



A Bright Road Ahead

JOSHUA CONWAY

Golden Arrow Lakeside Resort, Lake Placid, New York

The past eighteen months have been quite an exciting time for the Audubon Green Leaf™ Eco-Rating Program. As a result of a partnership with the New York State Governor's Green Hospitality Working Group the program was selected as the premier environmental evaluation program by the New York State Hospitality and Tourism Association. A grant from the New York State Pollution Prevention Institute then made it possible to eco-rate forty-three New York pilot members.

"Green tourism is good for our economy and good for our environment," states New York Governor David A. Paterson. "The new Green Lodging Certification program will certify and assist New York's hoteliers in the transition to environmental sustainability, helping

them remain competitive and protect our environment at the same time. I am pleased that New York will soon have forty-three new green hotels, providing travelers with green lodging options while they enjoy all of the natural beauty and tourism opportunities that New York has to offer."

The road ahead looks bright for the Audubon Green Leaf™ Eco-Rating Program and many of the veteran members are now realizing a significant marketing advantage after being eco-rated. One such member, the Golden Arrow Lakeside Resort (Lake Placid, NY) has worked hard to continually improve since its first designation of three green leaves and has reaped the rewards of guest and staff satisfaction, lower energy costs, and enormous marketing advantage in an international town.

Earlier this year, all the hard work paid off with a five green leaf designation. Golden Arrow Lakeside Resort is now one of only two to achieve this designation throughout the world.

"Audubon International made it possible for us to make our resort as sustainable as it is. In 2005, when we began this journey, Audubon was the only eco-rating program for hotels that we could find that actually came to the facility and helped ascertain the best way to operate your business sustainably and profitably at the same time. The program has been invaluable to us," states Jenn Holderied, Director of Marketing and Owner of the Golden Arrow Lakeside Resort. In addition to installing a green roof and retro-

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Dear Members and Supporters,

I had a newly-born fawn bedded down in the edge of the tree line near my house recently. My children could get close enough to pet it. (We didn't.) The looks on their faces were great—the pure joy of experiencing wildlife up-close. Sometimes it's easy to misplace the connection between a golf course best management practice or an innovative environmental practice at a hotel (as highlighted in this issue) and something like that fawn. But they are all connected. A great wildlife experience for a young child is connected to the steps you are taking as an Audubon International program member. Please know we appreciate it (and my kids do too). Keep up the stewardship.

Best,



Kevin Fletcher
Executive Director

In this issue...



A bald eagle observed hovering over a pied-billed grebe who was swimming in a storage lake at the newly built Kingfisher Golf Club at The Villages of Sumter. The eagle would attempt to grab the grebe, also known as "hell divers," before it would dive under the water only to pop up in another area of the lake. The eagle continued his chase for about twenty minutes before landing to rest at the edge of the lake. While catching its breath, the eagle was attacked by boat-tailed grackles and a red-tailed hawk causing it to retreat to the nearest tree. "The last we saw of the eagle, it was flying away with a small flock of birds flying after," relays Nancy Richardson, Audubon Signature Program Director.

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Audubon International Takes Initiative

In 2008, Audubon International launched a new strategy to affect change in four specific areas. Each of these Initiatives will provide a focus for our work in the years to come.

Community Engagement, Planning, and Action

Read an article on failed sustainable community efforts—and why initial outreach and education is so important.

www.SustainableCommunityInitiative.com

Eco-Design and Development

Take a look at Lessons from Fifteen Years of Eco-Development by Audubon International.

www.EcoDevelopmentInitiative.com

Environmental Stewardship and Management

Learn about a great “produce and buy local” effort in North Carolina entitled “From Dirt to Shirt.”

www.EcoManagementInitiative.com

Golf and the Environment

Is golf really doing a good job protecting the environment? Read the article and find out.

www.GolfandEnvironment.org



Shelly Foy Leaves the Board of Directors

After serving for over fifteen years culminating with her role as Vice President, Shelly Foy has decided to step off Audubon International's Board of Directors. Since 1991, Shelly Foy has advocated for the ACSP for Golf Courses and all of Audubon International's programs through her work for the USGA Green Section Florida Region. She spearheaded Hobe Sound Elementary School's certification in the School Program; and has been one of the driving forces behind Audubon International's member recruitment and support throughout the Treasure Coast area of Florida. “The make-up of the current Board is strong, affording me with a good opportunity to make room for a new voice on the Board. I will certainly continue to support Audubon International and it's programs in my community and throughout Florida in other ways.” Audubon International's Board will begin a process to replace Ms. Foy this summer. “I want to sincerely thank Shelly for her time and devotion to our organization,” states Ronald G. Dodson, President and Founder. “Every successful nonprofit relies on volunteers, and we sincerely thank Shelly for her devoted and passionate support of Audubon International through her Board service.”

Fletcher Elected to Leadership Positions for Partner Groups

Audubon International's Executive Director, Kevin A. Fletcher, Ph.D., has been elected Vice Chair of Communications for the American Planning Association's Small Town and Rural Communities (STaR) Division and as Interim Board Member for the newly-created Stewardship Action Council (SAC)—formerly, the Performance Track Participants Association. “Both of these organizations play an important role in meeting the success of our Community Initiative and Environmental Stewardship Initiative, respectively,” states Fletcher. “Through programming, development work, and advocacy, we'll be able to help foster change in cooperation with these organizations.”

Audubon Signature Program Announces Pricing and Process Changes

As a part of the restructuring of the Audubon Signature and Classic Programs, Audubon International is pleased to announce a reduction in registration fees for new members (now \$7,500) and a visiting site verification process which will also reduce the overall costs of program membership. Specifically, site visit frequency from Audubon International staff will be reduced while at the same time new recertification requirements (such as increased reporting and review by a local expert) will be instituted. For more information, contact Nancy Richardson at (270) 869-9419 or nrichardson@auduboninternational.org.

Free Webinars!

To celebrate the mid-way point of the United Nation's Decade of Education for Sustainable Development, through-out 2010 Audubon International will be hosting a series of training webinars designed to help people become better stewards of the environment where they live, work, and play. Registration is free, but space is limited.

Please visit: www.auduboninternational.org/webinars for more information.

Upcoming webinars include:

- **Environmental Monitoring**

Date: Thursday, July 15,
1:30–2:00 p.m. (Eastern Time)

Description: An environmental monitoring program is a valuable way of getting feedback about the effectiveness of your best management practices as well as increase involvement in stewardship projects. This presentation will discuss the different approaches to monitoring, from chemical analysis to fun activities involving youth, record keeping, interpreting results, and getting the word out.

- **Habitat Protection at Resorts**

Date: Tuesday, July 20,
1:30–2:00 p.m. (Eastern Time)

Description: Maintaining and protecting habitat is possible at your resort. Through case studies and other resources, we will show you how to maintain terrain within your existing property through land preservation to protect threatened or endangered species.

Future webinars include:

- **The ACSP as an Environmental Management System for Parks and Recreation**

- **Creating a Sense of Place in Your Community**

- **Conducting a Wildlife Inventory**

- **Greening Your Maintenance Facility on the Cheap**

- **Long-term Community Planning**

- **In the IPM Toolbox—The Audubon Cooperative Sanctuary Program**

- **Monitoring Water Quality**

- **Natural Resources and Your Neighborhood**

- **Outreach and Education**

- **Protecting Watersheds at Resorts**

Audubon International Prepares to Celebrate 20 Years of the ACSP

The Audubon Cooperative Sanctuary Program (ACSP) and ACSP for Golf Courses will be twenty years old in 2011. To help us celebrate, we're inviting members to send us those 5, 10, 15, and yes, maybe even 20 year old photographs of the work you've done through these programs.

Please send us digital images that are at least 4' x 6' and at least 300 dpi. Images may be sent to jconway@auduboninternational.org.

These photographs will be used throughout the next 18 months in print and on the Internet to help us tell your environmental story and the story of this two-decade old program. We appreciate you participation!

A Bright Road Ahead

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fitting the property with green technology, Jenn and her staff have also focused on some green initiatives that go beyond the resort. Jenn has provided us with a number of activities in which she and the resort have been involved:

E-Sweep: "In conjunction with Earth Day, we began a community wide E-Sweep. We invited local businesses and home owners to bring all of their E-Waste to the Golden Arrow in the days preceding Earth Day. Then, on Earth Day, we transported it to a recycling plant in Vermont to ensure that it did not end up in a landfill, but instead was properly recycled or disposed of. We collected over 2.5 tons of E-Waste!"

Formation of a Green Tourism Council for NY State: "We have been diligently working with our state officials, including the Department of Environmental Conservation, the Environmental Protection Agency, New York State Energy Research and Development Authority, I LOVE NY, the Governor's office in conjunction with New York State Hospitality and Tourism Association toward the creation of a Green Tourism Council for New York State. Currently there is not a centralized resource for businesses in the tourism industry to turn to when looking for help on how to "green" their business. One of the goals of this council would be to achieve that and make it easy for businesses to operate more sustainably. We are pleased to report that we have had amazing success and are working hard with these agencies on the formation of this council."

Heat Recovery System: "We have installed a heat recovery system in three of the four hot water systems in the resort. This is a bit technical, but basically if our town water comes into the building at 40 degrees Fahrenheit, this system heats the water anywhere



Jenn Holderied in front of the main section of GreenGrid® green roof system at the Golden Arrow Lakeside Resort. The resort was able to install 3,400 square feet of green roof, which improves air quality, reduces dust and storm runoff, provides insulation during the winter, and cools the air in the summer.

from 10-20 degrees by utilizing the heat from other water sources. That means the water is 10-20 degrees warmer before we need to use energy to heat it.”

Incentive Program for

Employees: “We encourage our employees to conserve in their private lives as well as at the Resort. In 2008, we began a transportation incentive program. Any employee who lives more than 10 miles away and carpools to work at least four days per week receives a gas stipend once a month. Employees who live within the 10 mile radius and either walk or bike to work have their lunch on us that day.

Since we went non-smoking in 2002, we have offered a smoking cessation program to any member of our Golden Arrow Lakeside Resort family who chooses to quit smoking. The plan is a simple one. The employee decides which method of smoking cessation would work best for them, and we cover the cost. For us, there is no more precious resource than our staff. We cannot do enough to protect them.”

Retiring 132 tons of Carbon

Credits: “We accomplished this by working jointly with the Adirondack Council and their Cool Park/Healthy Planet Carbon Retirement Program. The program was created by the Adirondack Council to prevent thousands of tons of carbon dioxide from being emitted by power plants from Maine to Delaware. The Golden Arrow committed to retire enough carbon credits to offset the total number of occupied room nights for the month of December 2008. We permanently retired 132 tons, which was almost one third more than our original goal. The objective was to make guests and the public understand that they can really help make a difference.”

Of these five initiatives, Jenn believes the formation of the Green Tourism Council for New York State will have the biggest impact. The certification process itself is enough to motivate, but having the process be something the state is endorsing and will be promoting via I Love NY is going to pay huge marketing dividends. ●



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When you register with iGive, a portion of any online purchase you make at a participating store (over 700 vendors) is donated to your organization or cause. Since so many of us shop online anyway, this is an easy, no-cost way to contribute to good causes. Simply visit www.igive.com/audubon to designate Audubon International as the cause you would like to support. To get credit for your cause, start online shopping at the iGive website. Or, install the iGive toolbar with donation tracker to ensure your cause gets credit for all qualified purchases automatically. This is an easy way to support our efforts. We hope you will register today!

Fred Realbuto on the Audubon Green Leaf™ Eco-Rating

Between December 2009 and March 2010, Fred Realbuto traveled to 28 hotels and bed and breakfasts throughout New York State, visiting some of the “freshman class” of the New York State Green Hospitality Pilot initiative, featuring the Audubon International Green Leaf™ Eco-rating Program. Below are some of his impressions based on these travels.

In addition to spending close to four months on the road, Fred took nearly 400 photographs highlighting his adventures. We've included a sample of some of the people and initiatives that were involved in the pilot phase of the Green Leaf™ Eco-rating Program in New York State, including samples of outreach and education, recycling, reducing packaging, and more.

Q: You drove throughout New York State in the dead of winter to conduct nearly 30 site visits at lodging properties as a part of this pilot. How was the overall experience of seeing all of those different hotels, motels, inns and B&Bs?

A: I visited 28 out of the 42 pilot properties and I traveled approximately 4,500 miles during three month period. The properties ranged from a three room bed and breakfast in an old armory in Amsterdam, NY, to a 1,300 room luxury hotel in Manhattan. My experiences were as diverse as the properties I visited. Since many of my visits were conducted during January and February, which are not peak times for the hotel industry, in most cases, the properties were not at full occupancy. This was actually a blessing because I was able to spend great deal of time with general managers and engineering, housekeeping, and food services.

Q: What were a few of the more interesting and innovative things you saw hoteliers already doing to minimize their environmental impact?

A: Perhaps the single most impressive environmental action that I witnessed was the program at the Grand Hyatt New York in New York City, which employs over 1,000 people. They created a beaded bracelet made from corn that was a dull brown when it was given to the employees who made a commitment to environmental excellence, and over time it would become a lustrous black. Employees wore these bracelets proudly signifying their commitment to good environmental practices and awareness. For overall environmental commitment, the Mohonk Mountain House stood out. They were able to document 140 years of environmental practices. Owned by the same family for the entire life of the property, they



The Mohonk Mountain House, New Paltz, NY Pictured from left to right receiving their four green leaf rating are Brad Dow, Nina Smiley, Jackie Appeldorn, Bert Smiley from the Mohonk Mountain House, and Fred Realbuto from Audubon International.

recycled, composted, and reused nearly everything. For example, when they constructed their new geothermal heated spa, they ground the stone that was taken out to build the foundation.



The Grand Hyatt New York in Manhattan The Grand Hyatt New York in Manhattan disproves the theory that you can't have recycling bins in upscale settings. This recycling bin is in their hotel lobby.



The “green board” at the Grand Hyatt New York in Manhattan It's no coincidence that the grand Hyatt hotel received the highest point score of any property in the pilot program.



Glen Lodge Bed and Breakfast in Warrensburg, NY Amy Aimeezaert from the Glen Lodge Bed and Breakfast shows off her environmentally friendly cleaning products made by BabyGanics.

Program



Crowne Plaza Albany, Albany, NY Fred Realbuto (far right) conducting an exit interview following the verifiers' site review with Gary Supply, (left) Chief Engineer at the Crowne Plaza Albany, and Todd Reichelt, General Manager of the Crowne Plaza Albany.



Glen Lodge, Warrensburg, NY Bulk amenity shower dispenser in use at the Glen Lodge Bed and Breakfast. Surprisingly, this hotel was one of only two in the pilot program using bulk amenity dispensers.



Shaheen's Hotel, Tupper Lake, NY This sign was posted in all 30 rooms in the hotel. In addition, Shaheen's was the only hotel I visited that recycled their bar soap.

Q: What were the most common and perhaps easiest environmental improvements or actions that were not being done at the properties you visited?

A: By far the easiest and most economical practice that was not in evidence throughout my visits was the use of bulk amenities. Out of 28 properties visited, only one used bulk amenities in their showers. In fact, only a few recycled the single use amenity containers.

Q: What has been the most common advice you gave to Audubon Green Leaf™ Program members to help them with their next steps and ways to continue to improve their overall environmental performance?

A: As mentioned above, changing over to the use of bulk amenities. In addition, compact fluorescent lighting is becoming more available and economical. Dimmable lighting has been a stumbling block for properties in the past, but there are now dimmable lights that are becoming more affordable. Wireless programmable thermostats are also becoming more reasonably priced and have been shown to save a great deal of money and energy.

Q: Explain the value of the relationship with the pilot phase partners—NYSHTA (New York State Hospitality & Tourism Association), P2I (Pollution Prevention Institute), and New York State DEC (Department of Environmental Conservation) to the overall results of the pilot.

A: Having Dan Murphy and Jan Chesterton from NYSHTA as a resource for their knowledge of the hotel industry in general, and properties I visited specifically, was invaluable. Not only did Tracy Freas from P2I conduct 14 of the site visits, she also acted as a sounding board and resource for questions that arose as we conducted our visits. Being selected by DEC as the program of choice for the hotel pilot gave the Audubon Green Leaf™ Program added credibility for those who may not have been familiar with the program.

Q: Based on your three-month tour of New York lodging facilities, what is your overall impression of the state of lodging facility operations, and, more specifically, the dedication and interest in environmental improvements at those sites by the staff themselves?

A: They are getting it. The awareness that hoteliers and consumers are looking for greener alternatives was almost universal. They are also keenly aware that making changes and investing now makes good "enviro-economic" sense for the future.

Q: What did you observe as the number one obstacle for lodging facilities that are interested in "going green" but just can't seem to move ahead effectively?

A: Unfortunately, all of my visits took place during one of the worst economic downturns that the hotel industry has seen in the last 30 years. Occupancy rates were down by up to 30% over the same period two years ago. The fact that so many hotels expressed an interest in the program during this economic downturn was, and is, inspiring. ●



Sheridan Syracuse University Hotel and Conference Center, Syracuse, NY This "Green Board" was featured prominently in the main lobby of the Sheridan Hotel.

Sheraton Seattle Hotel— A Leader in Green

The Sheraton Seattle has a long-standing history of supporting environmentally friendly programs. The hotel was an early adopter of a voluntary recycling program for more than 15 years. Over the years, they have implemented a number of programs and building enhancements that have furthered environmental conservation.

In 2008, the Sheraton Seattle renewed their commitment to the environment with a comprehensive Green Strategy that focused on three major areas: building infrastructure and physical enhancements, associate awareness and involvement, and guest participation. In addition to numerous initiatives regarding water conservation, energy efficiency, and waste management, the Sheraton Seattle has excelled at reaching out to and educating hotel guests, staff, and vendors to further enhance not only a corporate environmental ethic, but an environmental message that everyone can take home.

Giving Guests the Option to Go Green: “Make a Green Choice” Program

Like many hotels, each Sheraton guest room has an opt-in linen and towel replacement program that reduces the amount of chlorine, detergents, and water used in the cleaning process. Sheraton Seattle guests are also presented with an additional option: They may choose to decline housekeeping service (and the cleaning chemicals and energy involved in the process) by hanging a “Make a Green Choice” card on the outside of their guest room door before 2 am. In return for going green, guests receive a \$5.00 gift card or 500 Starwood Preferred Guest points for each day they participate. The gift card can be used for In-Room-Dining, at the In Short Order coffee bar, the Daily Grill Restaurant or the Lobby Lounge Bar.

Associates Promoting and Practicing Green Efforts

Sheraton Seattle’s “Green Team” is a cross-departmental group that promotes and advocates new green practices in the hotel. Formed in 2008, the team educates associates on ways to be green at work and at home by inviting all associates to participate in environmentally-focused charitable organizations and community events that promote cleaning up the Puget Sound and surrounding bodies of water. Signage throughout the hotel that includes visual images to educate associates on how to be “green,” and all employees are encouraged to choose eco-friendly modes of transportation by offering discounted Seattle Metro passes. The “Green Team” has also transformed the employee cafeteria into a nearly 100% compostable environment by providing compost bins for leftover food and used napkins. The cafeteria no longer distributes individually packaged items or disposable service ware. Each month the Sheraton family diverts nearly 7 tons of compost.

Make your Meeting Green

The Sheraton Seattle presents meeting planners with a number of green meeting options.

You can encourage your attendees to participate in the Sheraton “green” movement by providing them with a custom logo water bottle during registration. In addition, water bubblers can be set in meeting rooms and pre-function areas for attendees to fill up their water bottles. The Sheraton Seattle offers services such as recycling receptacles for paper, plastic, glass, and name badges. Offering “green” menus that emphasize local and organic products (thus reducing waste associated with long-haul shipping), including serving fresh baked cookies instead of packaged candy bars and serving guests Starbucks Organic Blend coffee.



“We are proud of the Sheraton Seattle’s commitment to environmental excellence and we continuously strive to improve upon our existing efforts to go green,” said Matthieu Van Der Peet, general manager of the Sheraton Seattle. “The Audubon Green Leaf™ Eco-Rating Program allows us to identify the success of those green efforts and to communicate the results to our guests.”

Conservation

The Sheraton Seattle retrofitted its 25 year old tower with the latest in energy efficient lighting and motion-sensors. The hotel also features a Building Automation System that allows for a more energy efficient operation of the hotel’s HVAC system. As a result, the Sheraton Seattle achieved a 21% total reduction in its Energy Index for 2008, equating to a utility reduction of \$550,000.

In order to limit water use, 1.5gpm sink faucet aerators, 2.5gpm shower heads, and low flow toilets (1.6 gallons per flush) are used in all guest rooms. A Modular Advance Concept (MAC) system creates instantaneous hot water via a steam-to-water heat exchanger in order to avoid constant heating of hot water, saving over 480,000 Kwh of electricity annually.

The Sheraton Seattle’s Continued Environmental Commitment

The Sheraton Seattle has demonstrated its environmental commitment through a corporate environmental ethic and through innovative programs designed to involve their staff, guests, and vendors. Their involvement in Audubon International’s Green Leaf™ Eco-Rating Program is one more example of their continuing dedication to environmental education and conservation now and into the future. In 2010, the Sheraton Seattle was awarded an eco-rating of four Green Leafs. ●

Fact Sheet

AUDUBON
INTERNATIONAL



EDUCATIONAL FACT SHEET

Bed Bugs 101 for Hotels

Jody Gangloff-Kaufmann, Ph.D.

Community IPM Program—NY State IPM Program

Are you concerned about the increasing occurrence of bed bugs in the United States and how this might affect your resort or hotel? It's not a bad idea to be concerned, and, in fact, it's probably a good idea to be proactive about this insect in order to reduce the economic risks that hotels may face, such as replacing furniture, high costs of bed bug eradication, lost revenues from empty rooms, bad publicity, and even lawsuits. The key to preventing and managing the common bed bug (*Cimex lectularius*) is to understand the bed bug. And it is especially important in hotels for housekeeping staff to have the skills to identify a bed bug and their evidence, because housekeeping staff will be your first line of defense.

Bed Bug Basics

Many things are mistakenly identified as bed bugs, including dust or dirt, plant parts, and other insects. Carpet beetles and cockroaches resemble bed bugs, so it is important to have your suspected item identified by a knowledgeable person. Confirm the pest. Bed bugs vary in size from about a poppy seed to an apple seed, depending on their age. However they hide very well in crevices close to where the host sleeps and easily avoid detection. Often we must rely on the evidence they leave behind. Fecal spots are the most common evidence of bed bugs, and frequently the first sign of a

problem, aside from bites. Spots can be tan to blackish-brown; they may be raised bumps on impermeable surfaces (such as wood) or resemble magic marker stains on fabric. They will be clustered in places where several or many bed bugs "hang out" and eggs are likely to be found here, too. The other evidence of bed bugs is shed skins. All insects molt as they grow, and bed bugs must feed to grow. After a blood meal, a bed bug will defecate, eventually shedding the skin to grow into the next life stage.

Bed bugs do not carry or spread disease, but the direct effect they have on the physical and mental well-being of those affected is significant. Bed bugs are also not limited to a certain segment of society. People of all



socio-economic levels can and do get bed bugs. Remember that it would be nearly impossible to pinpoint how a problem began or who brought bed bugs in. Don't bother with the blame game. Have a plan in place to deal with the inevitable appearance of bed bugs.

How do they spread?

Bed bugs are a socially transmitted pest, meaning they are transported from place to place in some way by people. They can be carried along on items, such as luggage, books, or used furniture, or they can be induced to migrate by pesticides, overcrowding, or when the person upon whom they feed avoids the infested sleeping area. In the early days of the resurgence of

continued on reverse



Bed bugs vary in size from about a poppy seed to an apple seed, depending on their age.

bed bugs, hotels were among the first sites affected, although bed bugs appeared in the United States in apartment buildings and other places occasionally before then. To accurately say where bed bugs came from is a guess at best. Instead, we must acknowledge that bed bugs are here for now, difficult to deal with, and require unprecedented measures to eradicate, including cooperation and communication.

What can be done?

The biggest mistake that a hotel operator or any other facility manager can make is to ignore, deny, or delay response to a bed bug infestation. Early detection and treatment (as with many other things) help ensure success. A festering bed bug population will get out of control quickly and once they get into walls or turn up in multiple units, control can be far more challenging. *Bottom line: React swiftly to complaints and treat immediately and thoroughly.*

Inspection is a top priority for bed bug management, especially in hotels, and this can be done by housekeepers. Educating your work force may be the single most important insurance policy you can get for this pest. As housekeeping changes bedding, they should be expected to look for fecal

spots on mattresses and linens. They should be aware of exactly what bed bug adults and nymphs look like, and they should collect any suspicious objects, alive or not, for inspection by a pro, as well as reporting any signs they may have seen. Traps have been developed to capture bed bugs using human-like cues, CO₂, heat and pheromones. These may be useful for confirmation of a problem or that treatment was successful in hotel rooms that are unoccupied. Similarly, a very useful bed bug-trapping dish has come along that captures bed bugs coming or going, and kills them without chemicals. These sorts of devices should be used in monitoring potential and real problems.

Mattress encasements are a highly recommended addition to any bed but particularly useful in hotels. While they do not repel or prevent bed bugs, they simplify the habitat and make inspection and treatment much easier, while protecting the mattress and box spring. Bed bugs are forced to remain on the surface and can be more easily found and killed.

Treatment for bed bugs is a constantly evolving process as new technologies come to market. Old standby pesticides play a role but not as much as they have in the past. Bed bugs display a significant level of tolerance to pyrethroids, the most common type of chemical labeled for

bed bugs. However dusts have long-lasting desiccant effect and are great for placing in voids between rooms and behind switch plates. Steam and a cold system called Cryonite involve specialized equipment that many companies use. Steam is 100% effective when applied thoroughly. It cooks the eggs as well as the bugs! Cryonite flash freezes bugs and eggs and is useful for delicate objects, such as oil paintings and other fine art. Thermal remediation (dry heat) is a newcomer to the game, and many heat systems have been modified to serve the needs of bed bug customers. Heat is 100% effective if applied correctly, and this involves bringing the temperature of a room or container up to about 135°F and holding it there for several hours. Bed bugs will die at about 115°F. Canine scent detection—bed bug sniffing dogs—can be hired to locate bed bugs or to confirm that a problem has been solved.

Bed bugs are a pest unlike any other and they may be here to stay. It is essential for hotel managers to be proactive because bed bugs can be brought in by anyone on any given day. Staff awareness will lead to early detection and faster resolution of bed bug problems. An integrated approach to controlling them, which includes routine inspection, cleaning, and innovative pest control tools, will ensure successful bed bug management.



Bed bug with fecal stains.

For more information:

NY State IPM Program:
www.nysipm.cornell.edu;
 go to What's Bugging You
 and select "bed bugs"

University of Kentucky bed bug site:
<http://www.ca.uky.edu/entomology/entfacts/ef636.asp>

Bedbugger blog site:
www.bedbugger.com

For hotels: Bed Bug Code of Practice
 for Australia: http://medent.usyd.edu.au/bedbug/bedbug_cop.htm

Kishwaukee College Horticulture Department Assists Earth Day in the Parks

The Horticulture Department at Kishwaukee College in Illinois is one of two community colleges in the state to assist with *Earth Day in the Parks*, a natural resources stewardship program for students of grades kindergarten through 12 sponsored by the Illinois Department of Natural Resources (IDNR).

The Kishwaukee College horticulture department has a long history of contributing to a variety of projects across the area, including landscaping at Pay It Forward House in Sycamore, Jane Addams Homestead in Cedarville, and Klehm Arboretum in Rockford. Pete Leuzinger, Horticulture Instructor, was contacted in summer 2009 by Valerie Keener, Administrator of the Education Section of the IDNR about Kishwaukee College participation. "Earth Day in the Parks allows students to get their hands dirty and get in touch with nature," said Valerie Keener. "The children of today will be the resource managers of the future. It is vital that we provide them with opportunities to learn about and experience the natural resources of our state." Kishwaukee College horticulture students along with faculty members Matt Girman and Pete Leuzinger tended over 2,000 native plants in the College's greenhouses since last fall.

Participating in the IDNR project to grow natives to be planted in parks across the state seemed a natural fit. Leuzinger said, "The Kishwaukee College campus is one of only a handful of college campuses to be designated as a Certified Audubon Cooperative Sanctuary. Participating in the parks' project fits in with our Audubon International mission—to reach out to the community." Working with an array of native plants is also nothing new to the horticulture department. The College's campus



Pictured left to right, Pete Leuzinger and Matt Girman, instructors with the Kishwaukee College Horticulture Department, in a campus greenhouse with several of the flats of native plants the department has planted and nurtured through the fall and winter for the Illinois Department of Natural Resources for the Earth Day in the Parks Program.

already has seven acres of natural prairie planted and maintained by the horticulture faculty and students.

The seeds were sent to the College in the fall and 32 flats were readied for the appropriate planting time. Matt Girman, greenhouse instructor, explained, "The plants each had specific requirements to ensure proper growth. Some needed cold storage or scarification to begin growth." Under Girman and Leuzinger, students have nurtured prairie grasses and forbs (flowering plants) that are now ready to be planted in state parks. The flats in the Kishwaukee College greenhouses include coneflower, prairie smoke, asters, goldenrod, and many other plants native to the region.

The native prairie plants raised at Kishwaukee College were used to

expand a prairie restoration at Lake Le-Aqua-Na State Park in Lena. Students, teachers and volunteers from Hiawatha Junior High School in Kirkland planted the seedlings.

"The staff and students of Kishwaukee College have helped us to reduce costs for the event by raising the plants for us," Keener stated, "but more importantly, they are learning about the value of native plants and how to grow them. The people at Kishwaukee College have been very positive and wonderful to work with."

For more information on the Horticulture Department at Kishwaukee College, contact the Career Technologies division at Kishwaukee College at 815-825-2086, ext. 2830 or visit the Kishwaukee College website at www.kishwaukeecollege.edu. ●



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

Printing: Benchmark Printing,
Schenectady, NY

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