TIPPE-TOPICS

NEWSLETTER OF THE TIPPECANOE AUDUBON SOCIETY

Cass, Fulton, Kosciusko, Marshall, Miami, Noble, Wabash, Whitley Counties, Indiana

Volume XXXVI, Number 4 August & September, 2010

COMING EVENTS

August Field Trip

Pisgah Marsh and Durham Lake

When: Saturday, August 21st, 9:00 am

Where: - meet at Pisgah Marsh, SE of North Webster (see directions below)

Pisgah Marsh has a nice elevated boardwalk with views of the marsh, a small lake and a mature hardwood forest. Many waterbirds, including nesting Sandhill Cranes, use the marsh as a migration stopover or breeding site. If time permits, we will visit Durham Lake and look for waterfowl on the lake and early migrants in the forest.

From State Road 5, about 8 1/2 miles north of Larwill, turn west onto Whitley County Road 850N. Follow this road about ½ mile to the parking lot at the dead end. (Note: this site is not directly accessible from the west via State Road 13.)

For photos and maps, see the DNR's web page: http://www.in.gov/dnr/fishwild/3085.htm

For more info. contact Dave Hicks at djhicks@manchester.edu or 260-982-2471..

August Program

Ecology and Conservation of Wetland Amphibians and Reptiles

When: Tuesday, August 24th, 7:30 pm.

Where: Manchester College Student Union, Hoff Room, North Manchester, IN

Dr. Bruce Kingsbury will speak on the importance of wetlands, especially shallow ones, to the ecology and conservation of many of Indiana's amphibians and reptiles. He will review some of his group's research findings, take a look at a variety of regional species using shallow wetlands, and include recommendations on how to properly manage this vital habitat. **This presentation will be especially pertinent as TAS proceeds with the restoration of our Flory-Gemmer Marsh.**

Dr. Kingsbury is professor and chair of the Dept. of Biology at IPFW. He has dedicated much of his professional life to the conservation of endangered reptiles, especially snakes. His areas of expertise include habitat requirements, population viability, and habitat restoration and management. His areas of interest also include behavioral and physiological ecology of reptiles, thermoregulation, foraging behavior, and patterns of habitat use. Dr. Kingsbury is the director of the Center for Reptile and Amphibian Conservation and Management, the "Herp Center."

COMING EVENTS - continued on page 2

Regular Tippecanoe Audubon Society Events:

BI-MONTHLY PROGRAM -

Held on the 4th Tuesday of February, April, June, August, and October and at the annual dinner in early December. Begins at 7:30 p.m., usually at the Student Union on the Manchester College Campus, North Manchester, IN. ALL ARE WELCOME.

MONTHLY FIELD TRIPS -

Time and place announced in the bi-monthly newsletter. ALL ARE WELCOME.

TAS BOARD MEETINGS -

Monthly on the 2nd Tuesday of the month at 7:00 p.m., except in December. Held at KenapocoMocha Coffee Shop, 101 E. 2nd St., North Manchester, IN. All TAS members are welcome.

Contact Info.

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September Field Trip

Jasper-Pulaski Fish and Wildlife Area

Jasper-Pulaski is best known for its late-fall congregation of migrating Sandhill Cranes. Although we will be too early for the main crane migration, there is plenty of interest in the prairies, wetlands and forests of JP at all times of year. We will stop at the crane-viewing tower and wetland observation tower, which should be good sites for migrants. If hunting schedules permit, we will also visit the Tefft Savannah nature preserve for fall prairie flowers.

When: Saturday, Sept. 18th, (see below for times)

Where: Meet at Manchester College to carpool or meet the group at Jasper-Pulaski (see below for details)

There will be two starting points for the field trip: Meet at 8:30 am at the Manchester College Science Center parking lot to carpool. The Science Center is on the east side of Wayne St. in North Manchester, above ¼ mile south of the intersection of Wayne St. and IN SR13. Or meet at the J-P headquarters at 10:30 am. This is northwest of Medaryville. From Medaryville, follow US 421 about 4 miles north. At IN SR143, turn west (left) and go about 1.3 miles to the headquarters area.

For more information contact Dave Hicks at djhicks@manchester.edu or 260-982-2471.

President's Corner - Beth Deimling

Our "Saturday mornings in June" breeding bird survey of five sub-watersheds of the Middle Eel River provided an interesting snapshot of this large local watershed. Our total list for all the sub-watersheds included 85 species. This compared favorably with the results from a block near Roann surveyed by the more complete - and multi-year - Breeding Bird Atlas project. That survey found evidence of breeding for 85 species, with a total of 87 species observed in the block within their breeding window.

Upon examination of maps of land use patterns for each watershed, it might be expected that differences in total species numbers would be apparent between sub-watersheds based on those land use patterns. However, in the field, total species number seemed more dependent on the number of person-hours spent birding in each sub-watershed. We often found that we could drive for some distance not seeing many birds, then we would stop at a bridge over a creek or the Eel River, or even a ditch, to listen and watch. If there was significant riparian vegetation, we could pick up quite a number of species, mostly through identifying calls. In short, the corridors along waterways are important bird habitat, providing diverse cover and water. Next June, we hope to continue with the survey, filling in on those sub-watersheds where we worked fewer person-hours, and adding a few new sub-watersheds. All those participating improved their birding-by-ear skills.

Although the well seems to be plugged, the Gulf oil disaster continues. An interactive map charting the extent and location of the Gulf oil spill through the present is available on the New York Times web site: nytimes.com/national. The amount of oil spilled by the Exxon Valdez in 1989 was 10.8 million gallons. Through July 22, the spill from the Deepwater Horizon has reached somewhere between 50.7 and 145 million gallons. This chart also shows shows the extent of the moving oil: a slick over 300 miles wide that changes shape with the day and the shifting Gulf currents. University of South Florida researcher David Hollander has also confirmed that vast plumes of underwater microscopic droplets of oil (invisible to the naked eye) from this spill are moving deep under the surface, at depths of 1,000 to 4,000 feet. These plumes were found near the DeSoto Canyon off the Florida panhandle, an area critical to Florida's spawning grounds. Even low concentrations of oil can be harmful to the eggs and larvae of the fish, coral, and other marine organisms. "What we have learned completely changes the idea of what an oil spill is," Hollander said. The BP spill "has gone from a two-dimensional disaster to a three-dimensional catastrophe."

Beginning in the early days of the disaster, and continuing on to the present, National Audubon has assembled a team of staff to organize thousands of volunteers who have responded to the tragedy in the Gulf and to coordinate recovery and bird rescue efforts. But longer-term answers to this nightmare rely on reducing our dependence on oil for our energy needs. National Audubon is leading the way in several areas, but needs all our help. $200,000 is available to Audubon through the "Members Project." This is a way for you to help without contributing a penny. Go to takepart.com/membersproject/vote, and vote for the National Audubon Society as your favorite charity. It is possible to vote once per week through August.

And on Thursday, July 22, efforts to move forward on a national clean energy and climate bill were suspended. It is extremely important to keep the pressure on our legislators to come up with a workable bill. Let Senators Evan Bayh (bayh.senate.gov) and Richard Lugar (lugar.senate.gov) know that we cannot afford to fail to move forward on this bill. Our oceans and our climate depend on it.

Flory-Gemmer Marsh Update

Drainage work continues at the marsh. Getting the water level to the desired level has really proven to be quite a challenge. We had hoped that after the drainage work was done last summer and the water control structure installed, that the marsh would slowly fill to the proper level and that we would begin to see the invasive Reed Canary Grass that covers much of the marsh begin to die. As the saying goes, "The best laid plans of mice and men…..". The water level has risen but has stubbornly remained 8 to 10 inches below the desired full pool level and the Reed Canary Grass looks as healthy as ever. The contractor was called back to the marsh in late spring and we explored for more tiles that could still be draining water from the marsh. One such large tile was found and removed. One more existing tile has been discovered and will be removed yet this summer. Hopefully we'll then see the water level rise.

The first application of herbicide to kill non-native invasive vegetation is scheduled for this fall, with a second application scheduled for next spring. If all goes as planned, native plant seeding and planting could begin late spring and/or summer of next year.

Bird of the Month • • (from page 4)

birds, and may even make noisy forays to startle other birds off their nests. Large, open nests in forest edges, shrublands and grasslands are most likely to be parasitized. Surprisingly, there is no correlation between the visibility of a nest (to humans, at least) and its likelihood of being parasitized by cowbirds. However, a study of Red-winged Blackbirds showed that parents that had noisy and conspicuous behavior around their nests were more likely to receive a cowbird egg.

When a nest with eggs is found, the female waits until the residents leave to feed around dawn. She then enters the nest, often removes one of the eggs, and quickly lays one or more of her own. Egg-laying behavior is quite different from that of most other birds; cowbirds can deposit an egg in less than 30 seconds, versus a typical 30 minutes or more for other species. Cowbirds can lay up to 40 eggs in a season.

Once the egg has been laid, it develops rapidly, hatching in an average of 11 days. Since most host species require 12-17 days, cowbird chicks are usually the first to hatch. Unlike cuckoos or African honeyguides, cowbird hatchlings do not damage the host's eggs or nestlings. Rather, they take advantage of the host parent's parental behavior by hatching earlier, growing faster, and begging more aggressively for food than the host chicks. The host parents feed the cowbirds at the expense of their own offspring, reducing their own reproductive success. Cowbird parasitism has been implicated as a significant threat to Kirtland's Warbler, Black-capped Vireo, Bell's Vireo and Willow Flycatcher, among others.

Phoebe nest containing one Brown-headed Cowbird egg.

Cowbird eggs have been reported in nests of 220 species, including hummingbirds and raptors, and cowbird fledglings have been raised by 144 of these species. As might be expected, there is a good deal of variation in the responses of a parent bird to a foreign egg. The eggs are white to greenish, with a mottling of dark brown splotches. About 20 species are able to identify and reject cowbird eggs. Rejecters use a variety of strategies. Vireos and some warblers place a layer of nest material over the batch with cowbird eggs and then lay more eggs of their own. Yellow-breasted Chats and Blue-gray Gnatcatchers simply abandon parasitized nests with foreign eggs. American Robins, Baltimore Orioles and Gray Catbirds puncture or eject cowbird eggs.

Since some species have evolved the ability to detect and reject cowbird eggs, it is surprising to find that so many have not done so. Cowbirds have been raised by hosts as small as Brown Creepers and as large as meadowlarks. Among the most frequently parasitized are Yellow Warblers, Song Sparrows, Red-eyed Vireos, Chipping Sparrows, and Eastern Phoebes.

There are several possible explanations why rejection of cowbird eggs has not developed in many species. Perhaps the most broadly applicable one is that some species have been exposed to cowbirds only relatively recently, and have not had time to evolve defensive behavior. Given that the cowbird has only recently expanded into eastern North America, and is found mostly in disturbed habitats, it is no surprise to find that many of the non-discriminators are forest species that would not have a long evolutionary history of cowbird parasitism. On the other hand, many of the rejecters are species found in forest edges and more open areas.

Another possible reason that some birds have not evolved rejection behavior lies in the risk to their own eggs when cowbird eggs are destroyed. The parent birds sometimes get too enthusiastic and destroy some of their eggs in the course of eliminating cowbird eggs. This is particularly likely in species that attempt to puncture cowbird eggs rather than simply shoving them out of the nest.

One final possibility is a type of behavior that has been documented in European cuckoos, and is sometimes called a "Mafia" behavior pattern. Cuckoos will return to a nest that they have parasitized, and if their eggs have been rejected, they will retaliate by destroying the host's eggs or offspring. A recent study in Illinois identified possible mafia behavior in Brown-headed Cowbirds, although direct observations of retaliation were not recorded.

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Bird of the Month– Brown-headed Cowbird

by Dave Hicks

A couple of weeks ago, I looked out at our bird feeder and saw a tiny Chipping Sparrow trying to satisfy the appetite of a juvenile Brown-headed Cowbird that was nearly three times its size. While the sparrow might have been proud of its parenting skills, raising cowbirds instead of its own offspring reduces its reproductive capacity.

Brown-headed Cowbirds (*Molothrus ater*) are members of the Blackbird family (Icteridae), and thus are related to orioles, Red-winged Blackbirds and meadowlarks. Like other members of this family, cowbirds are medium-sized, rather chunky birds that occur most often in open habitats or forest edges. Adult male cowbirds are distinguished by a brown head, but females are a drab gray. Also like other blackbirds, they have a varied diet that includes insects and seeds.

There are three species of cowbirds in North America. The Bronzed Cowbird and Shiny Cowbird occur in the southern U.S., though they range much further south. Two other species occur in South America. Recent genetic studies indicate that Brown-headed Cowbirds are a relatively recently evolved species that developed from a South American ancestor.

The Brown-headed Cowbird has the widest North American distribution, with its overall range extending from southern Alaska to Mexico and Florida. Birds in the more northern populations migrate south during the winter, but eastern U.S. populations are mostly non-migratory. During the summer, cowbirds are solitary, in pairs, or form small groups. However, during the non-breeding seasons they often flock with starlings and other blackbirds in groups that may number more than a million.

Brown-headed Cowbirds are associated with open habitats. Before humans created extensive crop fields and lawns, they were probably found mostly in the native grasslands of Great Plains. In the modern world, cowbirds often follow cattle to feed on insects stirred up by the herd. Before cattle were brought from the Old World cowbirds were probably followers of the bison herds. In some situations, they may defend territories, but they are often not tied to a particular location.

The most unusual thing about the cowbird is, of course, its reproductive behavior. They are among the few species of bird that do not raise their own young, or construct a nest. This behavior pattern is called brood parasitism or kleptoparasitism. It appears in just a few bird groups worldwide. Perhaps the best known brood parasites other than cowbirds are the Old World cuckoos. (North American cuckoo species typically do raise their own young, although they may occasionally engage in brood parasitism.)

Female cowbird behavior is well adapted for their parasitic lifestyle. They actively search for nests of other

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