



Making Change: Improve the Environment with Your Next Purchase

BY JEAN MACKAY

In our earliest years we learn that *nothing in life is free*. But rarely do we consider that the goods we purchase and consume have both economic *and* environmental price tags. Costs are incurred through the product's entire life cycle, including the costs of materials, manufacturing, labor, transportation, packaging, merchandising, storage, and disposal. They include impacts on our air, water, and land, as well as human health, welfare, and communities throughout the globe.

You can affect the quality of the environment and improve efficiency at home and work by adopting a buying practice known as *eco-purchasing*. Eco-purchasing means choosing products and services that reduce waste, support recycling, and minimize harmful impacts on the Earth's resources.

One obvious example is choosing to purchase paper with recycled content for home and office needs and when printing brochures, newsletters, and other publications. Demand for recycled paper spurs manufacturers to use recycled content and creates a market for recycled paper waste, thereby closing the loop on paper recycling efforts. There are many other products and services that similarly advance the cause of natural resource

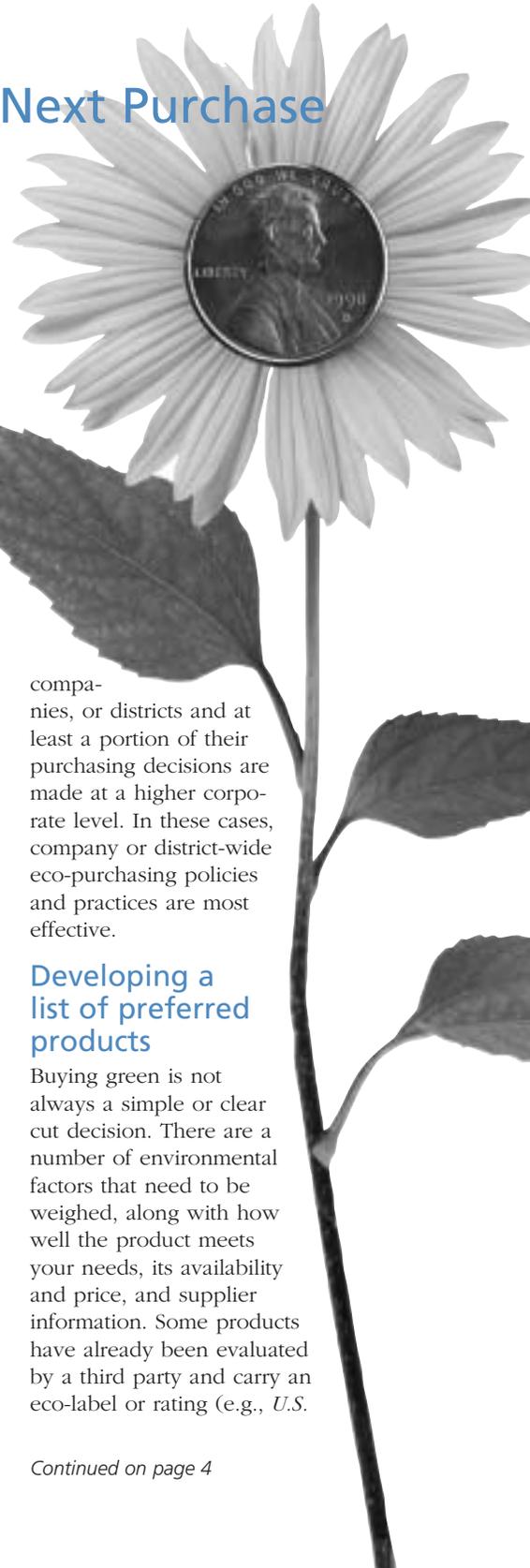
conservation. Adopting a policy of eco-purchasing will help you find and make greener purchasing choices.

Getting started

A good place to begin eco-purchasing is right at home, where you're in control of purchasing decisions. Faced with an abundance of choices for everything from cars to clothing to food to household products, you can consider not only price, but also factors that impact the environment. This includes product materials, quality, longevity, recycled content, energy consumption, recycling potential, packaging, and more. You might also rank the product according to *need vs. want* to reduce unnecessary or wasteful consumption in the first place.

At work, eco-purchasing is implemented most effectively when someone is given specific responsibility for it. The most appropriate person will depend on your workplace's corporate structure, but may include: the overall purchasing director, head of accounting, or chair of the environment committee. Larger companies may assign eco-purchasing as a primary job function. A committee or team could also be appointed to oversee eco-purchasing, conduct background research about new products, suggest alternative products, and ensure that eco-purchasing decisions are made by all departments.

Many hotels, golf courses, and schools enrolled in our programs belong to large chains, management



companies, or districts and at least a portion of their purchasing decisions are made at a higher corporate level. In these cases, company or district-wide eco-purchasing policies and practices are most effective.

Developing a list of preferred products

Buying green is not always a simple or clear cut decision. There are a number of environmental factors that need to be weighed, along with how well the product meets your needs, its availability and price, and supplier information. Some products have already been evaluated by a third party and carry an eco-label or rating (e.g., *U.S.*

Green Tip

Develop a list of environmentally preferred products and services, as well as a list of products to avoid. Your list might include products that have been eco-rated or labeled. Review your list on a regular basis and revise it as needed.

Dear Members and Supporters,

"To foster more sustainable human and natural communities...one person, one place... one purchase at a time."

Yes, *one purchase at a time*. As a member of the consumer society you have an opportunity to practice good environmental stewardship with each purchase you make. This issue of *Stewardship News* highlights the power of purchasing as a tool for fueling a more sustainable economy.

Whether you buy recycled content paper, upgrade to energy efficient windows, elect to stay at an eco-friendly hotel (Audubon Green Leaf Hotel), or golf at an eco-friendly golf course (Certified Audubon Cooperative Sanctuary or Signature member course), you are making a statement about your commitment to environmental protection and fostering a more sustainable world. With enough people making similar "environmental" statements through their purchasing decisions, suddenly there's a greater demand for environmental or sustainable products and services. That demand, in turn, helps create more environmentally-preferable products and services.

Consumer environmentalism...yet another way to help protect and sustain our natural environment.

Yours,



Kevin Fletcher
Director of Programs and Administration

In this issue...

- 4 Making Change:** What you buy can carry a hefty price for the environment. Find out how to make greener choices for the products you purchase.
- 6 Go Green:** You hold the keys to making your next trip more environmentally friendly and driving green change in the travel industry.



CLINT CALHOUN, CHIMNEY ROCK PARK, NC

Help protect the natural beauty and quality of the environment in the places you travel by following our green travel tips on page 6.

- 8 The Name Says it All:** Preserving the beauty and quality of the environment along Charlotte's Lake Wylie is the name of the game for *The Sanctuary*, North Carolina's first residential development to become a Gold Certified Audubon Signature Sanctuary.
- 10 On the Road—For Stewardship:** Audubon International President Ron Dodson takes us to Knysna, South Africa, where the environment is right for more sustainable development.
- 11 Membership News:** Find out who's in and who's on top in our listing of new members and certified properties.



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

ADMINISTRATION

Ronald Dodson, President, rdodson@audubonintl.org
Kevin Fletcher, Director of Programs and Administration, kfletcher@audubonintl.org
Howard Jack, Vice President, hjack@audubonintl.org
Mary Jack, Executive Assistant to the President, mjack@audubonintl.org
Paula Realbuto, Executive Assistant for Operations, prealbuto@audubonintl.org

AUDUBON COOPERATIVE SANCTUARY PROGRAMS

Jennifer Batza, Membership Secretary, jbatza@audubonintl.org
Peter Leuzinger, Great Lakes Field Office, pleuzinger@auduboninternational.org
Jeremy Taylor, Staff Ecologist, jtaylor@audubonintl.org
Shawn Williams, Environmental Technician, swilliams@audubonintl.org
Joellen Zeh, Program Manager, jzeh@audubonintl.org

AUDUBON SIGNATURE PROGRAM

Nancy Richardson, Signature Program Director, nrichardson@audubonintl.org
Linda Snow, Administrative Assistant, Signature Program, lsnow@audubonintl.org

AUDUBON SOCIETY OF NEW YORK STATE

Fred Realbuto, Director, frealbuto@audubonintl.org

EDUCATION DEPARTMENT

Jean Mackay, Director of Educational Services, jmackay@audubonintl.org

ENVIRONMENTAL PLANNING DEPARTMENT

Sarah Anderson, Natural Resource Manager, sanderson@audubonintl.org
Natalie Archambault, Administrative Assistant, natarc@audubonintl.org
Rich Henderson, Manager, rhenderson@audubonintl.org
Alicia Oller, Director of Technical Services, aoller@audubonintl.org
Miles (Bud) Smart, PhD, Director of Environmental Planning, bsmart@audubonintl.org
Larry Woolbright, PhD, Director of Wildlife Conservation Services, lwoolbright@audubonintl.org

MIS DEPARTMENT

Eric Dodson, Director of MIS, edodson@audubonintl.org
Alicia Karas, Database Manager, akaras@audubonintl.org

SUSTAINABLE COMMUNITIES PROGRAM

Peter Bronski, Coordinator, pbronski@audubonintl.org

Participate in the North American Birdwatching Open, Saturday, May 14, 2005

Additional dates offered for Southern and Northern members!

Migratory birds are on the move, as they begin to wing their way to northern breeding grounds. How many will stop to refuel or stay to nest on your property? Find out and contribute to Audubon International's official count during this year's North American Birdwatching Open.

We are excited to announce a change in the event this year to encourage wider participation. We will once again hold the "official" Birdwatching Open on International Migratory Bird Day, Saturday, May 14, 2005. But in response to requests to better reflect migration in the South and in Canada, we are offering additional Birdwatching Open dates on the second Saturday of the month from March through June. Participants may choose which date is best suited to peak migration in their region.

- **March 12:** Southern Tier (southern Florida and Texas)
- **April 9:** Southeast and Southwest
- **May 14:** Mid-Atlantic, Central/Midwest, Great Lakes, Northeast, Northwest

- **June 11:** Points north and high elevations

Rules for participation are simple: over the course of 24-hours, make a list of each bird species you see or hear within the boundaries of your property. Then send your results to us, so we can gather information about bird migration and habitats. We encourage participants to invite someone experienced in bird identification to help, if needed, to contribute to a more accurate count.

Results for each 24-hour count must be sent to us **within one week of each event**. All results will be compiled together for overall and regional winners. Certificates are awarded to members in each region who record the most species.

To participate, register online at <http://www.auduboninternational.org/projects/birdwatchopen/>. 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 12, or contact Jen with questions at jbatza@auduboninternational.org. ●



Our top courses identified more than 90 bird species during last year's Birdwatching Open. Register now to participate in this year's event.

A Welcome and a Farewell

Audubon International recently bid farewell to veteran staff member Kraig Marquis, Project Manager for the Environmental Planning Department. Kraig worked in Florida with WCI Communities and the Gold Audubon Signature Program over the past three years. Kraig's expertise and skillfull project management will be missed!

At the same time, we enticed Jeremy Taylor to move from Florida to New York, just in time for some truly frigid winter weather. Jeremy has specialized in habitat restoration, prescribed burning, exotic plant control, and bird biology and conservation. He will serve as staff ecologist, working with members of the Audubon Cooperative Sanctuary Programs. ●

Looking for Birds?

Check out these Florida golf courses

Following a half century of local, state, and national Christmas Bird Counts conducted by Audubon societies, nine southwest Florida golf courses enrolled in the Audubon Cooperative Sanctuary and Signature Programs completed their first Christmas counts in December, 2004. Ornithologist George McBath single-handedly tallied more than 8,000 individual birds and 78 different species on the nine courses. Highlights included: two bald eagles about to nest at Raptor Bay Golf Club; three black-crowned night herons at Royal Poinciana Golf Club; 12 blue-gray gnatcatchers at Hammock Bay Golf and Country Club; 18 hooded mergansers at The Old Collier Golf Club; 20 eastern meadowlarks at Venetian Golf and River Club; 77 least sandpipers at Bonita Bay Club East; 193 double-crested cormorants at Tuscany Reserve; 236 yellow-rumped warblers at Mediterra Golf Club; and a flock of about 1,500 tree swallows at Pelican Preserve Golf Club. ●

Making Change

Continued from page 1

EPA Energy Star labeled appliances). But the vast majority of products have no rating, and it's up to you to decide which product may be "greenest" among comparable choices.

Consider the list of factors here when deciding what to buy:

Production/Manufacturing

Raw material inputs for all of the products we use come from natural resources and require energy and water in manufacturing. Products made from recycled materials, such as recycled glass, paper, and plastic, reduce natural resource inputs, often require less energy, and open up markets for waste materials. When possible, choose products made from recycled materials.

Toxicity

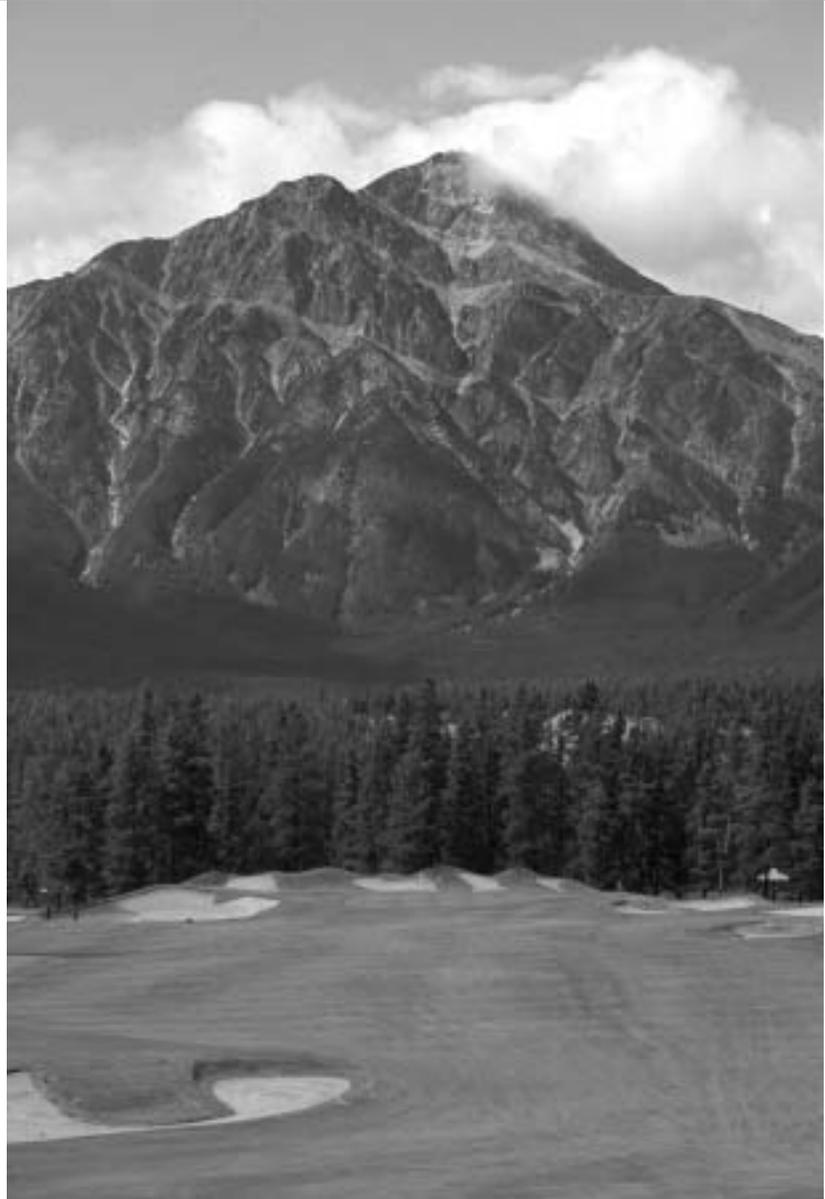
Consider the toxicity of product purchases. Look for non-toxic, biodegradable, and bio-based products first. Purchase products with less hazardous ingredients and that generate fewer toxic wastes in their manufacture.

Packaging

Less is better; recyclable is next best. Buying in bulk and avoiding disposable and one-time use products can also help you reduce the amount of packaging you get.

A word about food choices...

Extend eco-purchasing to your food choices and restaurant selections. When possible, choose locally grown fruit, vegetables, and meats to support local agriculture and ranching. This often has a secondary benefit of helping to protect natural areas and scenic vistas free of charge. In addition, avoiding fish and shellfish whose stocks are near depletion or are unsustainably harvested is a good way to reduce the demand for overburdened ocean resources.



Fairmont Hotels & Resorts is a good example of a company that has adopted sound environmental management practices. Its golf courses, including the spectacular Jasper Park Lodge Golf Course, are enrolled in the ACSF.

Transportation

The farther a product has to travel to reach you, the more pollution it generates. Purchasing locally or regionally produced products supports the economy locally and reduces the economic and environmental costs of transportation.

Durability, Efficiency, and Use

Consider the durability and longevity of the products you purchase. Cheap products that don't last increase waste. The longer a product, such as furniture, electronics, and heavy duty equipment, stays in use, the fewer resources consumed. Look for energy efficient products and appliances

that have an *Energy Star* label. At the same time, consider the efficiency of older equipment when considering whether to upgrade. By purchasing newer, more efficient equipment, you may quickly see a return on investment in terms of financial savings and environmental benefits.

Alternative Fuels and Fuel Efficiency

Despite steady increases in oil prices, consumer selection of efficient vehicles has been slow to keep pace. Make fuel efficiency a priority when purchasing cars, trucks, and vehicle fleets, and consider alternative fuels, such as gas-electric hybrids, fuel-cells, and bio-diesel.

Resources

Products and Supplies for Eco-purchasing

Appliances and computers
 Bathroom toilets and sinks
 Building construction, renovation, and maintenance
 Carpeting
 Cleaning products
 Electricity
 Food and beverage products
 Furniture and furnishings
 Heating fuel
 Lamps and lighting
 Landscaping products and services
 Linens
 Lumber and wood products
 Office supplies
 Paints and other finishes
 Paper
 Printing services
 Sanitary paper
 Vehicles and transportation services

Reuse and Recycling

Disposable, one-time-use products quickly become trash. Look for alternatives, such as china mugs and dishware, reusable containers, soap or shampoo dispensers, and products that can be recycled. In addition, buy products in containers that can be recycled. More than 200 billion bottles, cans, and plastic containers and cups are thrown away worldwide every year. (If you need more detailed information on recycling, visit e-Source on our Web site at www.auduboninternational.org.)

Disposal

Everything must go somewhere, and, in the case of the things we throw away, that somewhere is to landfills, incinerated into our atmosphere, or dumped in the ocean. Toxic wastes require special transportation, handling, and storage that pose threats to human health and the environment.

Make choices that reduce the amount of hazardous waste generated and reduce waste volume overall. Reduce packaging, increase efficiency,

and, when possible, divert useful products from the waste stream through reuse, recycling, or donation.

Support Environmentally Friendly Suppliers

On a final note, you can take eco-purchasing one step further by selecting products and services offered by environmentally-conscious producers, distributors, retailers, vendors, contractors, printers, graphic artists, and other businesses. Choose

suppliers which: use recycled products; recycle at their business sites; take back packaging; exercise energy and water conservation practices in their operations; and offer less hazardous materials in their products. ●

Center for a New American Dream, <http://www.newdream.org>, provides useful information on *The Conscious Consumer* and *Institutional Purchasing*, as well as other ways to use your power as a consumer to protect the environment and the well-being of people at the other end of the production line.

EcoBuyer, <http://www.ecobuyer.net>, is a resource tool for professional buyers and consumers who seek environmental responsible products or services.

Ecopurchasing Guide for Hotels and Motels (1993) is available from the University of Florida Cooperative Extension Service and online at <http://www.p2pays.org/refs/02/01784.pdf>.

Energy Star, <http://www.energystar.gov>, is a U.S. government-backed program helping businesses and individuals protect the environment through superior energy efficiency.

Environment Canada's Environmental Choice Program (ECP), www.environmentalchoice.com, identifies a variety of environmentally-preferable products and services.

GreenSeal, www.greenseal.org, partners with the lodging industry to promote environmentally responsible products and practices.

Pollution Prevention Regional Information Center, <http://www.p2ric.org/home.cfm>, provides a quick primer to green purchasing, including background information and a top ten list for getting started. Click on the *Topic Hub* for Green Procurement.

Pacific Northwest Pollution Prevention Resource Center (PPRC), <http://www.pprc.org/pubs/epr/index.cfm>, offers pollution prevention information and works collaboratively with business, government, non-government organizations, and other sectors to promote environmental protection through pollution prevention. Their Web site includes a section on *Product Stewardship for Manufacturers*, green purchasing tips and case studies, eco-labeling, and more.

TerraChoice Environmental Marketing, <http://www.terrachoice.ca>, helps companies convert environmental responsibility into market advantage by offering environmental improvement, marketing, and verification expertise and tools. TerraChoice manages Canada's Environmental Choice™ Program (which certifies more than 3,000 goods and services) and the Green Leaf™ eco-rating programs.

U.S. Environmental Protection Agency, <http://www.epa.gov>, provides a wealth of information on environmental management systems, comprehensive procurement guidelines, and numerous related topics.

Go Green

BY JEAN MACKAY

According to a recent Travel Industry Association (TIA) study, *more than three-quarters* of American travelers feel it is important that their visits not damage the environment. With travel spending averaging \$529 billion a year in the U.S. alone, both travelers and hotels can become powerful *green drivers* for making travel more environmentally friendly.

At first glance, green travel may seem like an oxymoron. Vacationers and business travelers alike buy airport junk food wrapped in plastic with scarcely a recycling container in sight, fly on an airplane whose engine exhaust contributes to global climate change, and stay in hotels where copious quantities of water, energy, and waste provide a luxurious and pampered experience.

Greener hotels

Yet look a little closer and you may notice that things are beginning to change, especially in the hotel industry. Linen reuse programs to conserve water are becoming the norm; compact florescent bulbs are keeping more rooms bright with less electricity; and many hotels now offer green meeting and conference rooms. Behind the scenes, environmentally conscious hotels are reducing waste through greater efficiency, using recycled products and non-toxic cleaners, and adopting environmental policies to guide hotel operations.

At the forefront of the industry are hotels that have pledged their commitment to environmental programs, such as the Audubon Green Leaf™ Eco-Rating Program for Hotels. These hotels receive a formal eco-rating of from one to five Green Leafs™, based on the number of environmental best practices they have implemented. Hotels work to increase their eco-ratings through continuous improvement in energy efficiency, resource conservation, pollution prevention, and environmental management.



"Our participation in the Audubon Green Leaf™ Eco-Rating Program is helping us reduce our impact on the environment, increase efficiency, and achieve cost savings," says Christos Paloglou, Director of Operations for Hotel Sofitel Chicago Water Tower. "Our Green Leaf rating also makes our hotel extremely attractive to organizations that have a Green Travel Policy."

But the key to greener travel is *you*. Increasing demand from individuals and companies is among the strongest incentives for hotels and other travel industry sectors to adopt environmental best practices.

Follow our tips for business and personal travel and be a green driver for change in the travel industry.

Tips for Travelers

- Seek out green hotels. For starters, check out the list of participants in our Audubon Green Leaf™ Eco-Rating Program for Hotels. Ask hotels where you are considering staying whether they participate in environmental programs.
- Participate in linen reuse programs, when available.
- Turn off AC, lights, and T.V. when not in your room.
- Recycle while traveling.
- Use public transportation, when available.
- Request fuel efficient rental cars.

- Take the time to offer feedback to hotels. Praise green hotel efforts or recommend them if you don't see any in place.

Tips for Organizations

- Adopt a green meeting policy. Meeting planners hold the key to waste reduction on the part of both vendors and participants. Insist that the people and venues associated with your events protect our natural resources by adopting best practices for printed materials, food and beverage, facilities, and waste reduction and recycling. Excellent resources are available from the National Recycling Coalition at www.nrc-recycle.org.
- Schedule overnight travel accommodations in hotels that offer environmentally friendly features.
- Incorporate video conferencing and web meetings as an alternative to employee air travel.
- Purchase fuel efficient company vehicles. ●

Members of the Audubon Green Leaf™ Eco-Rating Program For Hotels

(The Green Leaf™ program began in Canada and expanded in 2004 to invite U.S. and international participation. This list includes current members as of January 19, 2005)

Canada

Alberta

Banff Aspen Lodge (formerly Banff Traveller's Inn), Banff
Banff Park Lodge Resort Hotel & Conference Centre, Banff
Banff Y Mountain Lodge (AKA Banff YWCA), Banff
Brewster's Mountain Lodge, Banff
Buffalo Mountain Lodge, Banff
Douglas Fir Resort & Chalets, Banff
The Fairmont Banff Springs, Banff
Homestead Inn, Banff
Johnston Canyon Bungalows, Banff
Mount Royal Hotel, Banff
Sunshine Village Inn, Banff
Tunnel Mountain Resort Hotel, Banff
Calgary Marriott, Calgary
Carriage House Inn, Calgary
Days Inn—Calgary Airport, Calgary
The Fairmont Palliser, Calgary
Glenmore Inn, Calgary
Hampton Inn and Suites Calgary, Calgary
Travelodge Hotel MacLeod Trail, Calgary
The Alpine Club of Canada, Canmore
Fantasyland Hotel at West Edmonton Mall, Edmonton
Amethyst Lodge, Jasper
The Fairmont Jasper Park Lodge, Jasper
Lobstick Lodge, Jasper
Marmot Lodge—Mountain Park Lodges, Jasper
Pine Bungalows, Jasper
Sawridge Inn and Conference Centre, Jasper
Executive Resort at Kananaskis, Kananaskis
Aurum Lodge, Rocky Mountain House

British Columbia

Harbour House (Ganges Vineyard Hotel), Saltspring
Park Place Lodge, Fernie
Best Western Inn Kelowna, Kelowna
Recreation Inn & Suites (Big White Motor Lodge), Kelowna
Qualicum Heritage Inn, Qualicum Beach
Sooke Harbour House, Sooke
Days Hotel Surrey, Surrey
Delta Vancouver Suites Hotel, Vancouver
Delta Victoria Ocean Point Resort & Spa, Victoria
Ramada Huntingdon Hotel Suites, Victoria
Strathcona Hotel Ltd., Victoria

Manitoba

Victoria Inn Hotel & Convention, Brandon
Canad Inns—Club Regent Casino Hotel, Winnipeg
Canad Inns—Polo Park, Winnipeg
Canad Inns Fort Garry, Winnipeg
Comfort Inn Winnipeg South, Winnipeg
Norwood Hotel, Winnipeg
Place Louis Riel All Suite Hotel, Winnipeg
Sheraton Hotel Winnipeg, Winnipeg
Canad Inns—Garden City, Winnipeg

New Brunswick

Lord Beaverbrook Hotel, Fredricton
Delta Beausejour, Moncton
Hilton Saint John, Saint John

Nova Scotia

Chanterelle Country Inn & Cottage, Baddeck
Mersey River Chalets, Caledonia
Casino Nova Scotia Hotel, Halifax
The Prince George Hotel, Halifax
Keltic Lodge, Ingonish Beach
The Second Paradise Retreat, Lunenburg
White Point Beach Resort, Queen's Country

Ontario

Holiday Inn Select Brampton, Brampton
Motel 6 Brampton, Brampton
Quality Hotel Royal Brock Conference Centre & Sports Club, Brockville
Motel 6 Burlington, Burlington
Holiday Inn—Fort Erie, Fort Erie
Ambassador Resort Hotel & Conf Centre, Kingston
Marriott Residence Inn, London
Motel 6 Mississauga, Mississauga
Novotel Mississauga, Mississauga
Studio 6 Mississauga, Mississauga
Novotel North York, North York
Bartlett Lodge—Igonquin Park, Oakville
Holiday Inn—Oshawa, Oshawa
Albert at Bay Suite Hotel, Ottawa
Aristocrat Suite Hotel, Ottawa
Best Western Victoria Park Suites, Ottawa
Courtyard by Marriott Ottawa, Ottawa
Days Inn Ottawa Airport, Ottawa
Delta Ottawa Hotel & Suites, Ottawa
Fairmont Chateau Laurier, Ottawa
Hampton Inn Ottawa, Ottawa
Holiday Inn Hotel & Suites, Ottawa
Les Suites Hotel, Ottawa, Ottawa

Minto Place Suite Hotel, Ottawa
Monterey Inn Resort, Ottawa
Novotel Ottawa Hotel, Ottawa
Brookstreet Resort, Ottawa (Kanata)
Holiday Inn Select Ottawa West (Kanata), Ottawa (Kanata)
Casino Rama, Rama
Courtyard by Marriott Toronto, Toronto
The Fairmont Royal York, Toronto
Holiday Inn (King St.), Toronto
Novotel Toronto Centre, Toronto
The Cambridge Suites Hotel, Toronto
Motel 6, Whitby

Prince Edward Island

The Delta Prince Edward, Charlottetown
Dalvay by the Sea, York

Quebec

Fairmont Chateau Montebello, Montebello
Holiday Inn Select Montreal Centre-Ville, Montreal
Hotel Delta Centre-ville, Montreal
Holiday Inn Express Hotel and Suites, Montreal
Marriott Residence Inn Montreal Downtown, Montreal
Novotel Montreal, Montreal
Sofitel Montreal, Montreal
Chateau Cartier Resort, Ottawa (Aylmer)
Delta Trois-Rivières, Trois-Rivières

Suskatchewan

Hotel Saskatchewan Radisson Plaza, Regina
Days Inn Yorkton, Yorkton

Ireland

Crowne Plaza Dublin Airport Santry—Dublin

United States

The Colony Hotel/Boughton Hotel Corp—Kennebunkport, ME
Hotel Sofitel Chicago Water Tower—Chicago, IL
Hotel Sofitel Houston—Houston, TX
Sheraton Rittenhouse Square Hotel—Philadelphia, PA

The Name Says it All

The Sanctuary balances development and environmental protection

BY NANCY RICHARDSON

Charlotte, North Carolina, is a bustling university town and center for the arts, upscale shopping, and dining. It is also one of the 10 fastest growing metropolitan areas in the nation, with associated traffic congestion and loss of rural natural areas to show for it. Among 15 cities in the U.S. studied in a growth analysis of preservation of rural land, Charlotte ranked last at limiting the loss of rural land and open space in the 1990s (*Northwest Environment Watch*, 2004). Between 1984 and 2001, Mecklenburg County (which includes Charlotte) saw a 127-percent increase in areas covered by impervious surfaces.

residential development named *The Sanctuary* is one place where developers are striking that balance. *The Sanctuary*, developed by Crescent Resources LLC, recently achieved status as the first Certified Gold Audubon Signature Sanctuary in the state of North Carolina.

The Sanctuary is located along seven miles of quiet northern shoreline of Lake Wylie, the largest and oldest of four lakes on the Catawba River, which supplies much of the drinking water to the more than 700,000 residents of Mecklenburg County. Because of the project's proximity to such a large and regionally important water body, maintaining water quality by controlling development impacts was critical to Audubon International's work with Crescent Resources LLC.

Siting and Design

Fostering more environmentally-sensitive, planned growth begins with a well thought out design. *The Sanctuary's* primary distinction is its low-density approach. Crescent Resources limited homesites to 189 on the 1,348-acre property, while leaving 80% of the land undisturbed. The vast majority of the project site will remain wooded, with 215 acres preserved as common open space and 20 miles of nature trails for residents to enjoy.

The site's topography is typical of the Piedmont area of North Carolina, with obvious ridges and valleys sloping toward Lake Wylie. To protect water quality, Crescent Resources LLC designated a 200-foot-wide conservation corridor, or lakefront setback, along the entire lake front. The setback is four times the distance required by Mecklenburg County. The conservation corridor and 100-foot no-clear buffers along stream channels provide a filtering mechanism for stormwater runoff, while at the same time help-



ing to conserve the habitat value of the land.

Audubon International and Crescent Resources studied and mapped the natural characteristics of the land and customized a "development envelope" for each house lot, designating areas for the main house, as well as any accessory structures, such as a detached guest house, swimming pool, or other smaller buildings. The lots are billed as *private preserves*, with no clearing and minimal pruning allowed outside the development envelope. Rock outcroppings, flowing or ephemeral streams, lake edges, unusual or noteworthy native plants, mature specimen trees, bird nesting sites, wetlands, and views are among the features that give each preserve its own character.

Audubon International also worked with Crescent Resources LLC to create an interconnected network of habitat preserves to maintain the overall biodiversity of the property. Preserves wind throughout *The Sanctuary* and also link with other habitat patches in the surrounding area to facilitate wildlife movement.

Model home demonstrates green features

Arcadia Homes, Inc. of Charlotte constructed a model home at *The Sanctuary* to demonstrate how "green living" features can be incorporated without sacrificing convenience or luxury. The model is presently used



The Sanctuary's 20 miles of nature trails wind through scenic woodlands along Lake Wylie. Natural Resource Manager Sarah Anderson and Crescent Resources' Project Manager James F. Martin work to ensure that the property's unique resources are protected as development proceeds.

The challenge for developers and city planners alike is how to balance Charlotte's growth and demand for new housing with the need to protect the environment and preserve what makes it an attractive community in the first place. Just a few minutes and a short trip east of the city, a new



Protecting Lake Wylie was of central importance in the project's design.

woods. The trees shade the building in summer, keeping it cooler and reducing energy demands for air conditioning. The structure also blends into the surroundings through the use of stone, wood, and trim in earth tone colors.

In the case of *The Sanctuary*, good environmental design and Gold Signature status is an attractive selling point for Crescent Resources LLC. Lower maintenance costs and a beautiful, environmentally progressive setting are drawing homeowners.

"In nearly every respect *The Sanctuary* sets a needed standard for developers in the Charlotte area," says Ron Dodson, President and CEO of Audubon International. "The Crescent Resources team, the home builders, and the various consulting firms involved have all embraced our Principles for Sustainable Resource Management. Now that the private preserves and homes are being purchased, we are confirming what we believed in the beginning—that customers are also looking for environmentally friendly lifestyles. *The Sanctuary* is a real winner on all fronts." ●

as a sales center where potential buyers can check out both interior and exterior environmental features. Energy-efficient kitchen appliances include *Energy Star* products, such as a Viking range, refrigerator, and dishwasher. Water is conserved by dual flush toilets. A hot water circulating system supplies "on demand" hot water. A high-efficiency air handling system allows air to be filtered and returned to the home using less energy and contributing to a cleaner environment.

Outside, the building design and landscaping also promote environmental sensitivity. In place of a manicured lawn, a grove of mature trees complements surrounding



Environmentally desirable materials and construction are the hallmark of The Sanctuary's model home:

- Recycled cork used in flooring and recycled material used in sub-flooring
- Truss-joint floor joints consist of recycled materials
- Oriented strand board (OSB) used for exterior and roof sheathing as an alternative to plywood
- Wall insulation made from recycled paper (cellulose), which provides great insulation value compared to fiberglass and comes from recycled material
- Carpets made from recycled soda bottles
- Low VOC (Volatile Organic Compounds) paints both inside and out reduce greatly the amount of ozone depleting VOCs released into the atmosphere.
- Limited turf for home landscaping, drought tolerant plants, and plants of similar low maintenance requirements are used to minimize the amount of irrigation needed.
- Pervious pavement used in driveway construction allows water to drain through the slab, rather than runoff. Pervious concrete eliminates the erosion and stormwater runoff problems often associated with impervious surfaces.
- A rain garden in the center of the cul de sac of the driveway helps filter stormwater.
- Rain water diffusers added to downspouts cut down on erosion and help water infiltrate into the ground.

The sales center and model home showcase numerous environmentally-friendly features. Homes in *The Sanctuary* are subject to design guidelines enforced by a design review board.

Krystna, South Africa

BY RONALD DODSON

President and CEO Ron Dodson travels extensively on behalf of Audubon International and its programs. His reports from the field inspired our first newsletter, *Field Notes*, and will now resume as an occasional column in *Stewardship News*.

After nearly 18 hours sitting in an airplane, it was great to step out into the warm breezes of South Africa. Audubon International has been invited to Krystna, South Africa, by Peter Kohler to help plan a new golf, housing, and South African Sports Hall of Fame complex presently in the design and permitting stages. Kohler, who has built many golf courses over the years, particularly in Asia, is committed to our Principles for Sustainable Resource Management and has expressed a desire to build a national model for sustainable development. Bud Smart, Director of Audubon International's Environmental Planning Department, and I were going to spend a week looking at, thinking about, and immersing ourselves in the South African environment. Our agenda included determining what we believed needed protection and meeting with local citizens and governmental agencies to ascertain what was most important to the citizens of the Krystna area.

Taking in the big picture

South Africa is only ten years into a new democracy and, in many respects, is still in the early stages of developing a democratic process to guide growth, while protecting the region's critically important resources. The country is somewhat smaller in size than the state of Texas and home to around 43 million people. It is primarily semi-arid, but sub-tropical along the coastline.

South Africa faces a number of important environmental issues. Arterial rivers and lakes are scarce,

consequently requiring extensive water conservation measures. In addition, growth in water use is outpacing supplies. The rivers that do exist suffer from runoff pollutants and urban discharges, soil erosion, and desertification. Coupled with these environmental issues, however, is the fact that South Africa is a middle-income, emerging market with an abundant supply of natural resources (except fresh water). Even though the South African stock market ranks among the ten largest stock

that is putting stress on much of the community's infrastructure. The major natural features of Krystna include the Krystna River and Lagoon, and a unique geological structure called "The Heads," which is the Lagoon outlet to the Indian Ocean. An unbelievable diversity of wildlife is found in this estuarial system, including several species found nowhere else in the world, such as the Krystna Seahorse.

Peter Kohler's land is located directly on the Krystna River. The land has been used for various agriculture



The project team at the future home of the South African Sports Hall of Fame in South Africa; from left to right: Bud Smart (AI Environmental Planning), Rob O'Friel (Golf Design), Neil Eitzen, (Design Associate), and Ron Dodson.

markets in the world, tremendous unemployment problems exist, particularly in lower South Africa, and other daunting economic problems remain from the apartheid era.

The project site

Krystna, where we were headed, is a small predominately tourist community located on the coast in what is referred to as the Garden District. While Krystna proper looks like many prosperous tourist communities, the area is going through rapid growth

purposes over the years and a large part of the tract has been totally invaded by exotic and invasive plant species. However, there are also some important and unique pockets of habitat that must be protected and restored if possible, such as a habitat called Fynbos. Fynbos (fine bush) is an evergreen heath-shrub land that is estimated to hold over 8000 species of the floral kingdom. The Fynbos is unique to the south-western areas of South Africa.

AUDUBON COOPERATIVE SANCTUARY PROGRAM

NEW MEMBERS

Golf Program

International

Cozumel Country Club, Cozumel
Q-Roo, Mexico
Kranji Sanctuary Golf Course, Singapore
Rocky Crest Golf Club, MacTier,
Ontario, Canada

Alabama

Red Eagle Golf Course, Eufaula

Arizona

Heritage Highlands Golf and Country
Club, Marana

California

Bouldary Oak Golf Course, Walnut
Creek
Porterville Municipal Golf Course,
Porterville

Colorado

Flatirons Golf Course, Boulder

Florida

Palm Beach Gardens Golf Course, Palm
Beach Gardens
Duran Golf Club, Melbourne
Meadowbrook Golf Club, Gainseville
Bobby Jones Golf Course, Sarasota
Golden Bear Club at Keene's Pointe,
Windmere

Illinois

Oak Park Country Club, Elmwood Park
La Grange Country Club, La Grange
Westmoreland Country Club, Wilmette
Glen Flora Country Club, Waukegan
Ironhorse Golf Course, Tuscola
Bolingbrook Golf Club, Bolingbrook

Indiana

Bear Slide Golf Club, Cicero
Chariot Run Golf Club, Laconia

Maryland

Hyatt Regency Chesapeake Golf,
Cambridge
Ocean Pines Golf and Country Club,
Berlin

Massachusetts

Bass Rocks Golf Club, Gloucester
Framingham Country Club, Framingham

Michigan

Thunder Bay Golf Resort, Hillman
Oak Crest Golf Course, Norway

Minnesota

Minneapolis Golf Club, Minneapolis
Niel Ladd National Sports Center, Blaine

New Hampshire

Portsmouth Country Club, Greenland
Hale's Location Golf Course, Hale's
Location

New York

Putnam National Golf Club, Mahopac

North Carolina

Cypress Lakes Golf Course, Hope Mills
Methodist College Golf Learning
Center, Fayetteville

North Dakota

Grand Forks Air Force Base Golf Course,
Grand Forks AFB

Pennsylvania

Whitemarsh Valley Country Club,
Lafayette Hill
Chambersburg Country Club, Scotland

South Carolina

Dunes Golf and Beach Club, Myrtle
Beach
Pawleys Plantation Golf Course,
Pawleys Island

Tennessee

Fall Creek Falls Golf Course, Pikeville

Virginia

Broken Sound Club, Ashburn
Mattaponi Springs Golf Club, Ruther
Glen

Washington

Golf Club at Newcastle, Newcastle

West Virginia

Berry Hills Country Club, Charleston

Business Program

California

Stover Seed Company, Los Angeles

Tennessee

Griffin Industries (Memphis), Memphis

School Program

Kansas

Saint Michael the Archangel, Laewood

North Carolina

Williamston Primary, Williamston

RECENTLY CERTIFIED AUDUBON COOPERATIVE SANCTUARIES

Oldfield, Okatie, SC
TPC at Deere Run, East Moline, IL
TPC of Myrtle Beach, Murrells Inlet, SC

RE-CERTIFIED AUDUBON COOPERATIVE SANCTUARIES

Certified for 10 Years or More

TPC at River Highlands, Cromwell, CT

Certified for Five Years or More

Bakery Feeds, Inc. (Centre), Centre, AL
Baltusrol Golf Club, Springfield, NJ
Knollwood Country Club, Granger, IN
Lac Brome (Club de Golf), Ville de Lac
Brome, Quebec

Priddis Greens Golf and Country Club,
Priddis, Alberta
The Powder Horn Golf Club,
Sheridan, WY
Running Y Resort, Klamath Falls, OR
Val des Lacs, Ste. Sophie, Quebec

Certified for Two Years or More

Stone Tree Golf and Fitness Club, Owen
Sound, Ontario

AUDUBON SIGNATURE PROGRAM

NEW SIGNATURE MEMBERS

Paraiso del Mar, La Paz, Mexico
Sabal Bay, Naples, FL
Seashells at Cotton Bay, Eleuthera,
Bahamas
Tuscano, Venice, FL

RE-CERTIFIED SIGNATURE SANCTUARIES

The Bridges Golf Club at Casino Magic,
Bay St. Louis, MS
The Club at Briar's Creek, Johns Island, SC
The Club at Pelican Preserve, Ft. Myers, FL
The Old Collier Golf Club, Naples, FL
Quinta de Marinha Oitavos Golfe Clube,
Cascais, Portugal
Shark's Tooth Golf Club, Panama City
Beach, FL
SummerGrove Golf Club, Newnan, GA



This year's registration art print features a reproduction of John James Audubon's original painting of the Red-Shouldered Hawk. Many thanks to the United States Golf Association for generously underwriting the printing costs.

Krystna, South Africa *Continued from page 10*



The goals established through the Audubon Gold Signature Program, which Peter has registered his land in, are to design a system that takes into account the ecological, social, and economic issues important for the site, the watershed, the business of development, and the people of

the region. Clearly the ecological issues focus on the Knysna River and Lagoon system. Employment of local citizens is an extremely important issue, but even more important is the training and empowerment of citizens so they can have opportunities to better themselves over time. Finally, we must find a way to accomplish these and other goals while making an adequate profit for the business of development.

Our week in South Africa went quickly. We came away with a much better understanding of the important issues we will face during the partnership process connected to this development project. However, it will take time to fully understand and to develop site-based Best Management Practices that will work to the benefit of all. How will it work out in the end? We don't know yet...that is to be written in a future issue of *Stewardship News*. ●

Stewardship News

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

Jean Mackay, Editor
Audubon International
46 Rarick Road
Selkirk, NY 12158

Or sent via e-mail to:
jmackay@audubonintl.org

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 ACSS Golf Program is sponsored by The United States Golf Association.

The newsletter is printed on recycled paper.

Help us to keep up to date!
If you have a change of address or contact person, please let us know.
Call (518) 767-9051, ext. 12 or
E-mail jbatza@audubonintl.org

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



AUDUBON
INTERNATIONAL