



Stewardship

A PUBLICATION OF AUDUBON INTERNATIONAL

News

VOLUME 12, ISSUE 1 • WINTER 2009



Left: Marriott's Seaview Resort and Spa, NJ

Inset, top: Diamondback terrapins are small turtles that spend their lives in brackish estuaries, and are listed as "Species of Special Concern" by the State of New Jersey.

Inset, bottom: Excluder traps installed at Marriott's Seaview Resort and Spa protect diamondback terrapin eggs safe from golfers and predators such as fox and birds.

Partnerships for Wildlife

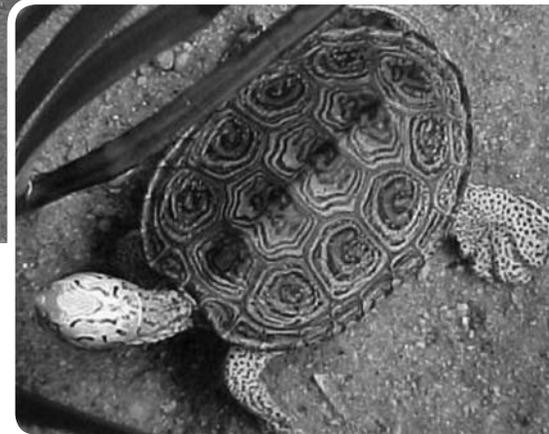
JIM SLUITER, SUZANNE ZAKOWSKI, AND NANCY RICHARDSON

Audubon International partners with program members in a number of ways—from reducing water and energy use to better environmental planning. Yet, for all the gallons of water conserved, energy saved, and waste reduced, steps taken to increase wildlife and wildlife habitat is still what brings the greatest satisfaction for most. An early morning encounter with a fox, the bustle and activity at a well-stocked bird feeder, or the simple beauty of a painted turtle—each is reason enough to become a steward of the environment. For this reason, Audubon International will be spending all of 2009 with a focus on celebrating wildlife. Wildlife enhancement and protection projects can be put in place at an existing site, throughout a community, and when designing and developing places for human use. What follows are examples of partnerships that Audubon International program members have created to support and celebrate wildlife conservation.

Taking Care of the Places for Wildlife

Marriott's Seaview Resort and Spa in Galloway, NJ, has partnered with Stockton College and The Wetlands Institute to protect nesting populations of diamondback terrapins on their Bay Course property along the New Jersey shoreline in Galloway.

Each summer, adult terrapins emerge from Absecon and Reeds Bay to lay eggs in shoreline nests, many of which are located on the golf course. The terrapins have found cart paths and sand bunkers to be ideal nesting sites, although they face the dangers of exposure and the local golfers. Because the terrapins spend virtually their entire lives in the water, very little is known of their habits and overall population status. In many areas, diamondback terrapins are thought



to be in decline due to entrapment in abandoned crab traps, commercial development of preferred coastal nesting sites, and collisions with vehicles during their annual nesting migrations inland.

continued on page 4

We invite you to share your favorite wildlife story. Through 2009, just email us at jconway@auduboninternational.org with photos or descriptions of some of your most meaningful wildlife encounters. Select stories will be featured in our publications and on the Internet.

Dear Members and Supporters,

In 1972, Ted Perry, screenwriter for the movie *Home*, fabricated a speech for the character based on the Native American Chief Seattle. And while this speech was fictional I believe it holds a kernel of wisdom:

“What is a man without the beasts? If all the beasts were gone, man would die from a great loneliness of the spirit. For whatever happens to the beasts, soon happens to man. All things are connected.”

The simple truth in Chief Seattle’s statement has resonated with various indigenous cultures for centuries but seems to be forgotten by much of today’s society.

Audubon International can help you protect and celebrate the wildlife around you. We can get you started or we can help you do more. Certification is not enough. Challenge yourself and those around you to do more.

Best,

Joshua Conway
Education and Communications Manager

In this issue...



2009 is the year of Wildlife for Audubon International. If you have photos of great wildlife encounters we would love to see them. Email jconway@auduboninternational.org

- 4 Partnerships for Wildlife:** A look at three examples celebrating wildlife.
- 5 Building on Henrietta’s Pride:** Audubon International’s newest Green Community Award winner.
- 8 Partnerships for Sustainability:** A focus on Bonterra Wines
- 9 Tear-Out Fact Sheet:** Creating a Wildlife Garden
- 10 On the Road to Stewardship:** Miami, FL



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Sticks for Kids

Audubon International has partnered in the development of content for the 2009 "Sticks for Kids" program, created and sponsored by the Golf Course Builder's Association of America (GCBA) Foundation, along with its partner the National Recreation and Park Association (NRPA). The "Sticks for Kids" program is especially designed for youth who may not otherwise have an opportunity to learn and play golf. The program gives kids the opportunity to learn about golf fundamentals as well as golf safety, etiquette, discipline, and now environmental stewardship. There are currently 407 golf facilities, connected with NRPA members, participating in the program and reaching out to tens of thousands of youth each year.

Multi-year Nestbox Survey Ends

After nearly a decade of time and mountains of data, Audubon International's Nestbox Survey has drawn to a close. We want to thank all of you who have participated in this monitoring project—especially those of you who have taken the time each year to complete survey forms. The data collected will be analyzed with a final report coming out in 2009. We anticipate that information will be available from the survey to help people with better nestbox placement and hatchling success rates. If you have data from the 2008 season, please do submit that information to us before March 1, 2009.

Get Ready...

North American Birdwatching Open Begins March 20, 2009

Birdwatching teams from golf courses throughout North America are beginning to register for this year's North American Birdwatching Open, held on International Migratory Bird Day, Saturday, May 9. The event is free and open to all Audubon International golf program members. Southern members may choose to participate on Saturday, March 14 or Saturday, April 11 to take advantage of peak migration. We hope to top last year's number of participants and total number of bird species seen. To participate, register online at <http://audubon-international.org/nabwo.html>. You can download registration forms, rules, a bird checklist, and tips for success. If you would like to participate, but do not have internet access, please call Jennifer Batza at (518) 767-9051, extension 110.



Greener Golf Recognition Grows with Insurance-Providers

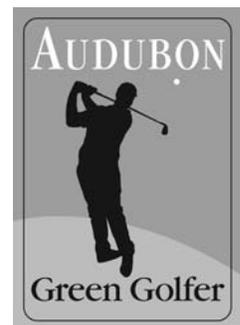
Audubon International has been working with two insurance companies to provide cost-saving incentives for golf courses certified by Audubon International for their environmental performance. Golf facilities insured by Fireman's Fund Insurance Company are eligible for a 25% reduction in the membership fee for the Audubon Cooperative Sanctuary Program for Golf Courses, while also having the potential to see a reduction in premium costs once certified in the program. Likewise, Signature Risk Golf, a Canadian-based insurance provider offers a 10% discount to golf courses certified by Audubon International. "Our hope is to see this kind of "green" recognition by insurance providers become the norm in golf," states Audubon International's Executive Director Kevin A. Fletcher.

Green Golfer Challenge

While we haven't determined this year's golf course and golfer winner of the 2008 Green Golfer Challenge as we go to press, this year has been a banner year for the Green Golfer Challenge. The Green Golfer Challenge gives golf course managers and superintendents an opportunity to highlight their own environmental efforts on the golf course, as well as educate golfers about how they can support those environmental efforts and also become stewards of the environment themselves.

We had 107 golf courses participate in this year's Challenge, nearly double the golf course participants from 2007, and, before the pledge deadline, we had more than 5,000 golfers pledge their support for 'greener' golf.

For those who got a late start last year, or are looking forward to participating in the 2009 Green Golfer Challenge, we'll be sending out invitations to join us for the 2009 Green Golfer Challenge in February. If you'd like to make sure to be on the list to receive information about the 2009 Green Golfer Challenge, please contact Mary Jack at (518) 767-9051, Ext. 101 or via e-mail at mjack@auduboninternational.org.



Congratulations to all the golf courses that participated and all the golfers who took the pledge to support greener golf.

Partnerships for Wildlife

Continued from page 1

Kevin Tansey, Bay Course Superintendent at Seaview Resort and Spa, and his staff have identified terrapin nesting sites within the course's bunkers and placed "excluder traps" in these areas to protect the eggs from disturbance by golfers or predation from foxes, birds, and other wildlife. The small "excluder traps" remain in place until the young turtles are ready to return to the bays to mature.

In October, turtles that nested at Seaview Resort and Spa were released into the bay with other diamondback terrapins that had been rescued through a collaboration with Richard Stockton College's "turtle farm" and The Wetlands Institute in Middle Township. Each of the twelve nesting sites protected at Seaview Resort and Spa produced at least one baby diamondback terrapin.

In addition to their habitat preservation

efforts, the staff of Marriott's Seaview Resort and Spa also raised \$500 to sponsor a "Transmitting Terrapin" through The Wetlands Institute. This sponsorship provides funding for the placement of sonic telemetry transmitters on released terrapins, thus enabling researchers to better track and study the movements and habits of this often elusive resident of the New Jersey Shore.

Rice paper butterfly, Turnberry Isle Resort and Club, FL.



City Hall, Coconut Creek, FL



Wildlife as a Community Asset

Over the years, we have witnessed time and time again that the most important factors for a community to achieve long-term sustainability is for all sectors of the community to be engaged and active. The most effective way to do this is to identify and publicize a common issue. It must be something that a wide spectrum of the community can identify with and find ways in which to participate. In Coconut Creek, Florida, the newest member of Audubon International's Sustainable Communities Program, it's butterflies.

The journey for the City of Coconut Creek to become a city-wide butterfly habitat was shaped by a local family-run butterfly sanctuary. In 2002, the City formalized a partnership with a local business to cultivate a natural habitat conducive to attracting many species of butterflies. They first adopted the ideal of preserving and protecting the area's

natural beauty, and then officially adopted the distinction of "Butterfly Capitol of the World" through local, regional, and state-wide resolutions.

Soon after deciding on a common community theme and officially adopting the name, the Coconut Creek began to take steps that would not only preserve the natural habitat but help to repopulate the species. The first step was to replace the landscaping on city property with native plants that attract butterflies, such as Dutchman's Pipe and Passion Vine. After kicking off an intensive educational campaign, the Coconut Creek began an annual Arbor Day tree give-away concentrating on distributing butterfly-attracting tree and plant species. In 2003, Coconut Creek partnered with Fairchild Tropical Gardens outside of Miami to adopt the Atala Butterfly larvae, and cultivate a population in the

Coconut Creek City Hall butterfly garden, which is now thriving.

Coconut Creek developed a backyard butterfly habitat certification for homeowners and schools as part of the outreach and education, an effort that has allowed Coconut Creek to be recognized as the first community-wide habitat in the State of Florida due to widespread participation. Schools also participate through a partnership with Kid's Ecology Corps, where the education is hands-on. The goal is to have the students care for the plants and eventually help create their first butterfly garden. Many municipal staff have received calls from homeowners and school countywide wanting to participate and possibly expand the habitat. Coconut Creek is a perfect example of how a community can come together and create a sustainable community by rallying around a common idea or issue.

Eagle-Driven Design

Where many developers continue to ignore a site's key features when they create the design for a new development, Audubon International's approach continues to let the natural landscape take center stage in what can best be termed an "eco-approach to design and development." This simply means letting the lay of the land drive the design. In addition to protecting existing habitat through judicious land planning, reforestation, and restoration, Audubon International's team works to actually increase the variety of habitats and wildlife species on the properties with which we work. With more than fifteen years of working with developers through the Signature Program, we have learned that there are many types of constraints on a project that can drive project design. Those considerations include physical constraints of the property such as existing water bodies, mountains, large tracts of woodlands, residences, and utilities corridors. There is also the constraint that comes with the discovery and essential protection of federally or state-listed wildlife species on your property.

Raptor Bay Golf Club, located in Bonita Springs, FL is a Certified Gold Signature Sanctuary, situated on 500 acres with 22 acres of lakes, more than 200 acres of native vegetation and nature preserve, 125 acres of wetlands and adjacent buffers, and 22 acres of phyto-zones. The eastern portion of the property is traversed by Halfway Creek, an Outstanding Florida Water. Adjacent to the western boundary of Raptor Bay is Estero Bay, a Marine Aquatic Preserve.

As is characteristic to Southwest Florida coastal areas, the original Raptor Bay site was relatively flat with elevation ranges from three feet on the west (near Estero Bay) to about twelve feet above sea level along the eastern edge. Although the total difference in elevation may seem insignificant, water slowly accumulates and persists in the lowest points, and over time, significantly influences the character of the site. In the areas

that remain moist to wet, vegetation exhibits greater density, height, species diversity, and structural diversity providing habitat for many wildlife species including the bald eagle.

One particular and unique wildlife conservation feature steering the design and construction at Raptor Bay was the presence of an eagle nest located in the north central section of the property. The nest is located within the large preserve area and is protected not only under the conservation easements, but also under a site specific management plan from the U.S. Fish and Wildlife Service. The management plan outlines primary and secondary protection zones based on radial distance from the nest site. Activities are limited within each of the protection zones both during and beyond the nesting season, and detailed vegetation management options are documented in the plan to secure continuing, future successful nesting.

During periods of nest occupancy, access to all pathways was curtailed until nesting activities ceased. Several regulations, including the Endangered Species Act, Bald Eagle Protection Act, Migratory Bird Treaty Act, the Florida Endangered and Threatened Species Act and Lee County Eagle Management Ordinance require that human-related impacts to the eagles and their nest site be minimized. In 2001, design and management efforts paid off. The nest produced a once-in-a-lifetime event of three viable offspring and has been successful in producing offspring almost every season since then. Although property constraints, such as eagle management zones, are necessary to protect the species, the reproductive success of this Raptor Bay eagle pair demonstrates that species such as the American Bald Eagle are coming in from the periphery of human habitation and are integrating themselves into our communities. ●



An interesting point about this particular eagle nest is that it is located between two Signature Program member properties—Raptor Bay Golf Club and West Bay Golf Club to the north. So, not only one, but two properties, made design decisions based on the proximity of the nest to land to be developed. Those decisions included:

- No residential community, industrial use, or tree cutting within the zones.
- No unapproved chemical use within the zones.
- No expansion of human activity (no trails, structures, etc.).
- Nesting season for the eagle is October 1 through May 15 so there could be no construction activity in the Eagle Management Zone during that time.



Juvenile bald eagle, Raptor Bay Golf Club, FL

Building on Henrietta's Pride

SUZANNE ZAKOWSKI

This November, the Town of Henrietta, near Rochester, New York, earned the Audubon Green Community Award from Audubon International's Sustainable Communities Program. Henrietta is the first municipality in New York State to earn the Audubon Green Community Award for their ongoing initiative called "Henrietta Pride." It is the culmination of engaging and educating the local community, fostering environmental stewardship, and taking pride in the sense of place that led to Audubon International determining that the Town was making huge strides towards sustainability.

"The Town of Henrietta has worked for years on several projects to become greener and we are pleased to be receiving this award," says Town Supervisor, Michael Yudelson. "There have been several people instrumental in making sure we stay on top of creating more opportunities. The attraction to Audubon International's program was the emphasis on integrating environmental stewardship with economic development; encouraging a city to grow while being sustainable."

In 2002, the Henrietta Chamber of Commerce began an annual seminar to educate local businesses about green business practices and highlight case studies. To encourage participation, an award is given each year to a local business for its efforts to enhance the environment through land preservation or energy conservation.

One such business was the Audubon Cooperative Sanctuary Program member Broccolo Tree and Lawn Care (certified in 2004). Business owner Laurie Broccolo began sponsoring a field day at Tinker Nature Park, designed for children and their parents to connect with the

community and with nature. The one-day event now draws more than 400 people, and employees from the business eagerly volunteer to assist with the event. It was this spirit of civic engagement, environmental

Broccolo Tree and Lawn Care sponsors an annual field day at Tinker Nature Park attracting more than 400 people from the community.



education, and ecological awareness that led to even more projects.

Henrietta Pride, through the Chamber of Commerce, spearheaded the community's participation in the Great Lakes Marsh Monitoring Program, designed to monitor amphibians and marsh birds and assess the health of the Great Lakes watershed. Ten candidate sites designed to kick off watershed education in the community were identified, and in 2006 volunteer monitoring groups adopted five of those sites to perform monitoring. The goal is to expand this project into community-wide awareness about the value of wetlands and open space, and enroll more sites. Volunteers from Henrietta Pride compiled training seminars and informational material for a marsh monitoring program, with the hopes that the Town will adopt international



Partnerships between Henrietta stakeholders have resulted in ECO-camps that expose middle school students to environmental career options.

marsh monitoring protocol.

Building on the efforts of local businesses, in 2007, Henrietta Pride began an ongoing project to reduce bus vehicle emissions. The Rush-Henrietta School District responded with interest in participating and is continuing to work with bus drivers and the Rochester Area School Transportation Association. The School District has become a pilot community for the Rochester EPA's CARE project designed to reduce toxins in the environment. They are actively pursuing public relations, bus driver education, a parent newsletter, and direct student involvement as outreach to raise awareness. The next step, under the promotional banner of "Do It for the Kids," is to promote public health issues by reducing fuel consumption and improving air quality.

To maximize public awareness of their activities, Henrietta Pride embarked on an educational campaign to a wider audience: civic groups, non-profits, schools, and other town governments. They regularly present their accomplishments, mission, and goals at public meetings. This is a key factor to the Sustainable Communities

Henrietta Pride, through the Chamber of Commerce, spearheaded the community's participation in the Great Lakes Marsh Monitoring Program, designed to monitor amphibians and marsh birds and assess the health of the Great Lakes watershed.



program. It is vital that all facets of the community are aware and engaged so that long-term commitments are made and the community is involved.

Another group, the Henrietta Foundation, was simultaneously becoming an active proponent of the community and surrounding environment. An all-volunteer, local non-profit, the Henrietta Foundation Inc. (HFI), was founded in 2000 by a few community members who were interested in preserving and protecting Henrietta's scenic and natural resources for public benefit. The Foundation's first major project was the Lehigh Valley Trail, which began as Rails-to-Trails project in 2004. Today, the trail is a recreational and environmental asset to the community and offers connectivity with various neighborhoods and other nearby trail systems.

The Foundation then started to focus on open space, environmental education, and preserving local landmarks. Through donations from local landowners, they acquired 22 acres of wetlands and woodlands directly adjacent to the trail. A kiosk at the trailhead on East Henrietta Road is regularly updated with information. When Executive South Family Golf and Recreation Center was put up for sale, residents feared they would lose a valued asset. The Henrietta Foundation purchased the Center with a \$300,000 matching grant from the New York State Office of Parks, Recreation and Historic Preservation's Environmental Protection Fund. An

ongoing local fund drive is expected to provide sufficient funds to offset the 2007 purchase of the Center and preserve it for the community.

Buy-in from the government is also an important factor for success in Audubon International's Program. In April 2007, the Town of Henrietta identified seven candidate areas that were regularly mowed and could be converted into wildlife habitat areas. Two of those candidate areas were selected for the project, based in part on the difficulty of mowing them because they were "wet" areas. The two designated areas are bordered by 28 residents. Henrietta Pride volunteers assist the Town by distributing wildflower seed packets and a "Benefits of No-Mow Areas" brochure, paid for by the local Rotary Club.

Schools are also doing their part. In 2005, with help from local businesses, The Rush-Henrietta School District developed an educational wetlands trail that, along with other nature trails, which opened in 2007, are being incorporated into the curriculum. The model for this successful partnership was born of the partnership formed by Cornell Cooperative Extension's 4-H program, the Henrietta Recreation Department, Rush Henrietta Schools Business Partnership, and Finger Lakes Community College.

In 2004, those partners created the template for a very successful camp, ECO-camp, which is a week-long educational seminar designed to introduce 24 middle school students to environmental career options. The camp includes a trip to local conservation field station, lessons in urban forestry, tree climbing, a guided tour of the local nature center, a field trip to a golf course, garden tours, and a community service project planting container gardens for a senior citizens community. Based upon the



Fourth Sustainable Communities Summit Planned for Central New York

We are currently in the planning stages for the next Audubon International Sustainable Communities Summit in New York State, to be held in June, 2009, in the Greater Rochester Area. Using past summits as models, we expect that the Rochester Area Sustainable Communities Summit will provide an opportunity for stakeholders to come together to discuss the environmental concerns facing communities in upstate New York. Email Fred Realbuto for more information at frealbuto@auduboninternational.org.

popularity of the camp, which now has a waiting list, organizers added a second week, for an advanced program for 9th and 10th graders.

With these environmental actions completed, Henrietta has proven that it walks the walk, and has a large, active, citizen-based volunteer network ready to embark on bigger projects to make the community sustainable. The next step is to work with Audubon International to more comprehensively integrate sustainability principles into the community's planning, policies, and practices. For the foreseeable future, Henrietta will continue to engage and educate citizens, participate in and reward stewardship, and integrate sustainability into the Town's heritage. This is why they are an "Audubon International Green Community." ●

Partnerships for Sustainability: A focus on Bonterra Wines

JESSICA DESLAURIERS



As a not-for-profit environmental organization, Audubon International relies on support from partner organizations and corporations to provide essential funding for our programs and initiatives, allowing our staff to do so much more in addition to our regular member services. This fall, Audubon International had the opportunity to partner with the country's best selling wine made from organic grapes, Bonterra Wines.

As the Official Wine of The PGA of America, Bonterra Wines became committed to helping golf courses find their balance between the environment and the game through the Bonterra 'Greens the Greens' promotion developed with Audubon International. From September 17th, until the end of the PGA Tour Season, November 10th, golf courses across the country were able to sign up for the Audubon Cooperative Sanctuary Program (ACSP) with Bonterra covering the \$200 registration fee for the first 100 U.S. based courses. Valhalla Golf Course, home to the 2008 Ryder Cup, was the first course to step up to join through the Bonterra promotion, followed by 99 other golf courses from 24 different states.

If each of the 100 golf courses enrolled through the Bonterra Greens the Greens event actively participates in the ACSP for Golf Courses, we can expect to see over 2,000 acres of turfgrass converted to wildlife habitat, over 180 million gallons of water saved, and a significant reduction in pesticide risk. These courses will also contribute to the education of golfers and the general public through Audubon International sponsored initiatives, press releases, displays, signs, and newsletters—raising awareness of the positive role golf courses can play when it comes to protecting the environment.

"Partnering with Audubon International was a natural fit for us. Bonterra uses a lot of the same water management and habitat strategies at its vineyard that Audubon International recommends for its golf program," said Don Freytag, global brand director for Bonterra Wines. "What's good for the earth is good for the earth, whether you are producing award-winning wines or playing on an award-winning golf course." ●

Initiative Sponsorship

Are you interested in becoming one of Audubon International's growing group of Initiative Sponsors? As a not-for-profit organization, we rely on our sponsors to provide essential funding for our programs and initiatives—supporting our staff's abilities to go beyond regular member services and provide the outreach, education, and expertise necessary to make a difference. Areas for Initiative sponsorship include:

- Community Engagement, Planning & Action
- Eco-Design & Development
- Environmental Stewardship & Management
- Golf & the Environment

By supporting our efforts by becoming a sponsor of one of the Initiatives listed above, you are enhancing your role as an active voice in the movement toward a more sustainable future. Sponsorship benefits vary by contribution level. Please contact our development office for details. We look forward to working with you!

Jessica DesLauriers
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Bonterra Wines, the Official Wines of the PGA of America, are produced in Mendocino County, California, and made with certified organic grapes. The Bonterra portfolio has several varietals including: Chardonnay, Merlot, Cabernet Sauvignon, Syrah and Viognier. For more information, visit www.bonterra.com.



CELEBRATING WILDLIFE

Creating a Wildlife Garden

If you enjoy flower gardening, add a new dimension to your planting by choosing flowers that are not only attractive, but attract hummingbirds, butterflies, and songbirds. This is an excellent way to provide food and cover for these species and enjoy their beauty and uniqueness.

Starting a wildlife garden

Even if your property is small, you can usually find an area to plant your wildlife garden. For best results, your garden needs to get at least a half-day of sunshine. A southern exposure is best, but gardens that face east or west will also work. Growing a successful garden also involves careful planning. Allow enough lead-time to plan your garden space, gather equipment, and purchase seeds or plants so that you're ready to plant in the spring.

Attracting butterflies, hummingbirds, and songbirds

Birds and butterflies will seek out your property if you provide food for them to eat. Hummingbirds and butterflies feed on the nectar of a variety of flowers, and songbirds eat the seeds and berries of shrubs and flowers that you can grow in a garden. Insects and spiders also provide an excellent source of protein for growing birds. During the spring especially, aphids, flies, mosquitoes, and beetles are just a few of the insects the birds need to feed both themselves and their young. Luckily, these insects will be attracted to the plants that you grow in your wildlife garden.

Hummingbirds

Hummingbirds are the smallest birds on earth. Almost everything about the hummingbird is unique—their dazzling iridescent colors; the sound of their

buzzing wings in flight; their darting, hurried movements. Hummingbirds can fly backwards, forward, sideways, and straight up and down. Because they move so quickly, you may only glimpse a hummingbird briefly when it stops to hover and feed.

Hummingbirds have slender, pointed bills, straight or curved, which are adapted especially for probing flowers for nectar. Because hummingbirds move quickly and have a high metabolism (the rate of burning up their food or “fuel”), they need to consume huge quantities of nectar each day. They feed 14 to 18 times per hour for less than one minute and rest in between meals.

While hummingbirds rely on flowers for nectar, many flowers depend on hummingbirds for pollination. You can easily attract hummingbirds to your garden by planting some of their favorite blooms.

Butterflies

Butterflies are insects known for their large, usually bright-colored wings. In summer, you may see them flit about in gardens and along roadsides while they feed on the nectar of a variety of flowers. All butterflies go through dramatic changes before becoming the beautiful winged creatures you recognize. Their metamorphosis proceeds through four stages: (1) egg, (2) larva (caterpillar), (3) pupa (chrysalis), and (4) adult butterfly. To entice butterflies



Even during the coldest winters backyard gardens can provide excellent an opportunity for birds to find food.

to your garden, grow plants for both adult butterflies and caterpillars to eat. You can also provide stones for sunning and a shallow source of water.

Songbirds

Songbirds are perching birds known for their varied and exceptional songs. There are hundreds of different songbirds in North America. You will hear the greatest number and variety of bird songs in spring and summer when birds are courting and setting up nesting territories. The male sings to attract a mate and tell other birds to stay away from his territory—the place where breeding and raising young will occur. These songs are often complex and contain patterns of notes grouped into phrases.

Both male and females also have short, distinctive calls. They use these shorter notes to communicate with each other. Aside from the practical functions of songs and calls, birds may also sing just for pleasure. Each species of bird has its own unique song and call. Once you learn to recognize them, you can identify a bird without even seeing it.

Songbirds eat a variety of foods, including insects, fruit, nuts, and seeds. They will come to your wildlife garden in spring to search for insects and in summer and fall to eat ripe berries and seeds.

Getting Started

Designing a garden to attract wildlife is similar to other kinds of gardening, except that the plants are selected as much for their food and cover value as for their beauty. The key to success is growing a diversity of plants that bloom throughout the growing season.

In addition to the following step-by-step guidelines, refer to a gardening reference book to give you more detailed information about soils, plant growth characteristics, and garden establishment.

1. **Choose a location:** Consider the following factors when choosing a site for your garden. You can generally balance these factors to choose the best all-around garden site.
 - Sunlight—Select a spot with 6 to 8 hours of sun per day; south-facing sites are ideal.
 - Soil—Well drained and loamy is best.
 - Traffic—Avoid heavy traffic, cut-throughs, and play areas
2. **Gather seeds and materials:** Refer to the attached list for plants you can grow to attract butterflies and birds. Seeds can be ordered from any number of garden catalogs or bought at garden stores. Perennial plants cost more, depending on their size and species. If planted properly, perennials are a worthwhile investment since they bloom year after year. However, it's very difficult to grow perennial flowers from seed. Unless you are an experienced gardener and have indoor growing equipment, buy perennial plants or stick with annual flowers. Start seeds indoors and transplant, or seed directly into the ground after the last expected frost.
3. **Prepare the soil:** Stake off the area for your garden using a rope and wooden markers. Turn over every square foot of the garden with a spade, pitchfork, or rototiller. Remove clumps of grass sod and any large rocks. You will likely have to improve the soil by adding compost. Compost is a rich soil material comprised of decomposed plants. It adds nutrients to the soil and helps improve drainage. (Tip: Call your local municipality to obtain compost. If they collect and compost leaves, it is likely that they will be willing to give you compost for free). Dig the compost into the soil and then rake the entire area smooth.
4. **Plant your garden:** Using a hoe, dig several shallow rows or trenches about one foot apart. Or divide your garden plot into two foot planting squares. Plant the seeds or plants into rows or squares so you know what has been planted in each row. If possible, plant on an overcast day when rain is expected. Then you won't have to water the site. Otherwise, wait until you complete your planting and then water the plants using a hose or watering can.
5. **Thin, weed, water, and watch!** After the seedlings have emerged, thin them to the required spacing. Keep the garden watered daily (if there is no rain) for two weeks after planting. After all seedlings have emerged and are thinned, pull any weeds. Next, place a thick layer of grass clippings, straw, hay, or newspaper around the flowers and along pathways. This mulch will help the plants retain moisture and greatly reduce weed growth.



By choosing the right plants in your gardens, you can greatly increase the number of butterflies, hummingbirds, and songbirds that will visit your property.

AVOID THESE INVASIVE PLANTS:

Asiatic bittersweet	<i>Celastrus orbiculatus</i>
Bush honeysuckle	<i>Lonicera spp.</i>
Japanese barberry	<i>Berberis thunbergii</i>
Butterfly bush	<i>Buddleia davidii</i>
Cotoneaster	<i>Cotoneaster spp.</i>
English holly	<i>Ilex aquifolium</i>
Japanese barberry	<i>Berberis thunbergii</i>
Multi-flora rose	<i>Rosa multiflora</i>
Privet	<i>Ligustrum vulgare</i>
Russian olive	<i>Elaeagnus angustifolia</i>
Winged euonymus	<i>Euonymus alatus</i>

Ask for trumpet vines by the Latin name to be sure you get the right vine! Other varieties can be invasive.

HERE ARE SOME HELPFUL LINKS:

Native Plant Information Network:
<http://www.wildflower.org/explore/>

NatureServe:
<http://www.natureserve.org/visitLocal/index.jsp>

Even small portions of your property can be greatly enhanced by planting a wildlife garden.



On the Road to Stewardship: Miami, FL

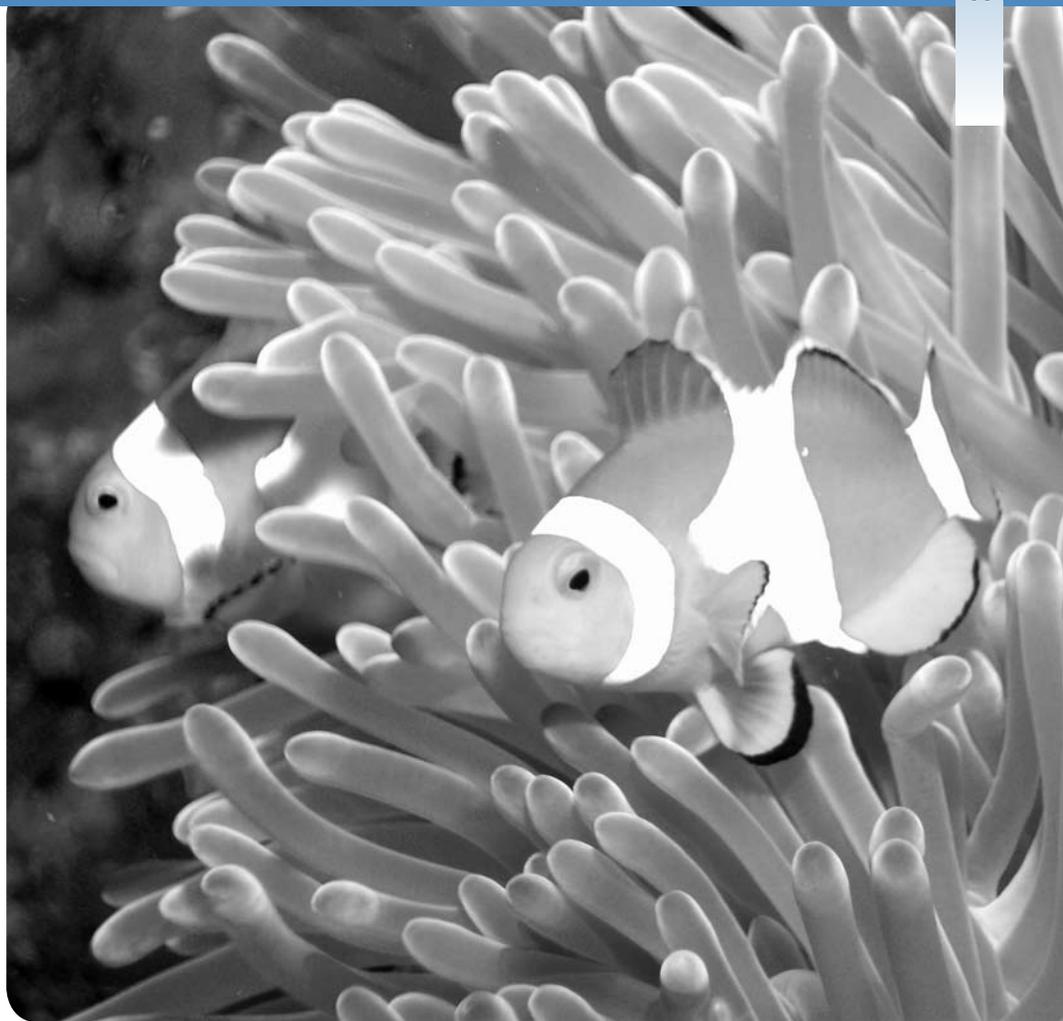
RON DODSON

As a member of the Urban Land Institute's (ULI) Sustainable Development Council (SDC) I attend the ULI Fall conference in Miami and attended the Sustainable Development Council meeting. For those of you who may not know, the ULI is a not-for-profit organization whose membership includes development companies, consulting firms, government agencies and other not-for-profit organizations. If you are involved with, or interested in, land development, the ULI provides an amazing array of resources and networking opportunities.

The ULI Sustainable Development Council (SDC) is one of many types of councils managed by the ULI. Membership of the SDC is comprised of people from the same diverse backgrounds, but with special interest and expertise in topics related to sustainable development. So, spending three days with the attendees at the ULI conference provides plenty of interesting insight into the world of economic development, community planning, governance issues, and more.

The conference keynote speaker, for example, was Paul Volcker, former Chairman of the Federal Reserve and now an economic advisor to Barack Obama. Many other luminaries were walking the halls of the conference including former President of Mexico, Vicente Fox.

An overriding cloud of economic uncertainty cast dark shadows over the entire conference. A most common theme of conversation was related to projects "on hold" or completely "dead" because of lack of funding, or because the real estate market is so "down." Most of the people manning



According to the United Nation's recently-released Millennium Ecosystem Assessment, over the last half century, 20% of the world's coral reefs were lost and more than 20% degraded, largely due to human-related impacts.

the trade show booths that I spoke with indicated that visit numbers to their booths were down and many of those stopping by were looking for business opportunities themselves, as opposed to looking to make a purchase of some sort.

Also of interest during the conference was the continued, and nearly constant talk about sustainable development, green buildings, energy efficiency, and Smart Growth. There seems to be a growing realization that we find ourselves in our present economic condition because of our past unsustainable business practices. And, of course, I agree! We have been building our futures on a crumbling foundation. While I'm talking about the neglect that we have demonstrated to our Nation's infrastructure, I'm also talking about our natural resource

infrastructure. Yes, we read about bridges collapsing, roads crumbling, power brown outs and the like, but we are also seeing the so called "Dead Zone" in the Gulf of Mexico growing in size, a global decline in marine fish species, the pending loss of coral reef systems and the list goes on. These are indications of unsustainable habits that must change. I, for one, am happy to see that even in the face of economic despair, a continued focus on all things sustainable is staying front and center.

The programs of Audubon International will continue to be an important part of our economic and environmental recovery and now is the time for renewed efforts in reaching out to people, companies, and organizations that are committed to a sustainable future. ●

Going Green? Well Stay Green As Well!

Visit Greenleaf.AudubonInternational.org for a list of Audubon Green Leaf™ Eco-Rated Lodging Areas. This list is always growing so check back often. Rest assured that these lodging facilities have met environmental best practice standards earning each a one to five Green Leaf Rating.

Stewardship News

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

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Layout and Design: 2k Design,
Clifton Park, NY

Printing: Benchmark Printing,
Schenectady, NY

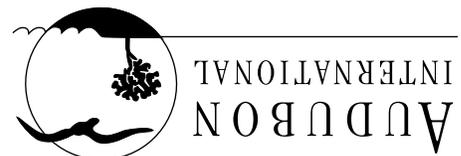
Audubon International is a non-profit environmental organization dedicated to fostering more sustainable human and natural communities through research, education, and conservation assistance. Programs seek to educate, assist, and inspire millions of people from all walks of life to protect and sustain the land, water, wildlife, and natural resources around them. Funding is provided by memberships, donations, and program sponsorship. The ACSP Golf Program is sponsored by The United States Golf Association.

The newsletter is printed on recycled paper.

Look inside for a tear-out fact sheet!

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