

Audubon News



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March 2007

The Marvels of Migration



Migration is arguably the most spectacular and intriguing aspect of bird behavior. In North America, it involves about 80% of the approximately 645 species of breeding birds; may be observed anywhere from the High Arctic to the tropics, from the Pacific Ocean to the Atlantic; and is accomplished in as many variations of timing, routes, and techniques as there are migratory species to practice them.

Almost everything we know about bird migration has been learned in the past 150 years, prior to which sophisticated men of science could theorize that swallows spent part of the year hibernating in the mud or on the moon without fear of contradiction.

Dr. Rob Bierregaard, Adjunct Professor at the University of North Carolina Charlotte, will help us understand the complexities of this amazing event which is taking place right before our eyes as it does every spring. He'll try to answer all the burning questions - who migrates? why do they migrate? when does migration take place? where do they go during migration? and how do they do it?!

So migrate over to the fellowship hall of the Seventh Day Adventist Church (920 Sharon Amity) on Thursday, April 7th at 7:30 PM to be marvel at the story of the mighty migrants.

Have Feathers, Will Travel

How Far?

The world's longest migration route is that of the western arctic populations of the Arctic Tern, some members of which travel as far as 11,000 miles each way between breeding grounds and winter range near the Antarctic Circle. The American & Pacific Golden Plovers, which fly 2,000-2,400 miles nonstop over the ocean from Alaska to mid-Pacific islands (Pacific) or from northeastern

Canada to the West Indies (American), probably make the longest uninterrupted flights. Wilson's Storm Petrel, which breeds on sub Antarctic islands approaches the Arctic Circle on its "wintering" grounds during the northern summer, holds the distance record for Southern Hemisphere breeders and for its order (the Procellariiformes); the Sooty Shearwater, which follows a similar itinerary, is a close second in both categories.



Few land-bird migrations approach these distances. However, Swainson's Hawk breeds as far north as central Alaska and winters almost exclusively on the Argentine pampas; both

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Field Trips

All Mecklenburg Audubon Field Trips are free and open to the public. Directions for all trips can be found on the Mecklenburg Audubon website - meckbirds.org. Click on Field Trips. Please remember to contact the trip leaders several days before the trip. If you don't, you may not receive information about last minute changes or cancellations. Also, if they don't know you are coming, they might leave without you!!

Saturday, March 31st: McAlpine Greeway



1/2 Day Field Trip Contact: Andrea Owens - andreaowens1@yahoo.com

Early spring migrants should be moving through this wonderful greenway with a variety of habitat. If the soccer fields are muddy (and empty) a number of shorebirds could be present. Resident birds should be in full courtship mode so there should be a lot to hear and maybe even a few nests being built within view of the paths. Who knows what might show up around the beaver pond.

We will meet at the Monroe entrance to the greenway at 8 AM.

Saturday, April 7th: Green Swamp Preserve (Brunswick Co.)



Full Day Field Trip Contact: Taylor Piephoff - piephofft@aol.com

The Green Swamp contains some of the country's finest examples of longleaf pine savannas. The open savannas have a diverse herb layer with many orchids and insectivorous plants. Almost 13,000 acres of the preserve, however, are comprised of a dense evergreen shrub bog (pocosin) dominated by gallberry, titi, and sweetbay.

One of the preserve's rarest residents is the federally listed endangered red-cockaded woodpecker. But other species of interest include the Bachman's Sparrow, Prothonary and Prairie Warblers. Be ready to get your feet wet and don't forget lots of drinking water and insect repellent.

For complete details and places to stay contact Taylor at piephofft@aol.com.

Saturday, April 7th: Ribbon Walk Nature Preserve



1/2 Day Field Trip Contact: Judy Walker - birdwalker@mac.com

For those who can't get away to the coast for the swamp trip. Judy Walker is going to lead an outing at Ribbon Walk Nature Preserve near Derita. We don't bird this preserve very often but when we do it usually turns up something special. The native gardens should be in bloom and the large trees should be attractive to neotropical migrants. We might even be able to coax the resident Barred Owl into making an appearance.

We'll meet in the parking lot of the preserve at 7:30 AM and should be done by noon.

Saturday, April 14th: Congaree Swamp National Park, Columbia, SC



Full Day Field Trip Contact: Judy Walker - birdwalker@mac.com

Our annual swamp stomp trip to the Congaree is a little later than usual this year, which means more migrants will have arrived. But the bugs may have as well. Warblers on our must see list will include Prothonary, Hooded, and N. Parula but there should be a host of additional ones as well - Worm-eating, Black-throated Green, Yellow, Yellow-throat, and waterthrushes. Tanagers should have arrived and other neotopics will probably be sulking around as well.

We will meet at 6:30 AM in the Crossroads Mall parking lot located on the right hand side of the main entrance drive into Carowinds Theme park off HWY 21. It will take us about 1.5 hours to get down there. Bring a lunch, snacks, plenty of water, bug repellent and good walking shoes.

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Thursday, April 19th: Landsford Canal State Park

1/2 Day Field Trip Contact: Dave Lovett - birdsalot@webtv.net

Lansford Canal State Park, in South Carolina, is another great place to be during spring migration. Migrants will be moving up-river to the high country. We should encounter a variety of warblers so make sure you exercise your neck the night before. After a lovely walk along the river we will have lunch in the picnic area and then head for home in the early afternoon.

Meet at the main parking lot at 8:30 AM. Take I-77 south from Charlotte to Exit 77-[US 21 & Rt. 5]. Go south on US 21 about 15 miles to road 321, watch for sign on left. Turn left on 321 and go 1.3 miles to park entrance on the left and proceed to parking area. There is a small park use fee with envelopes provided.

Saturday, April 21st: Latta Plantation Nature Preserve

1/2 Day Field Trip Contact: Judy Walker - birdwalker@mac.com

Mid April is a great time to check out the prairie and other areas in Latta Plantation Preserve. That's when Indigo Buntings, Prairie Warblers and Yellow-breasted Chats arrive to set up housekeeping. Other migrants should be passing through and resident birds will probably already be feeding babies.

We'll meet in the visitor center parking lot just inside the gate at 7:30 AM. Bring snacks and water as we will be doing a lot of walking.

Tuesday, April 24th: McDowell Nature Preserve

1/2 Day Field Trip Contact: Dave Lovett - birdsalot@webtv.net

This is another one of our local nature preserves that can provide excellent birding during spring migration because of its location along the river. Rivers and streams in the spring are migrant highways for birds moving up to our mountains or further.

We'll meet in the Four Seasons Nature Trail parking lot at 8 AM. The picnic area is wonderful so bring a lunch and then perhaps head out to the prairie in the afternoon if there is time and the birds are good.

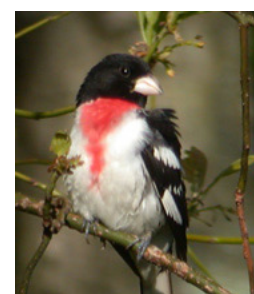
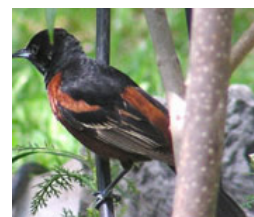
Sunday, April 29th: McAlpine Creek Greenway

1/2 Day Field Trip Contact: Taylor Piephoff - piephofft@aol.com

Because of the varied habitat along this greenway, McAlpine Creek Greenway, attaches a lot of neotropical migrants. Some arrivals will be settling in for breeding, others will just be passing through. Expect to see a variety of warblers, tanagers, and grosbeaks. Unusual birds that have shown up in this park in the spring include Swainson's Warbler and Swallow-tailed Kite. We're not likely to see these again but there will be plenty of other birds to keep us entertained.

Meet in the Monroe Rd. parking lot at 7:30 AM. We should be done around noon.

Field Trips



Burkett's Laws of Birding

First Law: The greater the time spent searching for a rarity, the greater the chances it will be sitting on your car when you return to the parking lot.

Second Law: There are two sides of a tree; the side facing you and the side where the bird is.

Third Law: When you see the bird you have always wanted to see, it will be in the last spot you thought of looking for it.

Fourth Law: The best bird seen during a trip is usually seen in bad light, isn't calling or singing, is seen for less than a second, and is the last "trip bird".

-- by Cody Burkett, Phoenix, AZ [<http://www-personal.umich.edu/~bbowman/birds/humor/laws.html>]

Have Feathers, Will Travel



Common Nighthawk

Barn and Cliff Swallows nest as far north as the Subarctic and winter regularly south to central Argentina (the former reaching Tierra del Fuego with some Frequency); and some Bobolinks commute between southern Canada and northern Argentina.

Excluding altitudinal migrants, the shortest migrations are by those of some northern seabirds, which move only as far south as the freezing of their marine habitat demands and birds that breed on the edge of the North Temperate Zone and must shift a few hundred miles south to find adequate winter food supplies.

How Fast?

“Cruising speeds” maintained during normal migratory flights are lower than maximum speeds attained by birds in chase situations or in aerial display. Generalizations supported by significant evidence include (1) waterbirds (including small sandpipers as well as larger,

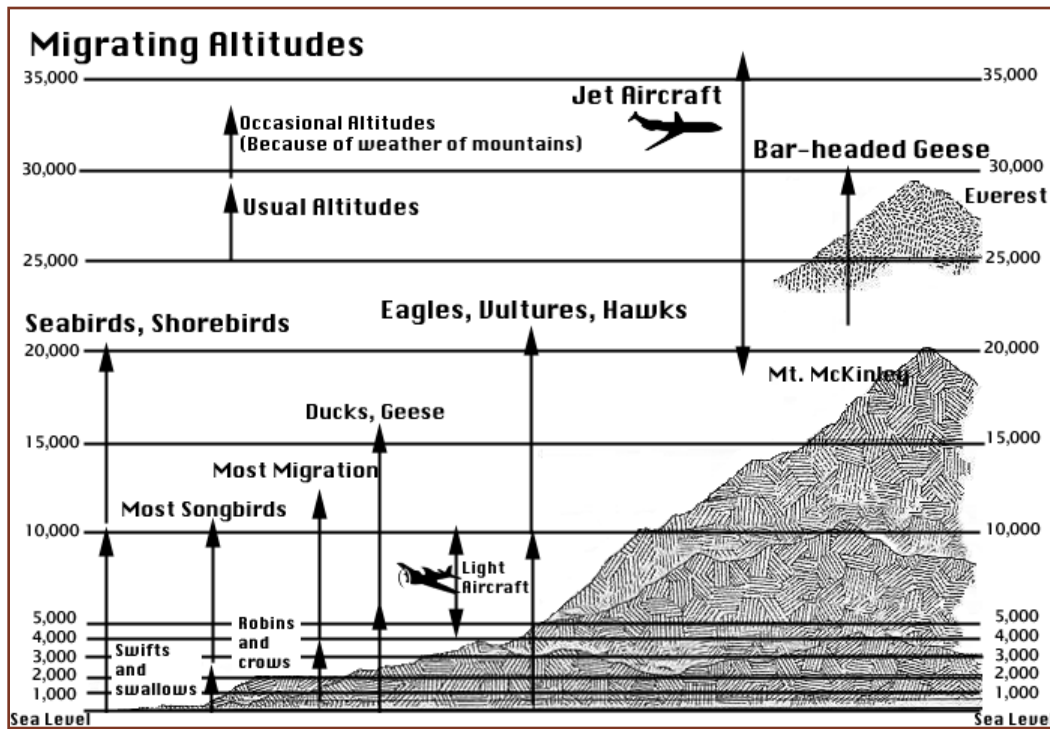
stronger fliers) migrate faster than small songbirds; (2) long-distance migrants travel faster than those making shorter journeys; (3) migrant birds en route to their breeding grounds travel faster than they do when bound for winter quarters; (4) the average rate of travel increases as a migrant nears its final destination, because stops tend to be fewer; (5) speed increases with altitude; and (6) migrants tend to maintain a constant ground speed by exerting more or less effort in response to unfavorable or favorable winds, respectively.

Most migrating songbirds travel at airspeeds between 20 and 40 mph, larger species averages are faster than small. Species of ducks, pelegic birds, shorebirds, and falcons seem to average between 40 and 60 mph airspeed, but small shorebirds flying at high altitudes have been clocked at airspeeds exceeding 100 mph.

How High?

In general: (1) Nocturnal migrants fly higher than diurnal migrants; in at least some cases the former gradually ascend and then descend during the course of a night’s travel, reaching maximum altitude around the middle of the night. (2) Migrants tend to fly higher over land than over large expanses of water. (3) Perhaps obviously, migrants crossing high mountain ranges tend to fly at greater than average heights. The altitude record for a migrant bird is held by the Bar-headed Goose, flocks regularly cross the Himalayans flying at about 28,000 feet.

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The most significant influence on the altitude at which birds fly is the weather, especially cloud cover and wind fields. Birds may fly lower when it is cloudy or, if the overcast is not too thick, they may ascend through it to reach the clear skies above. If favorable tail winds are to be found in certain altitudinal strata, birds often ascend or descend in order to take advantage of them.

Birds Kill Bugs Dead!!!

For all of the tactics insects have developed to avoid predation, they still face many species of birds that are highly adapted, consummate insect-eaters, including our neotropical migrants.

Outbreak insects are often infected with parasites. Many birds can identify the infected insects, and often select those that are not parasitized. By preying only on healthy individuals, birds add to the effect of the parasites in reducing insect populations.

Being highly mobile many species take advantage of a local insect outbreak by moving into the area. The abundance of birds at one of these invasions can be as much as 80 times above normal levels.

The breeding season for birds occurs during peak periods for insect populations. During insect outbreaks, some birds will actually increase the number of offspring they raise to take advantage of the abundant food supply.

Birds like to feed large, juicy insects to their young. Relatively few insects survive the egg and young larval stages. By feeding on large, late stages of caterpillars, pupae and adults, birds become a key force in depleting insect populations.

Birds can alter their diets to feed almost exclusively on an insect pest during an outbreak, if it becomes advantageous for them to do so. They can develop a search image for the new prey and learn how to hunt for it more efficiently.



Photo Courtesy Shawn Steffen
Utah State University Extension

Along with developing a search image, birds can change their foraging locations and adapt their behavior in response to an insect outbreak. For example, when a vast quantity of insects is located in the canopy of trees, many ground- or shrub-dwelling birds may ascend to the canopy to feed. Similarly, during a hatch of flying insects, birds that usually feed by plucking caterpillars off leaves may instead fly after the insects and capture them in mid-air.

Some foraging strategies of birds can result in such substantial changes in insect habitat that there is a resulting increase in insect mortality. For instance, by flaking bark off tree trunks, woodpeckers will expose bark beetles to temperature extremes, loss of moisture, parasites, and predators, all of which result in increased deaths.

Birds can affect the evolution of insects by increasing the cost to insects of avoiding predators. Many of the predator-avoidance adaptations can decrease the insect's efficiency in feeding and/or ability to lay the greatest possible number of eggs.

BATTLING THE BUGS

Bird predation plays a critical role in reducing and/or maintaining low populations of insect prey during non-outbreak years and in significantly increasing the time between outbreaks. Studies have shown that birds can eat up to 98% of budworms and as much as 40% of non-outbreak species in eastern forest, and can alter the population cycles and lower the population peaks when an outbreak does occur.

Increase numbers of birds in patches of forest with high insect pest density during a non-outbreak year may result in the elimination of those insects, and can alter the location and spread of subsequent outbreak.



Orchards near woodlots tend to have more birds present, which increases the rate of predation on agricultural insect pests. In some orchards, birds have been able to consume up to 98% of the over-wintering Codling Moths, and thus can successfully control the pest population.

HELPING BIRDS HELP US

There is much we can do to promote the effectiveness of birds as predators of harmful insects, and thereby help ourselves financially and environmentally.

For example, in Europe there have been numerous successful programs to provide nest boxes for cavity-nesting birds such as Pied Flycatcher. These birds can substantially reduce the insect pest population without the economic, environmental, and health costs of pesticides.

Managing for snag (retaining standing dead trees) in a forest or woodlots also increases available habitat for woodpeckers and other cavity-nesting birds. These species are highly efficient predators of insects, and can have a marked effect on insect populations.

One of the most promising forms of insect control is Integrated Pest Management (IPM), in which birds can play a key role. The success and economic feasibility of these programs may depend on the number and diversity of birds in an area. Providing hedgerows, woodlots, streamside habitat, and shade trees

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What You Can Do For Wildlife

* Walk your lawn before mowing or tilling to chase garter snakes, toads, baby birds and other wildlife into safe hiding.

* Do not release helium balloons because both the string and balloon are hazardous to wildlife. Read more from Audubon Magazine (09/02): <http://magazine.audubon.org/ask/ask0209.html>

* Stay away from bird nesting sites to avoid disturbing the birds but also to avoid leading predators to the nest.

* Do not prune or cut down trees or shrubs during the breeding season (April – August). Always check trees and cavities for residents before taking action. If a dead tree poses no threat to people or property, consider leaving it up to provide natural wildlife habitat. Read more about the value of dead trees in this article from Pennsylvania State University (12/02): <http://aginfo.psu.edu/News/december02/dead.html>

* If you encounter baby or injured animals, remove potential threats (dogs, cats, lawnmowers, etc.) and contact a local authority for further information. In general, it is best to leave wild animals alone. For help go to: <http://meckbirds.org/faq/faq.htm>

* Control all domestic animals (cats, dogs, ferrets, etc.) and do not allow them to roam freely, especially during the spring and summer when baby animals abound.

There are things we can do (or not do!) everyday to protect wildlife. It may be as simple as an added degree of alertness when driving or a sweeping stroll of your yard before mowing. With a heightened awareness and careful choices, each one of us can make a difference in our own patch of the ecological quilt.

* Other than birds, do not feed wildlife. Not only is it unlawful in many places, but it also creates dangerous imbalances (foraging patterns, wildlife interactions, population) and may cause animals to lose their natural fear of humans.

* Do not leave dog food outside and secure garbage with a locking lid. Wildlife Care of Ventura County (California) offers 8 great reasons NOT to feed wildlife: <http://www.wildlifecareofventura.org/Animal Help Information Pages/Feeding Wildlife - Why Not.htm>

* Motor oil should not be left in open containers (pans, buckets, etc.) and freshly paved or tarred surfaces should be guarded to avoid wildlife contact.

* In general, most chimneys should be capped and other entries into buildings should be blocked to prevent animals from becoming trapped. However consider that the off-season of your fireplace might be breeding season for chimney swifts that depend on the man-made structures for nesting sites. For information on maintaining your chimney for swifts, visit the Texas Department of Parks and Wildlife website: <http://www.tpwd.state.tx.us/nature/birding/chimneyswift/chimneyswift-index.htm>

* Explore harmless deterrent alternatives to deal with nuisance deer that are eating your garden. The University of Vermont Extension offers information on scent repellants: <http://www.uvm.edu/pss/ppp/articles/deerdeter.html>

* When driving, be alert for animals crossing the road. Turtles should be carefully helped to the other side.

* Avoid using snap and sticky traps in locations where birds and other untargeted animals can come into contact.

* Help children understand the value of living things and teach them to respect wild creatures and wildlife homes. The Connecticut office of the NRCS offers a list of resources and websites for school-aged children: <http://www.ct.nrcs.usda.gov/teachers.html>

--- National Audubon
[http://www.audubon.org/bird/at_home/KeepWildlifeSafe.html]



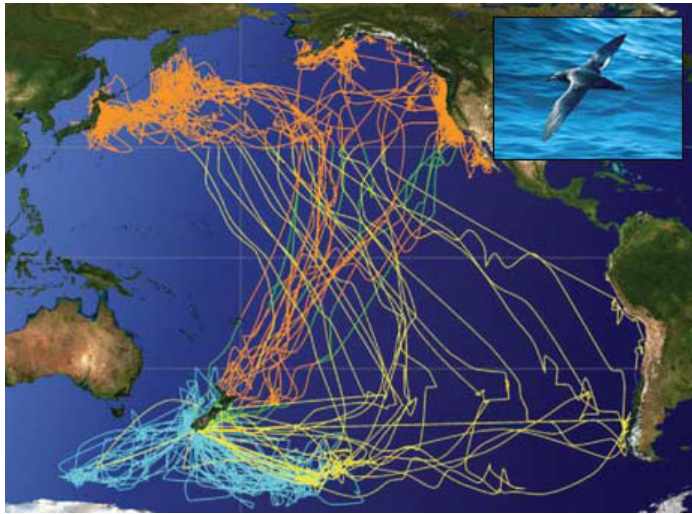
Where Do Birds Live?

*Birds live in quiet places.
They live where they can watch the morning come.
Birds live in spring blossoms,
cold winter snow
and prickly cactus in summer heat.
Birds live alone.
Some live with others.
Some live with so many you could not count them all.
Birds live in shrubby tangles,
in houses you make for them,
in lakes and streams where they can take a bath
and in trees older than anyone can remember.
Some live far away in the wilderness –
but many live in your own backyard.*

by Ron Hirschi

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Have Feathers, ...



This map depicts the migration of 19 sooty shearwaters that were tracked using electronic tags in a recent study. The research showed that the birds (pictured inset) migrated 40,000 miles (64,000 kilometers) a year, flying from New Zealand to the North Pacific and back. It is the longest animal migration ever recorded electronically.

Map courtesy PNAS/Inset photo courtesy Steve Shunk/USGS [<http://news.nationalgeographic.com/news/bigphotos/4083751.html>]

Nocturnal songbird migrants normally travel between 3,000 & 5,000 feet, but altitudes of between 8,000 and 10,000 feet are not unusual. Radar scans have picked up flocks (plausibly of long-distance, trans-oceanic migrants) as high as 21,000 feet. Clouds and other atmospheric conditions obviously affect the altitude at which birds can or prefer to migrate.

At the opposite extreme, many daytime migrants fly well below 100 feet over land and especially over the sea; small, low-flying land birds sometimes barely clear the waves, shearwaters regularly touch the surface with their wing tips.

---Adapted from *Birdwatcher's Companion*, by Christopher W. Leahy

Continued from page 5

Birds Kill Bugs Dead

in an agricultural landscape can provide cover and nesting areas for birds.

In 1921, Edward Forbush wrote "forest and agricultural pests were reduced by 28% by birds, resulting in saving of \$444,000,000 in crop and timber losses." The economic value of birds today is beyond our imagination. Their value is not just in their actual consumption of insect pests, but also in their role in keeping future outbreaks to a minimum.

--- Migratory Bird Center

[<http://www-personal.umich.edu/~bbowman/birds/humor/laws.html>]

Mecklenburg Audubon Society

Join now and your membership will be effective until June 2008.

Because National Audubon has reduced the chapter share of the national membership, Mecklenburg Audubon now must offer a Local Membership to cover the cost of the newsletter, web site & cost of meetings.

Name _____

Phone _____

Address [Street, City, ST, and Zip] _____

E-mail _____

- Individual Membership [\$10] Family Membership [\$15]
- Please, save trees and send me[us] the newsletter electronically.
- Please, add me to Meckbirds, the local listserv about birds and the environment.
- I[we] would be willing to lead a field trip.
- I[we] would be interested in participating in a work day.
- I[we] would be willing to do a program.

Return to:
Lucy Quintilliano, Treasurer, Mecklenburg Audubon Society
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Is it Time for You to Renew?

Take a look at your mailing label. Does it say 6/07? If it does it's time for you to renew. Renewing now will guarantee that you will receive newsletters in the fall. So don't miss an issue.

Renew Today!!

Audubon News

P.O. Box 221093
Charlotte, NC 28222



Who's New??

Bruce K Bowers
Beth & Andy Causey
Karen Record-Leach
Ellen Stone
Henry & Weslyn Strickland
Lee Van Malssen

Activities Calendar

- 3/24 Mallard Creek Greenway [1/2 day Field Trip]
- 3/31 McAlpine Greenway [1/2 day Field Trip]
- 4/5 Warblers [Monthly Meeting]
- 4/7 Green Swamp [Full Day Field Trip]
- 4/7 Ribbon Walk Nature Preserve [1/2 Day Field Trip]
- 4/14 Congaree Swamp [Full Day Field Trip]
- 4/19 Landsford Canal State Park, SC [1/2 Day Field Trip]
- 4/21 Latta Plantation Nature Preserve [1/2 Day Field Trip]
- 4/24 McDowell Nature Preserve [1/2 Day Field Trip]
- 4/28 Audubon North Carolina Annual Mtg. Charlotte, NC
- 4/29 McAlpine Creek Greenway [1/2 Day Field Trip]
- 5/1 McMullen Creek Greenway [1/2 Day Field Trip]
- 5/3 Where to Bird this Summer [Monthly Meeting]

