Black River Audubon Society



March 2011





Editors: Jack Smith and Harry Spencer Photographer: John Koscinski Webmistress: Arlene Lengyel

Program

Tuesday, March 1, 2011, 7:00 p.m. Visitor Center, Carlisle Reservation

Mark Shieldcastle

Research Director, Black Swamp Bird Observatory

Passerine Migration in the Lake Erie Marshes

Mark Shieldcastle assumed his current position after retiring from the Ohio Division of Wildlife where he spent 32 years as a wildlife biologist specializing in avian research. He has conducted research on the bald eagle, colonial waders, terns, wetland breeding birds, woodcock, shorebirds, colonial passerines, waterfowl, rails, cranes, migrating raptors, and migrating passerines and is the author or co-author of papers on a variety of birds in Ohio. He also is co-author of plans for wildlife habitat and management for the Great Lakes-Upper Mississippi River Region. While with the Division of Wildlife he was Representative to the Mississippi Flyway Council Technical Section (MFCTS), chaired the Banding Committee of the MFCTS, and represented the MFCTS to the International Black Duck Joint Venture and Adaptive Harvest Working Group. Mark is Past-President of the Inland Bird Banding Association, serves on the North American Banding Council (NABC) and presently is Chair of the Council. He has 32 years experience in the capture and banding of birds, has been responsible for over 750,000 banded birds, and is a certified trainer for banders under the NABC.

Field Trip

Saturday, March 19, 2011 Oberlin and Wellington Reservoirs Followed by pancakes in Chatham Meet at Oberlin Reservoir, 9:00 a.m.

.A Birder's Diary

By Carol Leininger

One summer I spent a couple of weeks as a volunteer assisting a scientist with his research in a tropical rain forest in Costa Rica. Earthwatch sponsors many such programs that are in need of willing helpers. I chose a program that dealt with manikins (dancing birds) – or so I thought.



BULLET ANT Courtesy of Carol Leininger

Much to my surprise it involved more ants and seeds of forest trees than it did of manikins!



What did I do? I sat on the rain-forest floor waiting

and watching for ants. Several kinds of seeds were placed on small pieces of paper, and some days I simply recorded how often ants came by, inspected, and in some cases carried away the seeds. Then I recorded which seeds they chose. Other days I actually caught the ants that showed an interest in the proper seed. To accomplish this task, I used my saliva on a toothpick to pick up and place the ants in a vial of alcohol. Later the ants were identified in the lab. One day I followed the ants as they carried away the seeds, after which I collected litter from the forest floor along the ants' route. This litter was also examined back in the lab.

What did I learn? There is a sequential seed dispersal by the birds

and ants that explains why a particular plant species (*Miconia vervosa*) is so successful in re-populating gaps in the forest. Its fruit, with its winged seeds, seems to be particularly attractive to the manikins, possibly because it is so nourishing. The birds eat the fruit of the tree and defecate the winged seeds. Small ants (Genus *Pheidole*) store the seeds in dead hollow twigs on the forest floor. Here the seeds are available as ant-food but are hidden from animals that might eat them. Uneaten seeds have adequate time to germinate before the twigs disintegrate.

Other interesting discoveries: 1. Keep your eyes open at all times for the large, dreaded bullet ants (*Paraponera clavata*) nearby. Their stings can make you really ill. 2. When you hear the rain, don't worry. The rain never penetrates all the canopy layers down to the forest floor. 3. Manikins are interesting birds to watch dancing in their leks, but not when defecating in a cage. 4. If ants move to a new home, they take the twig storehouses with them. 5. The best place to bird in the rainforest is not on the forest floor, but near open spaces and edges. 6. A volunteer on Earthwatch projects does not need any prior experience or knowledge. The scientist will explain everything, and the volunteer's efforts will advance scientific understanding.

Shreve Spring Migration Sensation

Saturday, March 26, 2011, 7:00 a.m. to 4:30 p.m. Shreve Elementary School 598 North Market Street (State Route 226) Shreve, Ohio 44676

www.wildernesscenter.org/shrevemigration.htm

Event Summary: This peak spring bird migration event includes self-guided tours with experts located at help stations in the nearby Killbuck Marsh, Shreve Lake, Brown's Bog and Funk Bottoms wildlife areas, Ohio's largest inland natural wetland complex, covering 5,671 acres. At the school enjoy a full day of "Sensational" Family-Friendly Activities in addition to six workshops.

Admission: \$10 single or \$15 family.

Workshops

| 8:30 to 9:15 a.m., | Sensational Birds, Sensational Observations, |
|---------------------|---|
| | Chuck Jakubchak. |
| 10:30 to 11:15 a.m | ., Planting for Wildlife: Native Plants that Attract Birds and Butterflies, |
| | Cheryl Harner. |
| 12:30 to 1:15 p.m., | Chip's Tips for Better Wildlife and Outdoor Photography, |
| | Chip Gross. |
| 1:30 to 2:15 p.m., | Ruby-throated Hummingbirds: Feathered Helicopters, |
| | Jim McCormac. |
| 2:30 to 3:15 p.m., | How to Be a Better Birder Even if You're Already an Expert!, |
| | Kim Kaufman. |
| 3:30 to 4:15 p.m., | The Big Year, |
| | Greg Miller. |

Conservation with Help from our Feathered Friends

By Jack Smith

On the first page of this issue is a Dane Adams' photo of our national symbol, bald eagle, in action after capturing a small fish that will soon become lunch for the big bird. The snow- or ice-covered rocks illustrate the winter season. To me this brings to mind how important, a healthy bio-diverse environment is for all living things.

I remember the days here in Elyria when Republic Steel poured into the West Branch of the Black River "pickling solution," a chromic acid waste that turned the water brown and killed

about every living thing for several miles downriver. The diluted toxic solution flowed into Lake Erie, where a portion probably ended up in our water supply. The water pollution also entered the food chain, a simplified version of which is: Humans and eagles eat fish that eat microscopic organisms. Water pollutants are known to concentrate in the tissues of the animals at the top of the food chain.

Today, Black River and Lake Erie are much healthier than they were 50 years ago. I believe the public in general is better educated and aware of the importance of clean waters and willing to support the more recent environmental regulations. Yet many serious problems are yet to be resolved.

Below is a Diane Devereaux photograph that illustrates another winter scene, an American robin eating a hawthorn berry. This photo brings to mind the relationship between plants and birds.

Over millions of years, certain plants have evolved into the current hawthorn shrub or tree that produces, when ripe, an orange-red berry, full of nutrients and attractive to winter robins. Robins swallow the berries whole, and the seeds in the middle of the berries goes through the digestive tracts. As a seed goes through the gizzard it may be scarified (scratching of the seed coat by gizzard-contained grit) which may improve germination when deposited with nitrogenous fertilizer usually distant from the hawthorn plant. If the fruit simply fell to the ground below the tree, the germinated seed might be too shaded to survive. But hawthorns and other organisms have evolved another propagation mechanism.

Similar to hawthorns, hundreds of species of plants produce small berries that turn brightly colored, providing signals to birds that lunch is served. Fruits from different plants mature at different times, but seventy percent of bird-distributed plants ripen to bird-attractive colors in time for fall migrations of birds. The birds may stop for several days to rest and feed. Many of these fall berries have a high fat







lipid content (Lipids have twice the energy value per unit weight of carbohydrates and help the birds build up the subcutaneous fats necessary for sustaining long arduous flights.) Some plants known to produce high-lipid fruits are magnolia trees, spicebush, flowering dogwood and sassafras. In contrast many other plants produce ripe berries that have very low lipid content and stay on the trees throughout most of the winter and into early spring; these berries are not very attractive to the birds. Birds generally choose high lipid berries over low lipids. However when spring rolls around and the low-lipid berries are the only food source available, birds eat them. Some plants with low-lipid berries are high bush cranberry (viburnums), wild rambling rose, winterberry, snowberry, and hawthorn.

Many other plants produce small blue, black, or white berries suitable for birds. These colored berries may not be readily seen by birds, so the plants have evolved other means to attract birds. For instance, the redpanicle dogwood with white colored berries develops red berry stems that attract birds. Virginia creeper, poison ivy and wild grapes have blue or white small berries that are difficult for birds to spot. These plants produce enzymes that prematurely decompose the green chlorophyll in leaves producing yellow, red and orange colored leaves that direct birds to the berries.

(Side note: The yellow-rumped warbler, formerly called myrtle warbler because its discoverer observed it eating wax-myrtle berries, is the only warbler commonly observed in the winter in our area. Usually it is found eating Poison Ivy berries. It is one of the few birds that can digest wax.)

As human populations are increasing in the United States and around the world more and more stress is placed on bird habitats such as forests, natural meadows, prairie fields, rivers, streams and lakes. As habitats are destroyed many bird populations, such as the rusty blackbird, are on a precipitous decline.



One way citizens like us can slow this decline is to create a bird garden. This I have tried to do in my oasis among an asphalt concrete jungle in downtown Elyria. I have many native plants such as winter-berry shrubs, black raspberries, various asters, purple-cone flowers, and more.

Suggestions for building such a bird-friendly garden are contained in *The Bird Garden*, by Steve Kress. I recommend this great book. It is more than outstanding.

Just recently Black River Audubon and the Lorain County Metro Parks were honored to have Steve Kress as

Saturday-afternoon speaker at the Carlisle Visitor Center. Kress is one of the most outstanding naturalists and ornithologists in the country today.

Reference: The Bird Garden by Steve Kress

Editor's note by Harry Spencer: Changing climate affects birds through change of weather, habitat, food, bird populations, migration patterns, and other ways. For a purpose unrelated to birds and birding, my daughter, Marsha S. Bollinger's wrote recently a succinct discussion of some aspects of climate change and weather that is pertinent to understanding bird-life. As part of her teaching duties she follows the currently active

weather/climate scientific studies without claiming to be an expert in climatology. She occupies the Dalton Endowed Chair, Environmental Sciences and Studies and is Professor of Geology at Winthrop University in Rock Hill, SC.

Why is the winter so severe and why is there so much snow?

By Marsha S. Bollinger

Climate change, more commonly referred to as global warming, is the culprit. How can that be?

Ice in the Arctic Ocean is melting due to increased temperatures in that area. This causes more of the Arctic Ocean to be exposed. The ocean absorbs more heat than the ice does as the ice has very high reflectivity. Since the Arctic is a bit warmer, the air circulation over the Arctic is changing. "Normally" in the winter there is a nice tight circle of winds. However, now that the air

circulation is disrupted, the tight circle may expand or split into more than one weakly defined circular area. Nice cold air then extends southward over North America.

The other piece to this is moisture. Climate change is causing the Gulf of Mexico to be a bit warmer, too. This causes more moisture to be in the atmosphere. So when moist air comes northward from the Gulf and cold air comes southward from the Arctic, we get lots of snow and ice!

Climate change is predicted to cause more extreme weather. In the case of North America, we are getting impressive snow and ice. In other places in the world we are seeing massive flooding, extreme fires, and devastating droughts. Hurricane season is just around the corner.

New Birding Site

Birds identified at Margaret Peak Nature Preserve, Eaton Township, and recorded on our eBird site for the period of June 23, 2010 through December 31, 2010 (104 species)

Canada goose, wood duck, mallard, green-winged teal, redhead, lesser scaup, ruddy duck, pied-billed grebe, double-

crested cormorant, great blue heron, great egret, green heron, turkey vulture, Northern harrier, sharp-shinned hawk, Cooper's hawk, red-tailed hawk, American kestrel,

killdeer, spotted sandpiper, least sandpiper, pectoral sandpiper, Wilson's snipe, ring-billed gull, rock pigeon, mourning dove, great horned owl, chimney swift, ruby-throated hummingbird, belted kingfisher,

red-headed woodpecker, red-bellied woodpecker, downy woodpecker, Northern flicker, olive-sided flycatcher, Eastern woodpewee, willow flycatcher, Eastern phoebe, Eastern kingbird, blue-headed vireo, warbling vireo, red-eyed vireo, blue jay, American crow, horned lark,

Northern rough-winged swallow, purple martin, tree swallow, bank swallow, barn swallow, cliff swallow, black-capped chickadee, tufted titmouse, white-breasted nuthatch, Carolina wren, house wren, marsh wren, blue-gray gnatcatcher, ruby-crowned kinglet,





Eastern bluebird, wood thrush, American robin, gray catbird, European starling, American pipit, cedar waxwing, Nashville warbler, yellow warbler, yellow-rumped warbler, black-throated green warbler, palm warbler, blackpoll warbler, common yellowthroat, Wilson's warbler, Canada warbler,

Eastern towhee, American tree sparrow, chipping sparrow, field sparrow, vesper sparrow, Savannah sparrow, grasshopper sparrow, fox sparrow, song sparrow, Lincoln's sparrow, swamp sparrow, white-throated sparrow, white-crowned sparrow, dark-eyed junco,

Northern cardinal, rose-breasted grosbeak, indigo bunting, dickcissel, bobolink, red-winged blackbird, Eastern meadowlark, common grackle, brown-headed cowbird, orchard oriole, Baltimore oriole, purple finch, house finch, American goldfinch, house sparrow

Half-Year Financial Summary

July through December 2010

By Treasurer Steve Chavez

| BLACK RIVER AUDUBON SOCIE STATEMENT OF ACTIVITIES PERIOD ENDED 6/30/11 12/31/2010 |
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| AMOUNT |
| 663.02 |
| 580.84 |
| 908.52 |
| 4,047.95 |
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