etc.—in order to see where we need to redouble our education and assistance efforts,” states Kevin Fletcher, Director of Programs & Administration. “Likewise, we need to continue to use this survey to find new areas within current programs, and perhaps new programs themselves, which are ripe for our assistance. After all, environmental stewardship is a dynamic, not static, endeavor.”

# Sustainable Development Presents a Winning Solution to Burgeoning Growth in Florida

*The Old Collier Golf Club First to be Recognized by Audubon International for Sustainability*

Rapid development and population growth in Southwest Florida, which includes popular destinations such as Ft. Myers, Bonita Springs, and Naples along the Gulf Coast, pose numerous threats to the area's water resources and wildlife habitats. The population of Collier County alone increased by 65% in the 1990s and is expected to grow by 60,000 people by 2010, reaching 311,369 (*Collier County Planning Department*). Understandably, the tension between growth and open space preservation has often led to protracted battles among developers, county planners, and environmentalists.

Audubon International stepped into the fray in 1993, when we were invited by Collier Enterprises to work with its development team to design and build a golf course residential community that would place primary importance on the environment. Collier's Reserve was our first certified Audubon Signature Program member and the result was so successful that it became a national demonstration site for preserving wildlife habitat, maximizing energy and water efficiency, and protecting water quality in a new golf course development.

Since then, 11 additional developments in Southwest Florida have enrolled in the Audubon Signature Program. Now, Collier Enterprises has achieved another *first*: its Old Collier Golf Club is the first golf course to be certified as an Audubon International Gold Signature Sanctuary for showcasing sustainable development.

"We've built on our experience at Collier's Reserve and elsewhere and applied it at The Old Collier Golf Club to protect the ecological integrity of this incredible property," reports Bud Smart, Ph.D., Director of Environmental Planning for the Audubon International Institute. Audubon International staff worked with the design and development teams at Collier Enterprises and Tom Fazio Golf Course Designers, as well as Golf Course Manager Tim Hiers, who shepherded Collier's Reserve through Audubon Signature Program certification years ago.

The Old Collier Golf Club site consists of 267 acres, 70% of which is native habitat, including upland pine flat-

woods and wetland mangrove communities associated with the Cocohatchee River. Through careful planning and environmentally-sensitive design, these areas have been preserved intact. In addition, a variety of freshwater and brackish-water wetlands occurs on site, and these have been connected to upland habitats by wildlife corridors.

That's good news for the property's wildlife residents, including ospreys, which have an active nest on site, a

number of gopher tortoises, Florida box turtles, and green treefrogs. Connections between habitat patches, access to water with appropriate wildlife cover, and availability of food, shelter, and breeding areas were priorities in planning and remain priorities in the management of The Old Collier Golf Club.

"The entire plant palette for the golf course was carefully designed to include 100% native plants that showcase the beauty and diversity in this region of Florida. Over one million native plants

were planted," says Smart. "There are extensive connections between plant communities and Old Collier has diversified available habitats by adding numerous lakes with shallow water areas for amphibians and water birds."

More than just a golf course, The Old Collier Golf Club serves as a demonstration site for sustainable design and management. It helps us rethink the way growth should proceed—in concert, rather than at odds with the environment—each new development presenting a call to go above and beyond our best, incorporating what we've learned to create more sustainable communities for all life.



Bud Smart

*Innovation and environmental quality are the name of the game at The Old Collier Golf Club, where natural habitats are carefully interspersed with golf play areas. The golf course is grassed with Seashore paspalum, a type of salt-tolerant turfgrass that is primarily irrigated with brackish water from the Cocohatchee River, thereby reducing the need for use of potable water supplies for golf course irrigation.*

# Wild America—Up Close and Personal

*Capturing a rare glimpse of elusive mammals is a way to measure the success of your Wildlife and Habitat Management Plan.*

**H**igh profile mammals—they go by many names: charismatic megafauna, fuzzy mammals, exotics. Whatever you call them, they all have one thing in common—they occupy a prime position in every other wildlife for their own survival. Because they generally occupy larger territories, their presence is a sign of a functioning ecosystem. Spotting one on your property is a sure sign that your Wildlife and Habitat Management Plan is making a contribution to the overall landscape.

Observing high profile mammals can be difficult. Unlike frequently seen wildlife, such as squirrels, common birds, or butterflies, high profile mammals are more elusive. But it is exactly this elusiveness that makes a chance encounter more memorable. Armed with knowledge and understanding, you'll be able to maximize your chance of encountering the face of Wild America on your own property.

## Bobcats

*(Felis rufus, Lynx rufus)*

Few large carnivores in North America are as elusive and ironically, as wide-spread, as the bobcat. However, while bobcats are the most common wild cat in North America, their numbers have decreased due to hunting and trapping for pelts (in the past) and habitat loss (in the present). They have few natural predators, so humans remain the bobcat's chief enemy.

Bobcats are most likely to be seen in remote, rugged country during early morning or late afternoon feeding times. Bobcats have also adapted well to human settlement of wildlands. Even a woodlot adjacent to a farming area may sustain a pair of bobcats. Connecting smaller habitats on your property and linking them



www.bengaltigers.com

with surrounding natural areas when possible will increase your ability to attract bobcats and other predators.

Because of their elusive nature and caution around humans, bobcats are rarely seen. Bobcats avoid human contact as much as possible. If you can share your land peacefully with a resident bobcat, it will help control rodent populations.

## Foxes

*(Vulpes vulpes and Vulpes cinereoargenteus)*

Foxes are members of the Canid (Dog) family. They have keen intelligence and acute senses of sight, smell, and hearing. Four types of foxes are found in North America, but the red fox (*Vulpes vulpes*) and the gray fox (*Vulpes cinereoargenteus*) are the most common.

Apple Mountain, MI



### *Bobcat Natural History*

#### **Range & Habitat:**

- North—boreal coniferous and mixed forests; South-east—bottomland hardwood forests and coastal swamps; Southwest—desert and scrubland
- Prefer broken, rough, rocky terrain mixed with stands of dense vegetation

#### **Diet:**

- Rabbits, rodents primarily; sometimes deer; also birds, amphibians, reptiles, some fruits and grasses

#### **Characteristics:**

- Activity concentrated during dusk and dawn, although active at all hours
- Territory—averages 4 to 15 square miles, although ranges from 0.5 square miles to 125 square miles
- Solitary; seek cover in rock cavities, hollow logs, snags, dense brush

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otic wildlife, or keystone species. But no matter ecosystems, depending on water, land, plants, and presence is usually a good indication of a healthy, Management efforts are making a significant con-

Look for foxes along hedges, in bushes lining streams, and in shrubby areas with dense cover nearby. Foxes are not usually seen in open country.

If a fox den on your property is causing a conflict, try to be patient. Foxes tend to den only during breeding season. If you can allow them to remain, the parents and young will usually abandon the den by the time the young are three months old. If you must evict foxes from their den, any kind of disturbance, such as dogs, loud noises, or human scent, will likely cause them to move to another den. Once they are aware of the danger, allow them the opportunity to move young to another den without the threat of harm.

### *Fox Natural History*

#### **Range & Habitat:**

- Red foxes—tend towards northerly latitudes, but found throughout North America; found in range of habitats, but prefer mixture of forest and open country
- Gray foxes—tend towards southerly latitudes, but found throughout North America; prefer chaparral and open forests

#### **Diet:**

- Red foxes—primarily eat rabbits and rodents, but also insects and young deer; in coastal areas crabs, stranded fish and dead sea birds; in summertime also fruits, berries and grasses
- Gray foxes—omnivorous; small mammals, insects, fruits, birds, eggs, carrion

#### **Characteristics:**

- Red foxes—
  - Den underground
  - Territory—25 acres to 8 square miles
  - Live in pairs or small family groups, hunt alone at night
  - Well adapted to living closely with people
- Gray foxes—
  - Dens in hollow logs and beneath boulders, sometimes underground
  - Territory—100 acres or more
  - Timid and avoid contact with human areas

## Beavers

(*Castor canadensis*)



www.beaversww.org

Beavers have earned a well-deserved reputation as nature's master mechanical engineers. Indeed, their ability to change the landscape is second only to humans. With their characteristic dams and lodges, beavers have played a large role in the natural history of North America. Dammed streams make the land more fertile, raising the water table to create ponds, lakes, and wetlands, making new habitat for fish and waterfowl, and stimulating the regrowth of vegetation.

Streams, lakes, and ponds are the best places to find beavers, or at least signs of their presence. Look for their characteristic neatly-constructed dams and pointed, chewed tree stumps. Approach these areas quietly at dawn or dusk, since beavers do much of their work by cover of nightfall.

If you are having a problem with flooding caused by beavers, working with the beaver is the best solution. Installing pipes or culverts through a beaver dam is one cost-effective way to minimize dam-induced flooding and maintain streamflow while still providing habitat for the beaver and other wildlife that rely on the beaver-created wetland. Another option is to encourage beavers to relocate by modifying the habitat around a stream or pond. Removing food trees restricts sources of food and dam-building materials. If the only available food trees are too far overland (greater than 16 feet), beavers will move to a better site. A third option is to protect food trees from beaver activity by installing wire cages around tree trunks or coating tree trunks with a mixture of sand and paint.

Live-trapping and dam removal are both highly discouraged. Live-trapping merely shifts the problem to a new area, and it is unlikely that you will be able to trap all members of a beaver family, which can number from 8 to 13 members including adults, kits, and yearlings. Dam removal alone is usually not enough to discourage beavers either, as they will begin to rebuild a damaged dam immediately.

### *Beaver Natural History*

#### **Range & Habitat:**

- Found throughout the United States and Canada from sea level to 9,000 feet
- Live near streams or lakes with trees along banks

#### **Diet:**

- Summer: leaves, grass, small herbaceous plants (duckweed, cattail, sedge, bulrush, water lily, waterweed, goldenrod, arrowhead)
- Winter: soft, chewable bark (cambium) and small twigs of aspen, poplar, birch, maple, cottonwood, alder, and willow trees

#### **Characteristics:**

- Build dams to alter landscape and create suitable habitat
- Lodges frequently built in riverbanks (southern regions) and in lakes or ponds with protective moats (northern regions)

# take ACTION

## Audubon International Welcomes New Staff

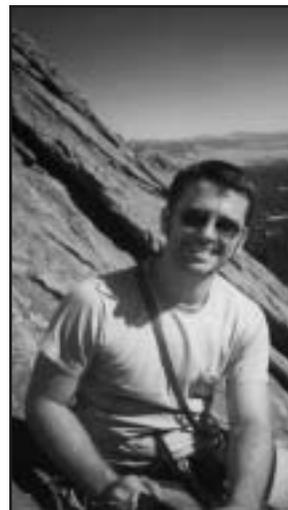
We welcome **Kevin Fletcher** to the new position of **Director of Programs and Administration** at Audubon International. "With ten years of education, outreach, and progressive stewardship programs under its belt, I sense that Audubon International is on the verge of even bigger and better things. Thus, I'm honored and excited by the prospect of helping an already significant

of the *Corporate Environmental Strategy Journal*. He received a B.S. in Biology from SUNY at Geneseo, an M.S. in Environmental Management & Policy from RPI, and is in the process of completing a Ph.D. degree in Management at RPI.



environmental stewardship organization become even more influential," shared Fletcher. In this new role, Fletcher will be responsible for much of the day-to-day operations and staff coordination, as well as having a primary role in growing outreach efforts, managing membership services, and fostering new programs.

Prior to joining Audubon International, Fletcher served as an environmental management consultant, an instructor at Rensselaer Polytechnic Institute (RPI), and managing editor



**Peter Bronski** recently joined Audubon International as a **Staff Ecologist** for the Audubon Cooperative Sanctuary System. "I'm excited about working with Audubon International's dedicated members and highly skilled staff," noted Bronski. "Together, we can accomplish great things for the environment." Bronski will be responsible for helping members work towards certification in the ACSP, as well as writing articles for *Stewardship News* and

other publications, and helping to expand Audubon International's programs.

Prior to joining Audubon International, Bronski worked in Colorado as an environmental advocate and public educator for a national non-profit environmental organization. He graduated from Cornell University with a B.S. in Natural Resources, has participated in several international outdoor leadership programs, and is a freelance writer who frequently covers topics in natural resources and outdoor recreation.

## Join Us For This Year's North American Birdwatching Open!

All members of the Audubon Cooperative Sanctuary System—including backyard, school, golf, business, cemetery, and Signature program members—are invited to participate in the fifth annual North American Birdwatching Open on International Migratory Bird Day, **Saturday, May 11, 2002**. Over the course of 24-hours, participants identify as many different birds as they can on their properties. The data we gather provides useful information about bird species commonly found on different types of properties. Members are encouraged to invite someone experienced in bird identification to help, if needed, to contribute to a more accurate count.

This year's event will be managed through our website at [www.audubonintl.org/projects](http://www.audubonintl.org/projects). To participate, visit our website to register and download rules and information, as well as a bird checklist. If you would like to participate, but do not have internet access, please call Jennifer Batza at (518) 767-9051, extension 12, by **April 1, 2002** to register.



Steeple Hollow, OH

## Individuals Honored for Environmental Stewardship

It takes hard work and dedication to get a property certified in the Audubon Cooperative Sanctuary Program. Most often, a leader emerges who spearheads the environmental efforts of employees, community members, and volunteers and documents activities for certification. Audubon International recognizes the following individuals for their significant accomplishments in completing certification requirements. (*List includes individuals recognized from June 30, 2001 through January 1, 2002.*)

### Reasons to Get Certified

1. Do the right thing for the environment
2. Enjoy a new and rewarding aspect of your job and be able to share it with others
3. Gain positive publicity
4. Better organize and coordinate your environmental management efforts
5. Evaluate the impact of management practices on the environment
6. Track environmental improvements
7. Build your skill set and your resume
8. Promote your stewardship efforts
9. Be recognized as a leader among your peers
10. Gain valuable feedback from Audubon International

Peter McDonough, Keswick Club  
 Dan McKean, McKean Park  
 Tyler Minamyers, IGM—Cahoon Plantation  
 Carrie R. Morrow, Blacklick Woods Golf Course  
 John A. Nurminen, Cherry Creek Golf Club  
 Norbert O'Hare, TPC at Rivers Bend  
 Kim Porter, Wawona Golf Course  
 Larry C. Robinson, Cliffs at Glassy Mountain  
 Kyle Sweet, Sanctuary Golf Club  
 Terry Stratton, Little River Inn Golf & Tennis  
 Tom Tully, Chicago District Golf Courses  
 John Walker, Shadow Hawk and Houstonian Golf Clubs  
 Matthew Weaver, Classic Golf Club  
 Deneen Ziegler, Emerson Club

### Certificate of Recognition in Environmental Planning and Environmental Stewardship

Glenn Bereiter, Aldeen Golf Club  
 Lee Byce, Reynolds Plantation  
 Peter Chow, Northstar at Tahoe Golf Course  
 David Dettmer, TPC at Piper Glen  
 Matt Fancher, Tiburon Golf Club  
 William Gaydosh, Round Hill Club  
 Ken Happ, CGCS, Fowler's Mill Golf Course  
 Jeff Karlstrand, TPC of Virginia Beach  
 Charles "Buddy" Keene II, Gainesville Country Club  
 Terry Laurent, CGCS, Saucon Valley Country Club  
 Dan Murray, Settler's Hill Golf Course  
 Doug Smith, The Brooks  
 Bob Taeger, Village Country Club

### Certificate of Recognition in Environmental Stewardship

Sarah Bowman, Warren Golf Course  
 Donald Cross, Skokie Country Club  
 Steve Kealy, CGCS, Glendale Country Club

### Certificate of Recognition in Environmental Planning

Cliff Beckman, Salishan Golf Links  
 Cory Blair, Three Ridges Golf Course  
 Tim Bryant, Blowing Rock Country Club  
 Brandon Conlow, Congressional Country Club  
 Lear Despeaux, Boca Rio Golf Club  
 David Ferrantino, Dedham Country & Polo Club  
 Dave Fisher, Park Hills Golf Course  
 Marty Fuller, Winchester Country Club  
 Greg Gunderson, Crane Creek Country Club  
 Cameron N. Halliday, Kau Sai Chau Golf Club  
 Stuart Hughes, Yarra Bend Golf Course  
 Paul Illgen, The Ravines Golf and Country Club  
 Erik Knudsen, Mizner Country Club  
 Bob Marshall, IGM—Pelican Bay Country Club  
 Paul Mayes, PGA of Southern California Golf Course

### Stewardship Signs Available!

Show your commitment to the environment with an Audubon International sign! Three distinct signs are available to help you announce your participation in the Audubon Cooperative Sanctuary Program. Each 11" x 15" sign is made of 100% recycled, thermoplastic Enviropoly to provide you with a long-lasting, maintenance free sign.



Each sign bears the Audubon International logo along with the wording "A proud member of the Audubon Cooperative Sanctuary System." To view the signs and place an order, visit our website and on-line store at [www.audubonintl.org/store](http://www.audubonintl.org/store). Or call Jennifer Batza (518) 767-9051, extension 12 to place an order.

# membership NEWS

## Audubon Cooperative Sanctuary Program

### New Members

#### Golf Program

##### Barbados

Sandy Lane Properties Ltd., St. Thomas

##### Arizona

Raven Golf Club at Sabino Springs, Tucson  
Torreon Golf Club, Show Low

##### California

Falcon Glen Golf Course, San Jose  
Sunnyvale Golf Course, Sunnyvale  
Westridge Golf Club, Lahabra

##### Colorado

Glenmoor Country Club, Cherry Hills Village

##### Delaware

Marsh Island Golf Club, Lewes  
Sussex Pines Country Club, Georgetown

##### Florida

Caloosa Greens, Sun City Center  
Lost Tree Club, North Palm Beach

##### Illinois

Renwood, Round Lake Beach

##### Kansas

Nicholas Golf Club at Lionsgate, Overland Park

##### Massachusetts

Brookline Golf Club, Newton  
Chelmsford Country Club, Newton  
Franklin Park Golf Course, Newton  
Sassamon Trace Golf Course, Newton  
Tournament Players Club of Boston, Norton

##### Maryland

Carolina Country Club, Denton  
Patriots Glen, Elkton

##### Michigan

R. Hill Photography Inc., Grand Rapids

##### Missouri

Rivercut Golf Course, Springfield

##### Oregon

Awbrey Glen Golf Club, Bend

##### Virginia

Hermitage Country Club, Manakin-Sabot

#### School Program

##### California

Rancher Buena Vista High School, Vista

##### Colorado

Eagle Valley High School, Gypsum

##### Illinois

Fairview Elementary School, Mt. Prospect

#### Business Program

##### Philippines

Malagos Garden Resort, Inc., Davao City

#### Backyard Program

##### Maine

Joel H. Joyner, Limington

##### Maryland

Edward B. Brandt, Chevy Chase

##### Michigan

Roger Hill, Grand Rapids

##### Missouri

Donald Delmez, St. Charles

##### North Carolina

Bill Cantrell, (The Fisher Property), Highlands

## Recently Certified Audubon Cooperative Sanctuaries

### Golf Program

Emerald Hill Golf & Learning Center, Sterling, IL  
Garra de Leon Golf Course, Filadelfia, Costa Rica  
Northstar at Tahoe Golf Course, Truckee, CA  
Northville Hills Golf Club, Northville, MI  
Pelican Marsh Golf Course, Naples, FL  
Settler's Hill Golf Course, Batavia, IL  
Skokie Country Club, Glencoe, IL  
Tan Tara Golf Club, North Tonawanda, NY  
TPC of Virginia Beach, Virginia Beach, VA

### Business Program

The Brooks, Bonita Springs, FL

## Audubon Signature Program

### New Signature Members

Los Hammond Golf Course  
Hammond, Indiana

## Recently Certified Signature Sanctuaries

Quita Da Marinha Oitavos Golfe  
Cascais, Portugal—*First Gold Signature  
Sanctuary in Europe*

## Congratulations!

Congratulations to **Sandy Clark**, CGCS, of Barona Creek Golf Club in Lakeside, California (an Audubon Signature Sanctuary), for recently completing **GCSAA's Environmental Management Program**.

**Andrew Baker**, Superintendent of Sanctuary Cove Resort in Australia was presented the **2001 Claude Crockford Environmental Award** in recognition of initiatives undertaken for certification in the Audubon Cooperative Sanctuary Program.

**Raptor Bay Golf Club** in Bonita Springs, Florida, recently ranked among the **Top 10 New Public Golf Courses** by *Sports Illustrated*. Raptor Bay is working toward certification as a **Gold**

**Audubon Signature Cooperative Sanctuary**, recognizing its outstanding environmental stewardship and sustainable practices. Surrounding the course are more than 200 acres of native vegetation and nature preserve areas and 22 acres of lakes.

ACSP Business Program member, **Griffin Industries**, parent company of Nature Safe Natural & Organic Fertilizers, was awarded the **Kentucky Industry of the Year Award** late in 2001. The award recognized the company's leadership in recycling management and community involvement. Sixteen of Griffin's industrial facilities are certified in the ACSP and have been actively involved with schools and community groups as part of their *Outreach and Education* efforts.

## Keep Your Landscape Looking Good...Even During Drought

One of the current trends in environmentally friendly landscaping is *xeriscaping*, or dry landscaping. This water conservation practice can be achieved in many ways and is applicable to any property. With drought such a significant regional concern across much of North America, xeriscaping and other conservation measures will help you keep your landscape looking good, without draining our water resources.

Some plants require much more water to sustain than others. Plants requiring little water are termed *xeriphytic*, or dry-loving. These plants can thrive on very little water, and often little care and attention. Some of the best examples of such plants are found in our native prairie, savannah, and dry meadow habitats. These plants have adapted over thousands of years to thrive on little or erratic water input, and include coneflowers, blazingstars, coreopsis, black-eyed Susan, and several aster species, as well as many ornamental native grasses, including Indian grass, big bluestem, and little bluestem.

In addition to the plants you use, try to incorporate other conservation practices to achieve a water efficient landscape.

- **Use mulch**—Organic mulches help retain moisture, cool the soil, and reduce weed establishment when used in a 3”–5” thick layer.
- **Collect rain water**—Rain barrels can supply a great amount of natural, soft water for your gardens. A 1,000 square-foot roof sheds about 250 gallons of water during a ¼” rain. By collecting this water in rain barrels for later use in your gardens, you can keep your moisture loving plants happy for a long time.



*Sue and Tanguay Charron have incorporated the principles of xeriscaping in their certified backyard sanctuary by integrating xeriphytic plants, mulches, and rain barrels to help reduce water use.*

- **Naturalize**—Converting turf areas to xeriphytic landscapes is a terrific way to save a great amount of water.
- **Water in the early morning**—When you do need to water turf areas, avoid watering at peak evaporation times. Watering in the heat of the day can cause up to 50% loss of irrigation water through evaporation. It is best to water early in the morning.
- **Give plants a thorough soaking**—By providing deep irrigation, you can reduce your watering to once or twice per week, and produce plants with much healthier root systems. Use a soil moisture probe to check how well water has penetrated the soil and determine when irrigation is needed.
- **Water based on need, not a timer**—Automatic irrigation systems are great, but should be used in combination with weather reports,

soil moisture, and common sense. Adjust your system to maximize efficiency.

- **Water only where it's needed**—How often have you seen irrigation systems that water the driveway or sidewalk in addition to the lawn? If you're wasting water this way, adjust your sprinkler heads.
- **Use drought tolerant plants**—Over-seeding your turf with drought resistant varieties will help to reduce the amount of water you use.

Reducing water consumption in your outdoor landscape can be quite simple. Start researching and planning now for a landscape that doesn't require supplemental irrigation. Don't forget to get your native plants ordered early too. Once summer gets here you'll be so happy with your new landscape that you won't want to do much more than sit back and enjoy it.

## Membership News

### New Golf Members

#### Alberta

River Spirit Golf Club, Calgary

#### Ontario

Eagle's Nest Golf Club, Toronto  
Flamborough Hills Golf Club, Copetown  
Grey Silo Golf Course, Waterloo

Renfrew Golf Club, Renfrew  
Twenty Valley Golf and Country Club, Vineland

### New School Members

#### Ontario

Upper Canada College, Toronto

### New Backyard Members

#### Ontario

Brian and Laura LaDuke, Lunenburg

## Recently Certified Audubon Cooperative Sanctuaries

### Golf Program

#### Ontario

Stone Tree Golf and Fitness Club, Owen Sound

### Backyard Program

#### Ontario

Sue and Tanguay Charron, Oshawa

## Helping People Help the Environment



Hobe Sound Elementary School, FL

**A**udubon International partners with individuals and organizations to address environmental problems and create a more sustainable future. What's the result of our stewardship actions? Find out more...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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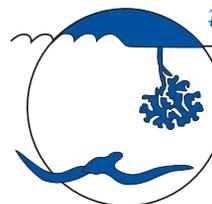
When you're finished reading this newsletter, pass it on to a friend and tell them about Audubon International. This is a great way to extend the use of paper and spread the word about environmental stewardship.

Pass it on!

ACSS  
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