Creature feature

Eastern Box Turtles (Terrapene carolina)

By Rob Thorn

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he wasn't there when I looked a few minutes ago. But when I looked back along the road, there was the unmistakable little squat lump lumbering across the asphalt. I did a double take, because this was Big Run, a small park surrounded by the suburban sprawl of southwest Columbus. I run across these personable little turtles several times a year, but usually in more rural, forested locations. Even under these conditions, however, I couldn't keep from smiling as I picked up the little box turtle and ushered her across the road. There's something about these animals that everybody likes.

Eastern Box Turtles, Terrapene carolina, are the common turtle for people to find away from water here in central Ohio. 'Terrapene' is just another name for little turtle, while 'carolina' is an old descriptor for the eastern U.S.. Their closest relative is the Western Box Turtle (T. ornata), a very similar little beast found primarily in tallgrass prairie areas from Illinois west to Kansas and Texas. There are several species of Asian 'Box Turtles' that can be found in pet shops, but they are not very close relatives. Also, box turtles are not closely related to the Gopher tortoises (genus Gopherus) that live in the deserts of the southwest and the pine scrub of Florida.

Characteristics. Box Turtles are very terrestrial for turtles, but they still share most of the major features of this group of ancient reptiles. They have a body encased in a 2-part shell made of a domed dorsal carapace linked to a flattened ventral plastron. The shell is made of the same dense bone found in our skulls, so you could think of them as 'walking skulls'. Just as with our skulls, there's skin on the outside of the shell, and this skin both has touch receptors and forms enlarged scales called scutes. Box turtles are unusual among turtles in having hinges on the plastron which enable them to pull the lips of the shell together after they have pulled in their head and legs. This makes them into bony little fortresses that can withstand the bites of curious raccoons and coyotes, but doesn't help much against the crushing force of automobiles.

The small domed carapace is very distinctive for box turtles; it's very unlike the sleek, flattened carapace of most other midwest turtles. Box turtles usually have symmetrical blotches of yellow, orange, and/or tan on a dark gray-brown background on the shell. The pattern of blotches is usually unique for each turtle, so the best way to ID an individual is to take a picture of the shell pattern. In long-term studies, scientists often build up a 'photo gallery' of the box turtles in a specific locale to identify them.

For their size, box turtles are heavier than other turtles, since they count on their shell armor, rather then a speedy escape, to protect them. The legs are rather short and arched, and have short claws at the ends of the stubby ‘toes’. They don't have the streamlined shell or webbed toes of aquatic turtles, nor are they very good at breathing through their leg and throat skin like those turtles. While they favor high humidity and wet ground, they can't stand prolonged immersion and would probably drown if thrown into a deep pond or river.

The head is rather blunt, ending in a mouth that has a sharp cutting edge on the lips that give it a beaked appearance. They use their beak to snip worms, slugs, insects, carrion, berries, fruit, and some herbs into bite-sized pieces, which are then swallowed. A powerful stomach does most of their 'chewing'. Younger, smaller turtles are more aggressive about pursuing animal food, while the older ones become more vegetarian. Being reptiles, they can adjust their metabolism to match the weather, so they can pass cooler days without eating, provided that they don't move around much. In the northern parts of their range, like Ohio, Box Turtles tend to 'hibernate' during the cold months, from roughly November through early April. They find a soft ground area or leaf litter pile or old stump, dig themselves down into it about 4-6 inches, and then become torpid as the temperature drops.

Range & Habitat. Box Turtles like deciduous forests, and spend most of their lives grubbing around in the leaf litter and ground herbs of this type of forest. They reach their northern limit about where this forest starts to peter out: a line running roughly from Massachusetts through southern New York, Ohio, central Michigan, Illinois, and Iowa out partway into the Great Plains. In areas of the Great Plains, E. Box Turtles take the forested river bottoms, while W. Box Turtles take the upland prairies. We're at the northern edge of their range here in Ohio, so they're not as com-

See Box turtles, page 12
GIAC announces new board leadership, new staff

With the retirement of our first board chair Phil Urban, an opportunity has been created for new leadership on the Grange Insurance Audubon Center Stewardship Board. While certainly not new to the board, Sandy Nessing has embraced her new leadership role and has hit the ground running to ensure the Center’s success.

Nessing is the Director, Sustainability & ESH Strategy & Design for American Electric Power. Nessing has responsibility for managing sustainability strategy, corporate stakeholder engagement and annual performance reporting for American Electric Power (AEP), as well as strategic projects within the Environment, Safety & Health and Facilities organization. She works closely with executives and business units to identify, evaluate, and coordinate strategic opportunities to reduce environmental impacts, protect people and support public policy and regulatory strategies. In addition, she manages special projects for AEP’s Chairman. She wrote and published AEP’s first Corporate Sustainability Report in 2007 and in 2010 published AEP’s first integrated Corporate Accountability Report, a combination of the annual sustainability report and Annual Report to Shareholders.

Prior to joining AEP in February 2006, she was manager of Corporate Communications for Yankee Gas Services Company, part of the Northeast Utilities System and Connecticut’s largest natural gas distribution company. She was responsible for all internal and external communications, including managing the company’s communications strategy for compliance with new federal gas pipeline safety rules and community outreach to support construction of a liquefied natural gas (LNG) storage facility.

Before her work in the utility industry, she was senior public information specialist for the Saint Raphael Healthcare System in New Haven, Conn. and spent 12 years as a broadcast journalist in Connecticut, holding positions that included radio news director, news anchor and reporter. She was elected the first female chairperson of the Connecticut Associated Press Broadcaster’s Association and received an AP Managing Editor’s citation for breaking the Unabomber Editor’s citation for breaking the Unabomber

See leadership, page 11
To schedule a program contact Doreen Whitley or to work with our staff to create customized program by email dwhitley@audubon.org or by phone 614-545-5481. Call for tuition rates.

School Programs  
2010-2011 Academic Year  
Conservation Classroom  
The center is still enlisting schools to participate in our customized year long field study program, Conservation Classroom. Our educators create an individualized education plan (IEP) for your school to address student’s academic weaknesses. The program consists of 12 four hour field studies that utilize inquiry and project based learning to enforce interdisciplinary concepts based on the Ohio Education State Standards and has proven to increase student proficiency in science on the Ohio Academic Achievement Test. Grades K-8. Call for tuition rates.

Focus in the Field  
Join us for a one day field study of your choice tailored to suit grade levels, academic needs, and designed to meet Ohio Education State Standards. Field studies are four hours in length and can vary from investigations on weather, invasive species, plant structure, non-renewable and renewable resources, rocks and weathering, seasons and life cycles or work with our staff to create a customized program. Grades K-8. Call for tuition rates.

Conservation On Location  
High school students assist center staff in collecting spatial data for analysis in a Geographic Information System (GIS). Students earn one half credit in life science and one half credit in technology. Grades 9-12.

Small Wonders  
Exploring nature during the formative years aids in physical, social, emotional, and intellectual development. Get outside with your pre school group for a 1 hour trip or a series of six 1 hour trips with an Audubon educator trained to share the outdoors with young ones. This program focuses on developing observation skills, using the five senses, and learning to identify patterns and structure in nature. Grades Pre-K. This program is offered year round. Call for tuition rates.

Community Programs  
Safe Neighborhoods Safe Shrubs  
Amur Honeysuckle is not native to Ohio and is harmful to wildlife due to its ability to crowd out native shrubs. We have had success removing this plant and replacing it with new shrubs at the Grange Insurance Audubon Center. Since its removal there has been a decrease in crime in the area. We hope to make your neighborhood safer for humans and wildlife by assisting you in removing this plant.

If you are a Columbus resident and have Amur Honeysuckle in your backyard you are eligible to borrow tools to remove the plant and receive as many native plants as you like to replace the honeysuckle. Attend a Workshop on Amur Honeysuckle and native plant landscaping on Sunday July 25th 1:00 PM or Sunday August 29th 2:00 PM. Or make an appointment with Doreen Whitley dwhitley@audubon.org or 614-545-5481

Birding for A Better Columbus  
Your help is needed to assist GIAC staff in conducting two studies with the aim of measuring avian response to the recent habitat restoration within the Scioto Audubon Metro Park. Birders of all levels are welcome, we will match you with a skilled birder to help collect data on point counts. Free training and public point counts take place in July and August every year.

See programs, page 10

Sign up now for Audubon Adventure Camp

**Camp is still in session! One-Week Sessions for Campers going into Grades 1-2 and Grades 3-5**  
($200/wk members or $245 non-members)

**July 5 - 9: Animal Trackers** – Uncover the wonderful mysteries of the animals that make their homes in the forest. Explore the trails while searching for birds, turtles, bugs, fish, and mammals. Discover the connections between all the living things in the forest.

**July 12 - 16: Audubon Artists** – Explore habitats and see wildlife. Campers will be painting murals, singing songs, pressing wildflowers, creating field guides, writing poems and performing the arts.

**July 19 - 23: Eco-Kids** – Learn outdoor safety and basic outdoor skills such as making a shelter and more. Campers will be exploring habitats and wildlife, learning about conservation and how to live more lightly on our earth.

**July 26 - 30: Amazing Flyers** – Observe our wild winged friends that call this Important Bird Area (IBA) their home. Campers will do experiments and explore everything that flies through the park.

**Aug 2 - 6: Animal Trackers** – Uncover the wonderful mysteries of the animals that make their homes in the forest. Explore the trails while searching for birds, turtles, bugs, fish, and mammals. Discover the connections between all the living things in the forest.

**Aug 9 - 13: Audubon Artists** – Explore habitats and see wildlife. Campers will be painting murals, singing songs, pressing wildflowers, creating field guides, writing poems and exploring the performing arts.

**Aug 16 - 20: Animal Trackers** – Uncover the wonderful mysteries of the animals that make their homes in the forest. Explore the trails while searching for birds, turtles, bugs, fish, and mammals. Discover the connections between all the living things in the forest.

Spaces are filling up fast so register now at grange.audubon.org/adventureCamp2010.html or call (614) 545-5475.
Field trips

**Wednesday walks at Scioto-Audubon**

**Wednesdays, July 7 and August 4, 7:30 a.m.**

**Leaders:** Paul Gledhill and/or Heather Raymond

Walks are always held the first Wednesday of the month. Join Paul Gledhill and Heather Raymond for a short walk around Whittier Peninsula to view wildlife as well as to watch the latest developments of the park and nature center. Meet at Lower Scioto Park in the boat ramp parking lot (west of Front Street and south of Whittier Street) **NOTE:** Please contact Heather Raymond at (614) 785-0342; heather_columbus_audubon@yahoo.com to see if the June or July walks are occurring as scheduled.

**Early migrants of the Delaware wetlands**

**Saturday, July 31, 7:30 a.m.**

**Leader:** Rob Thorn

It may seem like mid-Summer, but some birds are already done nesting and heading south. Join us as we scout for shorebirds, herons, swallow flocks, kingbirds, and other early migrants in the wetlands of Delaware County. We'll have our choice of spots among Alum Lake with its great upper basin off Hogback Rd; Delaware Wildlife Area and its fabulous Leonardburg marsh; and the famous upper reaches of Hoover Reservoir off Wiese Rd and Area N in Galena. The itinerary will change depending on water levels and the latest reports; if the reservoir levels are too high, we might even make a quick trip up to Big Island Wildlife Area. In any event, we'll be on the prowl for these early migrants in their favored haunts. We'll meet at the Westerville Community Center and explore Thoreau Lake and other trails. Call (614) 508-8000 for more information or go to www.metroparks.net.

**Bird tram ride at Blendon Woods**

**Saturday, August 4, 8 a.m.**

**Leader:** Bruce Simpson

Join us on a two mile tram ride to search for birds along the back roads. Call (614) 508-8000 for more information or go to www.metroparks.net.

**Avid Birders field trips**

Avid Birders welcome all birders to join any regularly scheduled trip. Ordinary trips involve no lengthy or arduous hiking, although we occasionally traverse snow, loose sand, or rocks, and several miles of leisurely walking is often called for. We can accommodate an unlimited number of persons on most trips; occasionally, longer trips out of state are planned, and these are usually limited to a small number of participants. The longer trips fill up early, and first priority is reserved for those who participate most regularly on the weekend trips. Unless otherwise noted, participants should meet at the southwest corner of the Worthington Mall parking lot at the designated time. Upcoming trips are:

- **July 10 - 11:** Exotic SE Ohio locales for OBBA atlasing.
- **August 14:** Shorebirds, etc. at best available locations.

Visit www.columbusaudubon.org/avidbirders for meeting times and other details on these trips.

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**Note:** Field trip times, dates and locations are subject to change due to unforeseen circumstances. Please contact the trip leader 24 hours ahead to make sure the trip has not been changed, postponed or cancelled. Also, check www.columbusaudubon.org or follow us on Twitter at @columbusaudubon.

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**A note from the President - Julie Davis**

Wow, I can not believe that 2 years have passed! My tenure as CA president has been exciting and fulfilling. We have almost reached our goal of the $100,000 we pledged 5 years ago to the Grange Insurance Audubon center. Now, the center has been actually up and running for almost a year. CA now has a home, a place for our meetings and programs and is a wonderful spot to visit for all of our members. Our joint membership and newsletter have also been a big success. As we go to press, the oil spill in the Gulf is still not capped and the oil has reached the delicate eco-system of southern Louisiana. Following is an excerpt from the Audubon Newswire from May 27: "It has been over one month since the Deepwater Horizon oil rig explosion triggered what Audubon President Dr. Frank Gill has described as a "disaster in slow motion." Audubon's rapid response made us the first non-profit group to have volunteers on the ground when U.S. Fish & Wildlife needed them, and our volunteer response effort continues to grow - thanks to 13,000 volunteers who heeded the call on our website.

See note, page 9
The students at South Side Settlement House enjoyed the annual bird festival mastering their skills at the Avian Olympic challenges like walking with a penguin egg on their feet, identifying 5 common bird species using binoculars and a bird id poster, weaving a nest made out of yarn using only one hand to see if an egg can be held within the nest, pin the tail on the birdie and endangered bird ring toss.

They also were proud of their hand made posters displayed that depicted what they had learned about "Seasons of Change".

The students were amazed at the live bird visitors from the Ohio Wildlife Center which included a Great Horned Owl, American Kestral and an Eastern Screech Owl.

The students as well as visitors took part in their conservation project which was to beautify SSS’s courtyard by planting native plants and improving the birdfeeder station to enhance the courtyard to attract native birds as well as neighborhood visitors to the center.

As always, pizza, drinks and dessert were popular as well! In addition to the students, members of the SSS board attended as well as parents and neighborhood visitors.

The bird festival brought together all that the students learned this school year about "Seasons of Change". Starting in the fall, the students learned about different bird adaptations that allowed them to feed and live in diverse habitats.

Following the inclass "Fill the Bill" activities, the next week they hunted the area around the Grange Insurance Audubon Center in search of birds utilizing their adaptations such as the great blue heron hunting fish with its long spear of a beak or the red tail hawk carrying its meal in its talons.

One adaptation that stood out was the gathering of starlings to keep warm as they roost in the trees on cold fall nights. With the ample snows of winter, in January, students honed their skills as "Bird Sleuth Investigators" learning to read the landscape identifying tracks and determining the complex lives of the winter animals without actually seeing them.

They also learned a few interesting facts about nests that can be easily seen in the bare trees of winter. Which are bird nests and which are animal nests?

This spring brought lots of migrating birds and the students experienced "The Migration Challenge" which showed them how challenging migration can be having to avoid tall buildings in the dark, predators, bad weather and power lines to name a few. Then it was off into the park in search of spring migrants like the yellow warbler.

The students also learned what conservation is all about and how they can be responsible residents by caring for the earth. They completed two conservation projects—one at the Grange Insurance Audubon Center and one at the South Side Settlement House. One class learned that it was a tough battle with the invasive garlic mustard plant but they proved victorious by pulling hundreds of plants in a section near the park path. Another class rolled up their sleeves and dug several holes to plant native bushes such as the spicebush.

All of the students found out that conservation work can be...
Passing the torch to the next generation is critical to the survival of any group. At the recent CA program at GIAC on May 25th, we were introduced to some young birders who are excited about carrying that torch forward.

The members of a middle school "Science Olympiad" ornithology team were guests of honor at the gathering, each receiving a goody bag of birding items and a free student membership to Audubon. "Science Olympiads" is a nationwide science competition that tests kids' knowledge in many areas of science -- chemistry, earth science, anatomy, astronomy, physics, biology, and - this year -- ORNITHOLOGY! In Ohio, a series of tournaments is held over the course of several months, resulting in the top 8 teams moving on from the big Regional Tournament to the intense State Tournament in April.

CA's 4 guests of honor on this night, from Immaculate Conception School in Clintonville, were coached by CA Board member Gerry Brevoort and parent volunteer Jane O'Shaughnessy. When the season started, the coaches were informed that their ornithology team consisted of four BRILLIANT kids….who knew absolutely NOTHING about birds. The challenge was set and they were off and running.

The team first met in November and received their assignment: the kids would need to be able to identify by sight, and learn everything there was to know about, 187 specific bird species -- including being able to recognize 50 of their vocalizations.

This was going to be a massive undertaking and they had just two months before their first tournament. That's when they recruited the assistance of Nadya Bennett, another CA Board member and coordinator of CA Kids.

The coaches met with the students once a week for an hour at a time. Along the way, these fantastic students learned about taxonomy, bird anatomy, environmental issues, and the state of birds. Their vocabulary increased as the coaches introduced them to terms like crepuscular, sexual dichromatism, zygodactyl, dihedryl, and altricial.

The students drilled and drilled on birdcalls, visited the OSU Museum of Biological Diversity, and took a field trip to Blendon Woods where they learned to use binoculars for the first time.

Their enthusiasm was evident as they literally jumped up and down, squealing at their first glimpse of baby owls at Greenlawn and an eagle's nest at Highbanks. For the kids, it was one discovery after another; for the coaches, it was a joy to behold how thrilled and energized the students were.

That passion produced some impressive results: at their very first tournament, the team went up against 36 other teams and took 4th place. Four weeks later, it was 3rd place against 29 other teams, followed by a 4th place finish a few weeks after that. At the big Regional Tournament, competing against teams from all over Ohio, the team proudly took 1st place and qualified for the prestigious State competition. And at that event in April, these novice birders, their brains stuffed with incredible amounts of bird-related information, walked away with 10th place out of the top 40 teams in Ohio -- including two National Championship teams. Very, very impressive!

Perhaps more impressive than all the medals these students earned was the dedication they exhibited. When other middle schoolers were sleeping-in on Saturday mornings or watching Cartoon Network in their jammies, these four were getting up at 6 a.m. to travel to out-of-town science tournaments.

They did not receive any extra credit in school for their efforts, and they weren't given any class time to work on their Ornithology studies (even though Jane, Nadya & Gerry relentlessly gave them homework every week).

Their focus and their drive to learn about birds came from within, and their enthusiasm was infectious. They did it because they love science. They love to compete. And now, it's safe to say, they love birds! THIS is the future of Columbus Audubon!
Join the party as Columbus celebrates the first anniversary of the opening of GIAC! Sponsors and guests will have an incredible Night Out with Nature, as they explore the Audubon Center’s unique location and beautiful setting, while entertainment and energy fill the air.

During the event, guests will be intrigued with ‘Did You Know’ facts about Audubon and the impact the Center has on the community.

They will roam the grounds inside the Center and under the stars while dining on tasty offerings from our preferred caterers and enjoying live entertainment from one of the best views of the city, connecting urban and rural.

**What:** Wingding on the Whittier – A Night Out With Nature  
**When:** Friday, August 27, 2010, 7 pm – 11 pm.  
**Where:** Grange Insurance Audubon Center, 505 West Whittier Street, Columbus  
**Cost:** Individual tickets – $150

Sponsorship Levels

- Cliff Swallow ($1,500)  
- Red-headed Woodpecker ($3,000)

Live auction full of surprises!!!

At the upcoming annual gala Wingding on the Whittier, the Center will host a live auction to help raise funds to reach thousands of school children in nature education programming. Two of the exciting items to be auctioned are:

**Awaken Your Inner Explorer In ‘The Land of Darwin’ with Lindblad Expeditions:** (valued at $11,380)

Join the world-renowned Lindblad Expeditions and GIAC Director, Heather Starck, for a 10-day trip for two people on a small-ship cruise throughout the Galapagos Islands. In partnership with National Geographic and Audubon, Lindblad’s intimate small-ship cruises enable you to encounter the world’s most pristine and inspiring places up-close, with the seasoned experts who know them best. This trip is likely to be one of the most memorable trips of your life. Visit http://www.expeditions.com/itineraries45.asp?Expedition=702&Destination=294 or watch a video: http://www.youtube.com/watch?v=fLh1zINwNgE&feature=player_embedded.

**A Red, White, and Boom Evening & Private Cocktail Party at the Grange Insurance Audubon Center!**

The winning bidder receives:

- A private reception for up to 50 people at the 2011 Red, White & Boom, hosted by the GIAC  
- Complimentary drinks and hors d’oeuvres  
- A spectacular view from the Whittier Peninsula to view the 2011 Red, White & Boom!  
- Guests receive reserved parking and a secure spot to see the best show in town!

Osprey ($5,000)  
Bald Eagle ($10,000)

For more information, contact: Julie Davis at greenheron58@insight.rr.com or Jeff Redfield at jredfield@audubon.org.
Columbus Audubon & NWF

Gulf Oil Spill - Help birds without leaving Ohio

Audubon is working closely with the government, the Cornell Lab of Ornithology, and other organizations to respond to the massive oil leak in the Gulf of Mexico. Hundreds of volunteers from local Audubon chapters in Louisiana, Mississippi, Alabama, and other areas that may be affected have volunteered to assist in monitoring and cleanup efforts.

The situation seems to change daily, so we recommend that you check the Audubon Web site for the latest updates. There you can find the latest information on the oil leak itself and its effects on birds and wildlife at the Audubon oil spill information Web site and at the Audubon oil spill blog. You can register to volunteer on the Audubon volunteer Web page, and you can show your support for cleanup efforts by taking actions such as supporting Audubon's call for cleanup funding. Of course, all of these Audubon efforts cost money, so you can donate online to support Audubon's work in the Gulf.

To find links to all of these sources and more, start at the Columbus Audubon site (http://columbusaudubon.org/), or go directly to the national Audubon site (http://audubon.org).

While we all want to help, Audubon urges you to volunteer and participate though coordinated, organizational efforts, such as the Audubon volunteer campaign. At this time, there is only so much that volunteers can do. Simply showing up in an affected area is not productive. Well-meaning efforts to help may cause more harm than good to nesting birds and wildlife habitats, and untrained volunteers may be exposed to dangerous chemicals and other hazards.

It is even more difficult to know what to do because so many people have so many suggestions. While well-intentioned, many ideas that have been raised are based on incomplete knowledge of the situation, failure to appreciate interconnections and unintended consequences, and even a lack of understanding of basic science.

Audubon has the resources to evaluate solutions and choose appropriate ones, even if the best available measures are not as dramatic as some proposed in various media outlets.

So please register, make a contribution, follow Audubon's efforts, and be prepared to help when the time is right.

Backyards for Wildlife: Water your lawn, garden and more

**Garden Care**

Use water from your rain barrels as needed. If you selected native plants suited for dry conditions, they may go dormant but come back next year without water.

Kill the first Japanese Beetle Scouts by dropping them in soapy water or alcohol so they won't call in the troops.

Deadhead or trim back plants that bloom again.

After final blooms, let them go to seed for the birds.

Kill Invasive Plants that destroy natural areas, see http://www.oipc.info/species-list.html

**Chipping sparrow in organic grass.**

Flowers, C. Colston Burrell

Thanks to Robin Chenoweth for some of these ideas in "What chores to do, when to do them", 4/22/10 Columbus Dispatch.

**Lawn Care**

Let lawn go dormant (brown) to reduce or eliminate grubs (which kill your grass) and become Japanese beetles.

If there is a severe drought, water lawn inch (not enough to turn it green) every 2 or 3 weeks on cool, early mornings to slow water evaporation. Avoid watering when it is windy.

Keep water on the lawn versus going onto concrete or blacktop.

Mow lawn high to shade soil and roots. Don't fertilize before mid-August as the weather is so hot it will burn the lawn or garden.

Use corn-gluten (brand names like Preen or Concern Plus) on your lawn from mid-August to mid-September to fertilize and control broad-leaf weeds.

More information about Organic Lawn Care: http://ohioline.osu.edu/hyg-fact/4000/4031.html

**Lessons learned? If you're interested, email marc-a@columbus.rr.com to receive our monthly 'Nature Scoop' email or go to www.backyardhabitat.info to learn more. Let's work together to help birds, one yard at a time.**

Festival

Continued from page 5

hard but gratifying and that they are doing their share to care for the earth.

This after school partnership between South Side Settlement House, Columbus Audubon and Grange Insurance Audubon Center has been providing outdoor nature education to the stu-

dents for seven years now and with out the hard work of each partner, volunteers like Johann Cozart, Betty Daniell, Tami King, Frank and Karen Martens, this program would not be as successful as it is. Also, we are truly grateful to National Audubon's state minigrants provided much of the funding for this valuable program. Also, thanks goes out to GIAC, Karen Martens, Frank Martens and Rosalea Immel and Greg Immel for their generous donation of plants for the SSS courtyard.

-By Susan Setterlin
Conservation corner

Calamus Swamp: Back to the future

Columbus Audubon has now owned and managed our 20-acre wetland jewel, Calamus Swamp, for ten years.

We are celebrating this anniversary by developing a management plan to help assure that the habitat will be preserved, within the boundaries of what we can control.

Our primary objective is to maintain the area in a state as natural as we realistically can, together with making the property available for education and non-consumptive recreation; that is, for walking around and enjoying nature.

To manage the area effectively, we need to address a few issues, the more important ones being:

1. Boardwalk extension.
   If you have ever been to Calamus Swamp you know that the boardwalk is incomplete and you may find yourself in muck (or worse) if you attempt a walk around the entire wetland. We built what we felt we could afford in 2000, and we will now get busy filling in those gaps.

2. Partnerships.
   We had hoped at one time to dedicate Calamus as a State Natural Area. That may still be possible, but the dismaying budgetary treatment that the Division of Natural Areas and Preserves has recently undergone causes us to rethink a dedication at this time. Meanwhile, the Pickaway County Park District now owns the railroad embankment bordering Calamus on the south and they have developed a walking trail from there eastward to the Scioto River. We look forward to a productive relationship with an organization that shares many of our goals.

3. Changing hydrology.
   "Everybody talks about the weather but nobody does anything about it." Calamus Swamp has a very small watershed and so it's at the mercy of whatever falls from the sky. We are investigating groundwater levels in the area to see if there is any recourse to reducing groundwater withdrawal by industrial neighbors.

4. Invasive species.
   Garlic mustard is rampant, and there are patches of multiflora rose, nightshade, butterweed and others. We encourage anyone who visits Calamus, if you can, pull up some garlic mustard. Of longer-term concern is emerald ash borer, since more than 1/3 of the trees at Calamus are ash.

We might not be able to do much about this issue other than removing trees that are an immediate hazard to people and property.

There are a number of lesser issues concerning Calamus but this at least will give the overall picture.

At present, Calamus remains a healthy wetland, although with somewhat less open water than a decade ago. It is natural and normal for glacial kettle holes to fill in.

Meanwhile, the muskrats are back after a 2-year absence, and they are doing their part to keep cattails in check. Calamus again hosted a good population of breeding tiger salamanders this spring, and it’s a rusty blackbird haven in migration.

If you visit Calamus and see something of interest, give me a call (614-262-0312) or drop me an e-mail (davehorn43@columbus.rr.com).

Invasive species: Butterweed (Packara glabella)

While walking around Calamus Swamp with some fellow Audubon members, one of our party strode toward an attractive yellow plant and yanked it out by its roots. I was somewhat taken aback, as there was a plethora of garlic mustard plants nearby on which he could have released his aggression. Sensing my puzzlement, my companion explained that the plant was called butterweed and that if allowed to become established, it might take over the area. Butterweed is also known as Yellowtop. (Scientifically it used to be Senecio glabellus.) It sports dense bright yellow flowers in clusters at the end of its branches.

It grows between two to three feet in height and blooms from May to July. It's a relatively new arrival to Ohio, but now that I'm aware of it, it seems to be everywhere. Fallow fields in the area are blanketed with butterweed.

In Wildflowers of Ohio, Robert L. Henn states that butterweed was introduced from Europe. Other sources maintain that it is native to the southeastern United States. It is definitely not native to Ohio, and it is on Ohio's noxious weeds list. If allowed to go unchecked, it may soon be ubiquitous.

If you should notice this plant on your property, pull it out by its roots and dispose of it.

It's one more invasive species for us to be concerned about, despite having pretty flowers.

-Bruce Lindsay

Note

Continued from page 4

One of the best ways to keep up to date on Audubon’s response and media coverage is to follow us on Twitter. www.twitter.com/audubonsociety

You can also donate directly to help this cause on the Audubon website: www.audubon.org. I hope that by the time this newsletter is released, the spill will be capped and the recovery beginning. Please visit our website www.columbusaudubon.org often to get any updates on the situation.

I would like to close by announcing our new officers:

President - Heather Raymond
Vice-President - Bill Heck
Recording Secretary - Suzan Jervey
Newsletter editor - Stefanie Hauck

The future is bright for Columbus Audubon! I look forward to staying involved and participating in our upcoming 100th anniversary in 2013.

-Julie Davis
Thank you to all of the volunteers that helped get the center bird banding station up and running this spring. As suspected the park is full of migrants and the carefully placed nets proved to be very productive. Here are some of the birds banded this spring:

- House Wren
- Common Yellowthroat
- Black Throated Blue Warbler
- Baltimore Oriole
- Yellow Warbler
- Warbling Vireo
- Wilson’s Warbler
- White Eyed Vireo
- Swainson’s Thrush
- Common Grackle
- American Robin
- Eastern Phoebe
- Northern Cardinal
- Cedar Waxwing
- Field Sparrow
- Song Sparrows
- Brown Thrasher

If you would like to volunteer with at the station or attend a Birding for A Better Columbus event, contact Doreen Whitley, dwhitley@audubon.org today!

Last spring we searched the state for model backyards that support wildlife. Thank you to everyone that submitted an application, we wish we could pick more than five winners! Awards were given to backyards of all spaces from many acres to creative urban spaces.

Raylene Cross of Pataskula modeled an excellent bird feeder set up in a new suburban community, Cindy Host of Westerville made a wonderful use of a small space to encourage bird nesting and sheltering and even submitted her own checklist of breeding species, Caroline Markley of Orville composts and uses rain barrels to maintain her yard, Terri Kessler of Cleveland built an aeration windmill and man made channel from a nearby river to proved a water source for birds, and Carol Rasoul of Plain City has over 50% native plant cover.

Each winner received 1,000 dollars worth of supplies to maintain their backyards from Wild Birds Unlimited supplied by a generous grant from the National Resources Conservation Service. Be sure to pick up a guide to restoring native habitat in your backyard at the center today!

Join the conservation community by volunteering at GIAC

The center staff would like to invite you to explore volunteer opportunities at the center. In just under a year over 150 volunteers have helped greet over 6,000 visitors, plant over 300 native plants, and remove 1/2 ton of trash from the park. Volunteers are needed to greet visitors, run activities on the weekends, assist with gardening and habitat restoration, and work special events. Learn more at our summer volunteer dinner on August 20 at 6 p.m. RSVP to dwhitley@audubon.org.

Programs

Continued from page 3

other Saturday beginning July 10, meet at the center at 9:00 a.m. Volunteers are also needed to help run the center bird banding station during spring and fall migration. Free training and practice sessions will be held on Wednesday, July 21, Wednesday July 28, and Wednesday, August 18, meet at the center at 6:00 p.m. All attendees are invited to a group outing to Planks after the training at 7:00 p.m.

Youth Programs

Calling All Scouts!

We are excited to begin offering a variety of programs this summer designed to help your Scouts earn achievements, electives, pin requirements, special awards and more! During your visit, your Scouts will enjoy some hands-on learning fun as well as a guided nature hike designed with your specific goals in mind. At the end of the two-hour program, each scout will receive a special GIAC activity badge. Programs are scheduled Tuesday through Friday as well as on Saturdays and Sundays and tailored to meet requirements for Tiger, Wolf, and Bear Cubs Boy Scouts, Webelos, Daisy, Brownies, and Junior Girl Scouts. Call for rates.

Birthday Parties

Celebrate your child’s birthday with a center naturalist. Parties are themed around the extraordinary ordinary nature of the Scioto Audubon Metro Park, include use of exhibits, birthday cake, naturalist led activities, t-shirts and more. Call for rates.
Leadership

Continued from page 2

She currently serves as chair of the Grange Insurance Audubon Center Stewardship Board and is a member of the Columbus Council on World Affairs Board of Trustees. She is on the Board of Regents of NAEM and is a member of the Electric Power Research Institute's Sustainability Interest Group, the Boston College Center for Corporate Citizenship and the NGO working group of the Electric Utility Industry Sustainable Supply Chain Alliance. She also led AEP's participation in the Global Reporting Initiative's (GRI) Electric Utility Sector Supplement Pilot Program, an international project to develop electric utility-specific sustainability performance indicators.

Nessing lives in Westerville, Ohio, with her husband, Ken, and son.

Redfield joins GIAC

The Grange Insurance Audubon Center staff would like to welcome the newest member of our leadership team, Jeff Redfield, our Director of Development. Jeff is responsible for connecting the community and developing the annual fiscal resources to support the Center’s operations and program. Before coming to the GIAC, Jeff worked nearly 8 years for Court Appointed Special Advocates (CASA) of Franklin County, and helped that nonprofit increase its revenue and thus grow from serving 300 to 730 kids a year. Jeff moved to Columbus in 1994 to work for The Ohio State University in residence life and also served as the Executive Director of Stonewall Columbus from 1998-2002.

He has a degree in Secondary Education - Math and Physical Education from Western Michigan University and a Masters in Student Personnel Services from Wright State University. Jeff is a member of the Association of Fundraising Professionals (AFP) and currently serves on the Board of the central Ohio AFP board as Legislative Affairs chair. In his free time he enjoys sports and has been active in four GLBT sports leagues since moving to Columbus.

Most of Jeff's family still lives in Marshall, Mich., where he grew up on the family farm. Jeff is excited for the opportunity to join the GIAC staff. He feels this opportunity allows him to use his development experience in skills at a time when the Center begins its annual campaigns and membership programs that will allow more inner-city children great educational opportunity - and the Center to be a place for the Columbus community to come together and celebrate nature. His wealth of experience in donor stewardship, relationship building, and cultivation will help the Center succeed in growing the annual donor base that will be critical to the Center's future success. Please join me in welcoming Jeff to the team at jredfield@audubon.org.
Box turtles

Continued from page 1

mon here as they are further south of us. These turtles are famous for being strict homebodies with a small home range. Many radio-tracking studies have shown that E.Box Turtles rarely wander more than 200 meters from where they’re first captured. The oft-cited analogy is that they spend their lives in the space of 2 football fields. This area tends to be close to where they were born, so Box Turtle dispersal is a slow, generations-long affair. They like mature forest because the cool humidity of the ground layer allows them to stay active for longer periods of time. Some will accept edge and meadow habitats, but they become inactive during the hotter, drier parts of the day, since these habitats have greater temperature challenges for the turtles.

In Spring, warm rain tends to rouse them from their hibernation torpor. They are most sexually active at this time; in fact, turtle-keepers have learned that you have to either overwinter captive turtles or ‘fake it’ by putting them in a controlled low temperature refrigerator in order to stimulate breeding. Courtship is a series of butting and biting maneuvers by the male; if the female accepts him, he will be allowed to mount her from behind. She can store sperm for the rest of the year, and will use it to lay batches of 4-6 eggs in small holes that she digs in moist soil. When the young turtles hatch out, they look and act very different from the adults. They have a small, flattened dark shell, and they are very wary and sensitive to desiccation. They spend almost all of their time in leaf litter and swampy areas where they hunt insects relentlessly. Only when they reach a certain size, - usually about 5-6 inches -, do they start to take on adult appearance and behaviors. This process can take anywhere from 3-8 years, depending on how well-stocked their home range is with food. They’re pretty much invisible to us during those early years. You’ve probably seen plenty of tiny painted turtles, but you’re extremely lucky if you’ve ever seen a tiny box turtle.

If they survive their early encounters with raccoons and other small predators, box turtles in the wild can live to a ripe old age of 50-80 years, an amazing span for an animal that small. Interestingly, captive box turtles live shorter life spans, possibly because a captive diet lacks the variety of vitamins and trace elements found in their natural diet. Possibly their diet in the wild changes in subtle ways as they get older. The major problem wild turtles face now isn’t predators; it’s humans. Our propensity to fragment forests with farms, roads, and subdivisions exposes box turtles to more cars, pets, and inquisitive children, not to mention hotter, drier temperatures. You can still occasionally find them in local forest parks like Blendon Woods, Blacklick Woods, or Highbanks, as each local forest parks like Blendon Woods, Blacklick Woods, or Highbanks, as each local forest parks like Blendon Woods, Blacklick Woods, or Highbanks, as each local forest parks like Blendon Woods, Blacklick Woods, or Highbanks, as each local forest parks like Blendon Woods, Blacklick Woods, or Highbanks, as each local forest parks like Blendon Woods, Blacklick Woods, or Highbanks, as each local forest parks like Blendon Woods, Blacklick Woods, or Highbanks, as each local forest parks like Blendon Woods, Blacklick Woods, or Highbanks, as each local forest parks like Blendon Woods, Blacklick Woods, or Highbanks, as each local forest parks like Blendon Woods, Blacklick Woods, or Highbanks, as each local forest parks like Blendon Woods, Blackli...