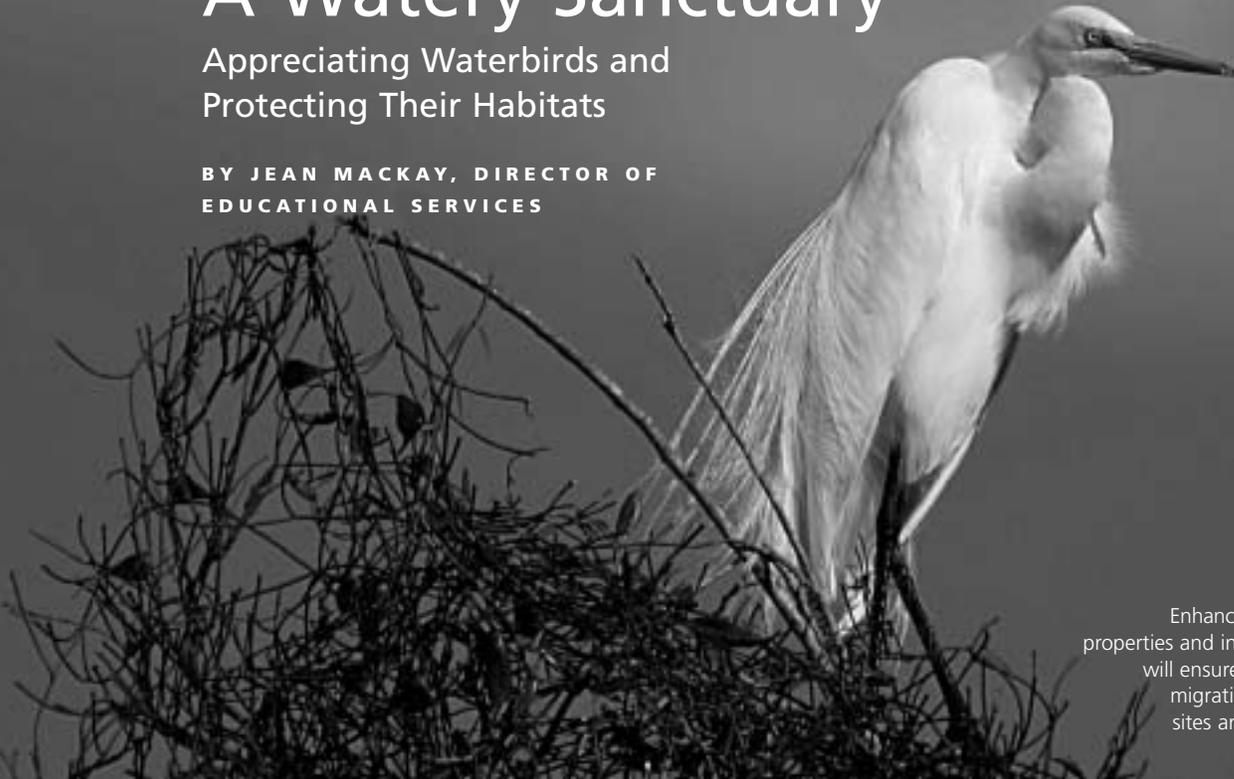




A Watery Sanctuary

Appreciating Waterbirds and
Protecting Their Habitats

BY JEAN MACKAY, DIRECTOR OF
EDUCATIONAL SERVICES



Enhancing habitat on our own properties and in our local communities will ensure that feeding grounds, migration stops, and breeding sites are viable for waterbirds.

Shorebirds, wading birds, geese, and ducks have long been recognized as some of North America's most beautiful birds. To watch a great blue heron wade in the shallows, glimpse a sandhill crane lift off into flight, or hear the shrill whistle of the wood duck are special moments for birders and non-birders alike.

Though each species of waterbird is distinct, all depend on wetlands and other water bodies throughout the year for migratory stopovers, breeding grounds, and wintering sites. More than half of America's wetlands were lost from the 1700s to the mid-1980s (Tiner, 1984); and 9.1 million were lost from the 1950s to the 1970s alone (Frayer *et al.*, 1983). As increasing human pressures continue to impact natural wetlands, it is imperative that constructed wetlands, ponds, and even water gardens provide viable habitats.

The value of wetlands or ponds as waterbird habitat depends on a number of factors, including:

- overall size—generally the bigger the better;
- water depth—shallow areas are preferred by wading birds, whereas deep water is preferred by diving birds;
- abundance and types of food present—plants, insects, fish, amphibians, etc.;
- aquatic and shoreline plants—the amount, structure, density, quality, and diversity all play a role; and
- proximity to forested areas or other types of habitats—the closer the better.

In the end, diversity is key. A combination of deep and shallow water, many types of prey foods, dense and sparse shoreline vegetation, and different types of wetlands and ponds

in close proximity to other types of habitats are ideal. In addition, because many species of waterbirds nest together in colonies, they need large and sheltered wetlands in which to breed. Egrets, herons, spoonbills, storks, bitterns, and ibises prefer islands, coastal swamps, and large wetlands. Therefore, permanently protecting these habitats is a priority for ensuring waterbird survival.

Doing your part

In addition to supporting wetland protection in your community, there are many things you may be able to do on your own property to improve waterbird habitats. This issue of *Stewardship News* offers a number of tips and techniques to help you take action and make a positive difference for water-dependent wildlife.

continued on page 4

Dear Members and Supporters,

Just as we have been reflecting on our first twenty years as an organization, this issue of *Stewardship News* echoes the roots of the Audubon Movement and offers innovative visions of a more sustainable future. Birds and their habitats are at the heart of what the original Audubon members worked to protect. That certainly has not changed—as reflected in our feature on waterbirds and improving aquatic habitats. The tips and tools offered harken to a day when bird conservation was the dominant goal for Audubon societies.

Now, however, we also see technology, innovation, and creativity driving change in the way we build and manage the places where we live, work, and recreate. For instance, The Villages at Sumter, Spruce Peak at Stowe, and Bundoran Farm offer glimpses of Audubon International's vision—a world where communities become more sustainable through better planning, smarter policies, and best management practices, with an emphasis on nurturing the whole environment. And that's not just for the birds.

So read, enjoy, learn, grow, and then, take action yourself.

Best regards,



Kevin A. Fletcher, PhD
Executive Director

In this issue...



The outstanding cover image of the great egret, as well as the other waterbirds featured in this issue, are used with permission from photographer Maryle Barbe of Bonita Bay, Florida. Barbe's images were taken at the Bonita Bay Club—Bay Island, Creekside, and Marsh Golf Courses, all certified ACSP members.

- 4 Getting Started on Stewardship:** *Wetland Planting and Aquascaping*—Enhance wetlands and ponds for waterbirds using our tips, techniques, and aquatic plant list.
- 6 Eco-Design and Development:** *Innovation Benefits Water and Wildlife at the Villages of Sumter*—Florida's fluctuating water levels spark innovative solutions that improve the way lake shorelines are managed.
- 7 Sustainable Communities:** *Spruce Peak at Stowe Earns Audubon Green Community Award*—The first private-sector member of the Sustainable Communities Program recently reached its first major milestone in the program, as it integrates sustainable technologies and practices into its ski resort operations.
- 8 On the Road...for Stewardship:** *Charlottesville, Virginia*—Travel to Bundoran Farm, where sustainable agriculture takes center stage in this Audubon Gold Signature project.
- 10 Membership News:** Welcome to our newest members and congratulations to our recently certified sanctuaries.



46 Rarick Road
Selkirk, New York 12158
(518) 767-9051
www.auduboninternational.org

You can reach our staff via e-mail by typing the person's *first initial, full last name @ auduboninternational.org*.
e.g., jmackay@auduboninternational.org

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SUSTAINABLE COMMUNITIES PROGRAM

Peter Bronski, Manager

Staff Changes

Fletcher to Serve as Executive Director

Audubon International's Board of Directors recently appointed Kevin A. Fletcher, PhD to serve in the new position of executive director for the organization. In this position, Fletcher is responsible for day-to-day management and will work closely with the Board, and Board President Ronald Dodson, to achieve the vision and mission of the organization. Fletcher has worked for Audubon International for over five years as Director of Programs & Administration. Previously he worked as a college instructor and management consultant in the field of environmental management, business strategy, and sustainability.

Farewell to Alicia Oller and Jeremy Taylor

We wish staff members Alicia Oller and Jeremy Taylor the best of luck in their future endeavors as they move on from Audubon International. For nearly eight years, Alicia Oller has been a valuable part of the Environmental Planning Department, serving as Director of Technical Services and ecologist. Alicia has been a key player in helping development projects around the world achieve certification in the Audubon Signature Programs. She ensured consistent delivery of technical information and onsite training. Her ability to connect with members, educators, public representatives, and development professionals will be missed greatly.

Staff Ecologist Jeremy Taylor served members of the Audubon Cooperative Sanctuary Programs and Audubon Partners for the Environment for the past two years. Jeremy's dedication to the environment and passion for birds were assets to our programs.



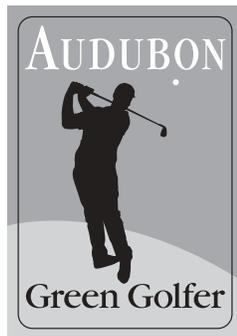
Accessible only by boat, Hog Island is a 330-acre island in midcoast Maine's beautiful Muscongus Bay. Since 1936, it has been home to Audubon camp for adults, educators, and young people, with sessions led by some of the most respected naturalists and environmental educators in the nation. For more information, visit http://www.maineaudubon.org/explore/camp/hi_overview.shtml.

Audubon Partner Vivian Cardoso Receives Environmental Educator's Scholarship

We are pleased to announce that Vivian Cardoso of Oak Forest Elementary School in Texas is the recipient of a scholarship to the Educator's Workshop in July at the Audubon Center on Hog Island, Maine. Maine Audubon generously offered one full scholarship to a teacher participating in our Audubon Partners for the Environment Program for Schools and Youth. Cardoso couldn't be a better choice. She spearheads environmental education and stewardship activities at Oak Forest, transforming the campus into an environmental showpiece and earning numerous awards, including *Certified Audubon Cooperative Sanctuary* designation last fall.

Join the Leader Board!

Green Golfer Challenge gets underway



Our Green Golfer Challenge is in full swing as more than 25 golf courses have signed on to date. Participating courses encourage their golfers to take the Green Golfer Pledge as a simple way to support environmental stewardship while playing golf. The Green Golfer Challenge is open to all golf facilities and we especially encourage ACSP and Audubon Signature golf course members to sign on. Participating courses—and Green Golfers—

are eligible for golf-related prizes to be awarded at the end of 2007. The free pledge and golfer education resources are available from Audubon International, with support from the USGA and The PGA of America. To find out more about the *Green Golfer Challenge* or to take the *Green Golfer Pledge*, visit www.golfandenvironment.org.

A Watery Sanctuary *Continued from page 1*

Wetland Planting and Aquascaping

One of the best ways to improve habitat for waterbirds—and a myriad of other wildlife species—is to enhance wetlands and ponds with aquatic plants and protect them from disturbance. Wetland planting and aquascaping have the added benefits of stabilizing shorelines, reducing erosion, improving aesthetics, and absorbing pollutants that can degrade water quality.

While you may be an experienced gardener when planting flowers or trees, you may feel like a fish out of water when it comes to aquatic planting. But planting wetland plants is basically the same as planting any other plants. Familiarize yourself with each plant's requirements for sunlight, space, water depth, and nutrients, just as you would for regular gardening...and then dig in!

Planting Tips

- **Do some homework.** Many nurseries sell aquatic plants. Request a brochure and look it over carefully. Choose plants that fit well with your specific site conditions.
- **Choose native plants.** This will ensure the best benefit to wildlife and help to promote the unique natural heritage of your region. If you need a native plant list for your specific region, call our staff—they can send you a list.
- **Purchase plants locally, when possible.** Many plants develop specific regional adaptations, called ecotypes. Purchasing within your geographic area will help to ensure that your plants are hardy for your local conditions.
- **Plant aquatic plants as soon as you receive them from the nursery.** Bare root plants, plugs, and container plants can all be planted directly into the pond or wetland in spring, after the danger of frost has past. Follow recommendations for the appropriate water depth for each plant species. If you can't plant them right away, pot the plants, and keep them well watered and in the shade.
- **Maintain your investment.** During the first two years of establishment, check shoreline plantings at least every other week. Watch for invasive species, such as purple loosestrife, and remove unwanted plants. It may also help to rope or mark these areas to keep people from trampling through them. Once established, naturalized shorelines require minimal maintenance, especially compared with the routine maintenance required to manicure a shoreline.



Waterbirds eat a variety of foods, including all parts of aquatic plants, insects, fish, aquatic vertebrates, small mammals, and agricultural waste grain. When you see waterbirds, like this green heron, notice that they are often swimming or wading in fairly shallow water, close to the edge of a pond or wetland where plants help to conceal them.



Clean up! Unfortunately, enhancing wetland habitats in many locations starts with removing trash. The staff at ACSP member Wildhorse Golf Course in California, under the leadership of Superintendent Wes Leith, clear away garbage annually from a canal that flows through the property. About half of the trash removed each year is recyclable.

Aquatic habitats make great outdoor classrooms. Last year, Olson Elementary School in Bloomington, Minnesota, created an outdoor classroom next to a pond on its elementary and middle school campus. The study area links the pond with school buildings via a new nature trail that is also open to neighborhood residents. Teachers now use the outside environment for hands-on science and environmental studies, as well as to enhance the curriculum in art, reading, and writing. A grant from Tree Trust covered the cost of trees and shrubs, while The Toro Company and school's Audubon sponsor, Minnesota Valley Country Club, donated labor, equipment, and additional project funds.



Audubon International's Top Ten Hardy Shallow Water Plants

Not all aquatic plants are created equal. Some provide food, others offer protective cover, and the best offer both. Still other aquatic plants—particularly invasive, exotic species, such as purple loosestrife and phragmites—provide few benefits and plenty of problems.

In addition to these favorite shallow water plants, there are a great variety of aquatic and shoreline plants available. Both local and mail-order nurseries can supply you with a list. The following plants should be planted zero to six inches below the water surface, unless otherwise noted.

1. **Arrow Arum** (*Peltandra virginica*) ZONE 5—Attractive glossy, dark green arrow-shaped foliage. Will tolerate some shade. Wood ducks and other waterfowl eat the seeds. 2 ft. tall.
2. **Common Cattail** (*Typha latifolia*) ZONE 3—Leafy foliage, all season interest, and excellent wildlife food and cover value. A perfect tall background plant. 4 to 6 ft. tall.
3. **Duck Potato/Arrowhead** (*Sagittaria latifolia*) ZONE 4—Strong, wide arrow-shaped foliage. White flowers with bright yellow centers. Underground tuber provides a waterbird food source. 2 ft. tall.
4. **Pickerelweed** (*Pontederia cordata*) ZONE 3—Slick, broad, dark green foliage and bright lavender flowers. Easy to grow. Seeds eaten by waterfowl. 1 to 2 ft. tall.
5. **Bulrush** (*Scirpus sp.*) ZONE 5—Lush, dark green foliage. Waterbirds and song birds eat the seeds; stems and rhizomes are eaten by muskrats and geese; birds also nest in the upright stems. Valuable for controlling shoreline erosion. 3 ft. tall.
6. **Sedges** (*Carex sp.*) ZONE 5—Narrow foliage forms dense clumps with uniform stature. Provides habitat for upland ground birds, mammals, songbirds, waterfowl, and shorebirds. 1ft. tall.
7. **Common Rush** (*Juncus effuses*) ZONE 5—Dark green spiky stems. Provides food, cover, and nesting for waterfowl. 2 to 3 ft. tall.
8. **Blue Flag Iris** (*Iris versicolor*) ZONE 4—Striking, delicate violet blossoms and sword-like foliage make Blue Flag an attractive choice for wet areas and pond plantings. Provides some cover for wildlife. Plant near water's edge, up to 4 ft. deep. 2 to 3 ft. tall.
9. **Sweet Flag** (*Acorus americanus*) ZONE 4—Slender, upright with narrow sword-like leaves, light yellow-green flowers. Seeds eaten by wood ducks, stems eaten by muskrats. 1 to 4 ft. tall.
10. **Marsh Marigold** (*Caltha palustris*) ZONE 3—Golden yellow flowers in early spring. Prefers cold climates and light shade or cool running water. 1ft. tall.

Small Ponds

If you have a small pond, or you are planning to build one, there are several ways you can enhance it to combine the essential elements of food, cover, and water to attract birds and other wildlife.

1. Keep the water level of the pond stable to encourage the growth of aquatic vegetation along the pond margin.
2. Plant aquatic vegetation and wet-site tolerant plants at the pond edge to provide food, cover, and nesting areas.
3. Install an aerator or fountain to add oxygen, reduce algae growth, and prevent the pond from becoming stagnant.
4. Do not drain ponds or marshes for repair or other purposes during important migration times or during the spring breeding season.
5. Place a tree limb along shore, jutting into the water. Turtles will climb onto it to bask in the sun, and small fish, frogs, and salamanders will seek shelter amidst its underwater branches. You can also make a rock or log pile along the shoreline to provide shelter for salamanders.
6. If nests are present, mark them with signage or fencing, if needed, to keep people from disturbing them.
7. Add floating logs, rafts, or islands to provide safe resting sites for waterbirds.
8. If you are building a pond to create habitat, the edge should gently slope, rather than drop off steeply. Most waterbirds can't feed in water greater than 18 inches deep. Ponds with steep banks also inhibit vegetative growth that provides food, cover, and nesting areas. ●

Innovation Benefits Water and Wildlife

BY NANCY RICHARDSON, DIRECTOR, AUDUBON SIGNATURE PROGRAMS

*“Necessity
is the mother
of invention.”*

Golf Course Architect Ken Ezell (left) surveys one of the many lakes at the Villages of Sumter. Ezell's leadership and commitment to the Audubon Signature Program are remarkable, bringing innovation to the projects he works on and great results for the environment.

We often hear that statement made with satisfaction when someone has finally arrived at a solution to a pressing problem. Mark Twain looked at it a little differently. In Twain's view, *“Necessity is the mother of taking chances.”*

That is exactly what Golf Course Architect Ken Ezell, with Clifton, Ezell & Clifton Golf Design Group, did when faced with the common problem of fluctuating lake water levels at The Villages of Sumter, an Audubon Silver Signature project located in Sumter County, south of Ocala, Florida. Ezell took a risk that resulted in a whole new approach to managing water quality and wildlife habitat.

The Problem

The littoral shelf or region of a lake is the shallow area along the shoreline. Aquatic and shoreline plants in the littoral shelf serve a number of valuable functions. They provide wildlife habitat, filter runoff that might degrade water quality, and help to cool lake water. When establishing a littoral shelf, aquatic and shoreline plants are selected according to water depth and wave action. And that's where the trouble with fluctuating water levels arises.

During Florida's rainy season, lake waters rise above their normal banks, flooding plants along the shallow margin. During dry months, water is drawn down for irrigation, causing aquatic plants to become too dry. Both conditions can kill desirable shoreline plants and result in the loss of investment of pond plantings.

At The Villages, the problem was multiplied by the sheer size of the project and the number of lakes and wetlands on the property. The Villages encompasses 13,000 acres of



The floating mats consist of puzzle cut pieces held together by nylon connectors. Mats can be assembled in any size or shape. Emergent aquatic plants are inserted into pre-cut holes and quickly establish extensive roots.

land, with 4,200 acres of open space that includes 1,995 acres of golf course, 840 acres of wetlands, and approximately 300 acres of lakes. The lakes not only serve as aesthetic features of the property, but also store water for irrigation and retain stormwater runoff during rain events.

As construction proceeded at The Villages of Sumter, the lakes continued to fluctuate. With each new golf course and its associated lakes, waiting for lake levels to stabilize became a long and frustrating waiting game. Necessity was forcing Ezell to think outside the box. So the question became: if you can't keep water

at the Villages of Sumter

levels from fluctuating, how can you fix the plants to fluctuate with the water levels?

The Solution

The answer came from Beeman's Nursery in New Smyrna Beach, Florida. Owner Steve Beeman and his staff had been working on that very question for years.

"Over the past twenty years, the Beemans have been conducting experiments to devise a system that provides the benefits of vegetated littoral shelves without having to deal with the problems associated with changing water levels," explained Forest Beeman, Vice President and Production Manager. "Using interlocking mats, combined with aquatic plants in perforated pots, we can suspend a simulated shallow water environment. This not only takes care of fluctuating water levels, but also produces oxygen, takes nutrients and pesticides out of the water, and provides habitat for wildlife."

The floating aquatic mats (U.S. patent pending) are anchored in the lake and are designed to move back and forth with the natural lowering and raising of the water levels. The mat simply moves with the level of the water, depending on the amount of rainfall during each season. Mats are anchored with concrete weights to keep them from floating in and becoming rooted in the littoral zones, thereby defeating the purpose of their mobility.

"We initially thought that using increments of 1,000 to 2,000 square feet would be an ideal size for the floating islands," recalls Ezell. "What we found was that, in this situation, any size much over 1,000 square feet was too large. The mats were pulled apart in high winds and shifting



A great blue heron takes refuge on one of the floating islands.

wave currents. We also learned that because the mats shift and move with wind patterns, securing them to prevent them from moving too close to shore is important."

Further experimentation

With the use of the floating mats came another consideration: what to do with the vacant shoreline areas that would no longer have littoral plantings. To mitigate for the high and low fluctuations on the slopes, Clifton, Ezell & Clifton experimented with seashore paspalum, a salt-tolerant species of turfgrass, along the banks. Sod was laid on the 5:1 slopes to cover approximately four feet of vertical fluctuation. The paspalum has been remarkably successful at surviving periods of inundation as well as drought. The sod also eliminates the exposed bank and subsequent erosion that was experienced initially.

To date, more than one-half acre of aquatic floating mats has been introduced into eight lakes at the

Villages of Sumter. Ezell is very optimistic: "As with all new experiments and innovations, there are kinks to be worked out. This floating aquatic mat system is no exception. We will continue to work with Steve Beeman and his staff to perfect this system because we have already seen that, once established, the result is as island bird sanctuary that produces multiple habitats while producing a healthier water system."

Born of necessity, risk-taking, and innovation, the aquatic mat system is working well at The Villages. We applaud the work of Ezell, Beeman, and the staff at The Villages for continuing to spearhead on-the-ground solutions that are improving the quality of our environment. ●

For more information about aquatic floating mats, contact: Beeman's Nursery, Inc.
<http://www.beemansnursery.com>
 E-mail: info@beemansnursery.com
 Phone: 1-877-767-6232

Spruce Peak at Stowe Earns Audubon Green Community Award

BY PETER BRONSKI

Spruce Peak's Planning Director Ron Apple accepts the Audubon Green Community Award on a picture-perfect day in Vermont's Green Mountains.



It's a warm, blue-sky morning as I stroll into the central square at Spruce Peak at Stowe in Vermont's Green Mountains. Two weeks earlier, upwards of four feet of snow fell in a single, massive storm that finally brought winter to the region after one of the warmest and driest starts to the season in recent memory. Today, the weather is glorious: temperatures in the mid-30s, sunny skies, gleaming snow.

It's late February 2007, and I've come to Spruce Peak to celebrate a milestone in the resort's participation in the Sustainable Communities Program. Spruce Peak at Stowe—Stowe Mountain Resort's new base village—first joined the program in early 2006, becoming the first

mountain resort in the country to do so. Now, Spruce Peak celebrates another first, as it becomes the first community in New England, and the first mountain resort in the country, to earn the Audubon Green Community Award.

The award heralds Spruce Peak's successful completion of Stage 1 of the program, specifically recognizing the resort's commitment to sustainability, and its environmental accomplishments to date.

Here, in the central square, we've arranged to hold the official awards ceremony. Spruce Peak's team is on-hand, as are the instructors from Stowe Mountain Resort's ski school. Hank Lunde, President of Stowe Mountain Resort, stands tall in the

crowd as a handful of passers-by fill in. News crews from television and print media are here, too. We stand atop an elevated platform, a banner with Audubon International's logo to one side, an ice sculpture of Stowe Mountain Resort's logo to the other, and the summit of Mount Mansfield framing the scene.

"The Spruce Peak at Stowe project is the result of many years of collaborative planning and coordination with many varied interests, including all of Vermont's major environmental organizations," says Spruce Peak's Planning Director Rob Apple, reflecting on what got the resort to this point. "Now, as the vision turns into reality, we are proud to receive this award from Audubon International and look forward to a continued focus on sustainable development principles throughout the resort."

Sharing the message

In the week following the award ceremony, Spruce Peak's accomplishment is prevalent in the media. New England Cable News did a three-minute segment. A smattering of local newspapers and ski industry publications covered the event. And the public relations, for sure, is a nice benefit for Spruce Peak at Stowe, which is looking to revitalize the resort and bring more people and dollars into the Town of Stowe.

But here at Stowe, sustainability is about so much more than public relations. Here, sustainability is synonymous with lifestyle. The pastoral Stowe valley below and the Green Mountains above offer a way of life and a quality of life intimately connected to the community, to the land, to recreational and cultural



◀ Bright red gondolas emblazoned with the white logo of Stowe Mountain Resort are just one outward sign of the resort's commitment to sustainability. This 2006-2007 winter season is the first time the gondola—called the Easy Over—has been in operation, cutting down on traffic and replacing a fleet of exhaust-belching diesel buses that used to transport skiers and snowboarders between the resort's two base areas, Mount Mansfield and Spruce Peak.

▶ Spruce Peak at Stowe's mountain cabins were built to the maximum 5-star rating of the EPA's Home Energy Rating System.

opportunities, and to the environment. Sustainability becomes the way to preserve that lifestyle while infusing the region with a new shot of economic vitality.

I'm reminded of that link between sustainability and lifestyle later in the day, when I head to the Mount Mansfield Nordic Center for a business meeting, Stowe-style. I'm joined by Rob Apple, and also by Tom Jackman, Planner for the Town of Stowe and member of the Sustainability Steering Committee at Spruce Peak, and by Steve Sease, Director of Planning for Vermont's Agency of Natural Resources. We step into our cross-country skis and head off on a vast network of groomed trails, chatting about the Sustainable Communities Program, the Stowe valley, and where we go from here.

As we kick and glide our way through the forest, I remember that the Audubon Green Community Award is not an endpoint for Spruce Peak. It's a waypoint. Today we stopped to celebrate the resort's progress, and to reflect on where we've been. But the most exciting is yet to come, and where we're going. ●



Selected Accomplishments: Spruce Peak at Stowe, Vermont

- Permanently protected over 2,000 acres of wildlife habitat with a pair of conservation easements donated to the Vermont Land Trust and the Vermont Department of Fish and Wildlife. The protected lands include 10 acres of summit terrain on Spruce Peak that have been restored to their natural state, providing needed habitat for the Bicknell's Thrush, a rare local bird.
- Built the village's mountain cabins to the maximum 5-star rating of the EPA's Home Energy Rating System, with input from Efficiency Vermont, the state's private energy utility. Each cabin is expected to save \$3,500 per year through extensive energy efficiencies.
- Mitigated transportation impacts in the Stowe Valley and especially along the Mountain Road. By financially supporting the Stowe Municipal Trolley System, the Mountain Road Trolley is provided free of charge throughout the ski season, alleviating traffic congestion, reducing vehicle emissions, and encouraging the use of environmentally-friendly public transportation. Spruce Peak is also advocating for the extension of the Stowe recreation path, popular with joggers and cyclists in summer and Nordic skiers in winter, which would link the base village with downtown Stowe. And of course, there's the Easy Over gondola, and the village's compact design which encourages walkability and leaving your car behind.

Bundoran Farm Charlottesville, Virginia

BY RONALD DODSON, PRESIDENT

Bundoran Farm encompasses 2,300 acres of rolling farmland with sweeping vistas. The Gold Signature Project will continue its agricultural operations, as parts of the property are developed.

The Gold Signature Program

Audubon International's highest level Signature Program for U.S. or international projects, the Gold Program is particularly well-suited to projects that include multiple new land uses (*e.g.*, residential, recreational areas, and commercial development), but is available to single-land-use projects, as well. Projects must register prior to the completion of the design. A team of Audubon International experts and consultants prepare an Environmental Master Plan, which guides siting, design, and management decisions relative to environmental aspects of the project. They also prepare the Natural Resource Management Plan and offer extensive environmental education and on-site technical assistance in sustainable development and best management practices.

The clouds hung low over the hills and the wind was strong and bitter as we stood in the open field of Bundoran Farm, just south of Charlottesville, Virginia, in early February. For me it was a bittersweet visit to one of Audubon International's Gold Signature member projects.

It was just a few months before this visit that a tragic plane crash at Bundoran Farm took the lives of two great friends, Robert Baldwin, Sr. and David Brown. Bob Baldwin was the founder and President of QROE Preservation Development Company and the creative mind behind the vision of sustainable development for Bundoran Farm. David Brown was the Vice President of QROE and the man in charge of the day-to-day efforts connected to Bundoran Farm. I had not been to Bundoran since I walked the same field with Bob and David just prior to their enrolling Bundoran Farm in the Gold Signature Program. So, this particular cloudy, cold day seemed to reflect my mood.

Bundoran Farm is a 2,300-acre parcel of rolling land located just five miles south of Charlottesville, Virginia. The property has been used agriculturally for nearly 100 years, with both cattle and timber management playing a central role in the history of the farm. What makes the Bundoran Farm project unique is that it will be an agriculture-based, sustainable development, with continued cattle and timber operations and fewer than 90 homes at build out. Future homeowners will be living amidst a working farm that will include a community supported agriculture component.

As my visit progressed, the sun peeked through the clouds and the day began to warm. As I walked and talked with the new Bundoran Farm leadership, including Robert Baldwin, Jr., and David Hamilton, along with Audubon International representatives, Casey Williams and Leif Riddervold, I knew that the dream of Bundoran Farm did not fade away on the fateful day of the accident. Indeed, the bold vision of

creating a place for people to live in harmony with the natural and agricultural environment is alive and well.

"When you plan a sustainable development that includes working agriculture, the challenge is to protect the economic assets associated with the agricultural operations, while at the same time thinking about the health and safety of the people who will be living on and around the farm," said Bob Baldwin, Jr. One of the most compelling topics of conversation during the visit concerned how to handle the movement and management of the cattle, given the increase in car traffic from the main road to individual homes.

The planning and dreaming that began with Bob Baldwin, Sr., continues at Bundoran Farm today, with a creative, problem-solving approach to dealing with the complexities of integrating economic, agricultural, and environmental issues in this innovative project. I believe that it will be a true model of sustainability and Audubon International is certainly proud to be a partner in the effort. ●

AUDUBON COOPERATIVE SANCTUARY PROGRAMS

NEW MEMBERS

United States

Bissell Companies, Charlotte, NC
Gaylord Entertainment, Nashville, TN
Tyson Foods Inc.–Glen Allen Complex,
Glen Allen, VA

International

Hacienda Punta Islita, S.A., Guanacaste,
Costa Rica
The Banff Center, Banff, AB, Canada

GOLF PROGRAM

International

Eshowe Hills Eco & Golf Estate, Eshowe,
Kwa-Zulu/Natal, South Africa
Four Seasons Resort Carmelo Uruguay,
Carmelo Dpto, de Colonia, Uruguay
Long Reef Golf Course, Sydney, NSW, Australia

Canada

Anderson Links Golf & Country Club,
Carlsbad Springs, ON
Arbutus Ridge Golf & Country Club,
Cobble Hill, BC
Banty's Roost Golf & Country Club,
North York, ON
3536696 Canada Inc., Fairwinds Golf and
Country Club, Nanoose Bay, BC
Club de Golf Memphremagog, Magog, QC
Connaught Golf Club, Medicine Hat, AB
Dakota Dunes Golf Links, Saskatoon, SK
Emerald Links Golf & Country Club,
Manotick Station, ON
Gallaghers Canyon Golf Course, Kelowna, BC
Greystone Golf Club, Milton, ON
Kenora Golf and Country Club, Kenora, ON
St. Charles Country Club, Winnipeg, MB
The Hermitage Club, Magog, QC
The Toronto Golf Club, Mississauga, ON
The Woodlands of Sunset, Welland, ON
Wooden Sticks Golf Inc., Uxbridge, ON

Alaska

North Star Golf Club, Fairbanks

Alabama

Canebrake Golf Club, Athens
Orange Beach Golf Center, Orange Beach

California

Hidden Valley Golf Club, Norco
Mayacama Golf Club, Santa Rosa
Pine Mountain Club Golf Course,
Pine Mountain

Colorado

Ballyneal Golf Club, Holyoke
Cheyenne Shadows Golf Club at Fort Carson,
Fort Carson
The Club at Pradera, Parker

Connecticut

Lyman Orchards Golf Club, Middlefield
Richter Park Golf Course, Danbury

Delaware

Cavaliers Country Club, Newark
Delcastle Golf Club, Wilmington
Fieldstone Golf Club, Greenville

Florida

Myakka Pines Golf Club, Englewood
Orange County National Golf Center and
Lodge, Winter Garden
Osprey Point Golf Course, Boca Raton
The St. Andrews Club, Delray Beach

Georgia

Canyon Ridge Club, Rising Fawn
Rabun County Golf Club, Tallulah Falls

Iowa

Rolling Hills Golf Course, Grand Junction

Illinois

Halldale Golf Club, Hoffman Estates

Indiana

Hillcrest Golf & Country Club, Batesville

Kentucky

Charlie Vettiner Golf Course, Louisville

Massachusetts

Falmouth Country Club, East Falmouth
Tides @ Nahant, DBA Kelly Greens Golf
Course, Nahant
Yarmouth Golf, DBA Bayberry Hills,
West Yarmouth
Yarmouth Golf, DBA Bass River,
West Yarmouth

Maryland

Clustered Spires Golf Course, Frederick

Michigan

Barton Hills Country Club, Ann Arbor

Minnesota

Windsong Farms Golf Club, Independence

Missouri

Hidden Pines Country Club, Warrensburg

North Carolina

Badin Inn Golf Resort and Club, Badin

New Jersey

Great Gorge Country Club, McAfee
Indian Spring Country Club, Marlton

Nevada

Montreux Golf & Country Club, Reno

New York

Middle Bay Country Club, Oceanside
Pine Ridge Golf Club, Coram
South Shore Golf Course, Staten Island
Turning Stone Resort–Atunyote, Verona

Oregon

Juniper Golf Club, Redmond

Pennsylvania

Country Club of York, York
Reading Country Club, Reading

South Carolina

West Argent Golf Club at The Tradition,
Hardeeville

Utah

Tuhaye Golf Club, Tuhaye

Virginia

Osprey's Golf Club, Woodridge
Spring Creek Golf Club, Gordonsville

Washington

Marrowstone Country Club, Nordland
Sudden Valley Golf and Country Club,
Bellingham
Tri Mountain Golf Club, Ridgefield

Wisconsin

Glen Erin Golf Club, Janesville

RECENTLY CERTIFIED AUDUBON COOPERATIVE SANCTUARIES

Dacotah Ridge Golf Club, Morton, MN
Furnace Creek Golf Course, Death Valley, CA
Hidden Lake Golf and Country Club,
Burlington, ON, Canada
Range End Golf Course, Dillsburg, PA
Spring Hill Golf Club, Wayzata, MN
The Hills Country Club, Austin, TX
Weekapaug Golf Club, Westerly, RI

RECERTIFIED AUDUBON COOPERATIVE SANCTUARIES

Certified for 10 Years or more

Aurora Country Club, Aurora, IL
Gull Lake View Golf Club, Augusta, MI
Old Westbury Golf & Country Club, Old
Westbury, NY
Persimmon Country Club, Gresham, OR
Woodhill Country Club, Wayzata, MN

Certified for Five Years or more

Augustine Golf Club, Stafford, VA
Bakery Feeds, Inc., Henderson, KY
Bent Creek Golf Course, Jacksonville, FL
Biltmore Country Club, North Barrington, IL
Brooklake Country Club, Florham Park, NJ
Coyote Hills Golf Course, Fullerton, CA
Delhi College Golf Course, Delhi, NY
Edgewood Country Club, River Vale, NJ
Fairmont Le Chateau Montebello, Montebello,
QC, Canada
Floridian, Stuart, FL
Glens Falls Country Club, Queensbury, NY
Golden Horseshoe Golf Club, Williamsburg, VA
Grand Harbor, Vero Beach, FL
Griffin Industries, Henderson, KY
La Tourette Golf Course, Staten Island, NY
Mesquite Grove Golf Course, Dyess AFB, TX
Murphy Creek Golf Course, Aurora, CO
Padre Isles Country Club, Corpus Christi, TX
Park Hills Golf Course, Freeport, IL
St. Thomas Golf and Country Club,
St. Thomas, ON, Canada
White Bear Yacht Club, White Bear Lake, MN

Certified for Two Years or More

Columbia Edgewater Country Club, Portland, OR
Le Challenger Golf Club, Saint-Laurent, QC, Canada

AUDUBON PARTNERS FOR THE ENVIRONMENT

NEW MEMBERS

River Bend Golf Community, London, ON, Canada

AUDUBON SIGNATURE PROGRAMS

NEW SIGNATURE MEMBERS

Barbour Pointe, Savannah, GA
Kittian Hill, Dieppe Bay, St. Kitts, The Bahamas
Wyndansea, Uclulelet, BC, Canada

RECENTLY CERTIFIED SIGNATURE SANCTUARIES

WCI–Tuscany Reserve, Naples, FL

RE-CERTIFIED SIGNATURE SANCTUARIES

Audubon Park Golf Course, New Orleans, LA
Forest Dunes Golf Club, Grayling, MI
The Old Collier Golf Club, Naples, FL
The Talon at TwinEagles, Naples, FL
WCI–Lost Key Golf Club, Perdido Key, FL

SUSTAINABLE COMMUNITIES PROGRAM

AUDUBON GREEN COMMUNITY AWARD

Spruce Peak at Stowe, Stowe, VT

Our apologies... We neglected to list Fairview Banff Springs Hotel Grounds, a Certified ACSP member operating at Banff National Park in Alberta, Canada, in our March-April *Stewardship News* feature on park concessionaires. The grounds department does an outstanding job of helping to protect the spectacular natural assets of the park.

Celebrating 20 Years

"Audubon International is an organization that understands that though we all have unique perspectives, we all also have common interests. The organization is a leader in using collaborative, non-confrontational approaches to creating change that benefits all "sides." It helps us all to realize that sometimes we can work with "the other side," and maybe we ought to give it a try now and then."

— Jim VanKirk, Director, Southern Integrated Pest Management Center

This year Audubon International has achieved a milestone—*twenty years of helping people help the environment.*

Join us in building upon our success!

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- Share your thoughts on what Audubon International has meant to you or your organization. Send your message to Jean Mackay, Director of Educational Services at jmackay@auduboninternational.org.
- Make a tax-deductible contribution in support of our programs and initiatives.

Visit www.auduboninternational.org for program information or to make a donation.



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Jean Mackay, Editor
Audubon International
46 Rarick Road
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Call (518) 767-9051, ext. 12 or
E-mail jbatza@auduboninternational.org

Audubon International
46 Rarick Road
Selkirk, New York 12158
Phone: (518) 767-9051
Web Page: <http://www.auduboninternational.org>
e-mail: acss@auduboninternational.org



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