Birds are not the only creatures migrating in the fall. Soon some 300 million monarch butterflies spread all over North America will converge on small forests in the mountains of Mexico. During its migration this 1 inch dynamo will travel over 5,500 kilometers (3,417 miles). In comparison, if a human undertook an equivalent trek, s/he would have to travel to the moon and back.

Don and Barbara Moeller have been studying and working with these mighty migrants for many years. They have captured some unique events on their slides of the Monarch butterflies they have raised. And they will be sharing these amazing photographs with us at our October meeting. They will also educate us about IPM, integrated pest management, because we must stop applying pesticides to our yards if we wish to help all butterflies as well as the birds we love.

So glide on in to Mecklenburg Audubon’s monthly meeting on Thursday, October 6th at 7:30 PM in the fellowship hall of the Sharon Seventh Day Adventist Church [920 Sharon Amity].

Join the folks at Mecklenburg County Park and Recreation for their annual Reduce, Reuse, Recycle Fair and Yard Sale. They will have agencies from across the county that will lead hands-on demonstrations along with arts-n-crafts to make and take. There will be crafters and vendors selling their art with recycled materials. They will also be hosting a multi-family yard sale. So bring your reusable items such as eyeglasses, books, clothes, and building materials to donate to local agencies while enjoying a day of fun and learning! Call McDowell Nature Center at 704-588-5224 for more information.
**Field Trips and Events**

*Audubon News*

If you don't, you may not receive information about last minute changes or cancellations. Also, if we don't know you are coming we might leave without you!!

**Saturday, October 1:**

**Evergreen Big Sweep Workday**

*Half Day:* Mecklenburg Audubon has officially adopted Evergreen Preserve and now is committed to having several workdays a year. We still have several benches to place. But since Oct. 1 is Big Sweep we will also spend some time cleaning the settling pond and creek. We will do the same thing we did for the spring workday - meet at 7:00 AM, bird for about 2 hours then get to work. If you don’t want to get up early you can join us at 9 AM. Contact Larry Barden at 704-535-6385 or larry@labarden.com. He’ll let you know where to park since they are renovating Winterfield Elem. School. Bring water and tools.

**Thursday, October 6th:**

**Boyce Park**

*Half Day:* This year, since Dave Lovett is retired, we are offering some field trips during the week. Boyce Park is off of Sardis Rd. not far from where McAlpine Greenway crosses Sardis. There are a lot of nature trails and we might wind up doing some of McAlpine Greenway as well.

We’ll meet in the Boyce Park parking lot at 9 AM. Contact Dave at 704-622-2770 or birdsalot@webtv.net.

**Saturday, October 8th:**

**Huntington Beach, SC**

*All Day:* This is our fall sojourn to a South Carolina birding mecca. Fall migrants - hawks and warblers - will still be moving through, wintering shorebirds will have settled in and a few ducks may also have begun arriving. This is probably one of the best times of the year to see peregrine falcons and merlins. And I am sure we will be delighted with the annual spectacle of hundreds if not thousands of tree swallows. Best of all most of the people have moved out! It is a wonderful time of year to be on the beach.

We will meet in the parking lot on the east side of the causeway at 7:30 AM. It can get pretty hot so remember a hat, sunscreen and plenty of water. We will eat lunch in the park so you will need to bring food.

Since most participants stay for the weekend, we will plan to go out to dinner Saturday night. At dinner we’ll plan where to go on Sunday. A favorite, inexpensive Mom & Pop motel in Murrell’s Inlet is the Brookwood Inn [843-651-2550]. If you are planning to go contact Judy Walker at 704-537-8181 or birdwalker@mac.com.

**Saturday, October 15th:**

**Six Mile Greenway**

*Half Day:* This is a new greenway off of Marvin Rd. in the southern part of the county. In fact the trail leads right up to the South Carolina border. Very little birding has been done along this creek so anything could show up.

If you are interested in being one of the first birders to explore this area meet at the Earthfare grocery parking lot on Johnston Rd. Don’t forget to let Dave Lovett know you are coming by contacting him at 704-622-2770 or birdsalot@webtv.net.

**Saturday, October 22nd:**

**McMullen Creek Greenway**

*Half Day:* As the last of the tropical migrants move out new migrants from the north seeking warmer weather and more abundant food supply begin to arrive. The greenways are usual first place we encounter these winter wanderers. McMullen always has surprises for us.

We will meet in the McMullen Creek Greenway parking lot on Rt. 51 near the intersection of Johnson Rd. at 8 AM. If you are planning on coming contact Andrea Owens at 704-651-2232 or insectogirl@yahoo.com.

**Saturday, October 29th:**

**Owl Prowl - Freedom Park**

*Evening Field Trip.* Now a well established tradition, this owl prowl should be a sure thing. Rob Bierregaard has beentracting barred owls in the Myers Park area for several years now. He knows where they live! So we should be guaranteed at least one sighting.

We will meet at Nature Center parking area at 6:30. Costumes are optional but if you are planning on coming please contact Rob Bierregaard at 704-333-2405 or rbierregaard@carolina.rr.com.

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**The Big Sweep**

**Saturday - October 1, 2005**

In that seminal year, the Sweep was nothing more than a hastily planned coastal cleanup. However, the success that year, attracting over 1,000 volunteers and collecting over 14 tons of debris, allowed the Sweep to grow and rapidly expand inland. In 1989, the public-private partnership officially became Big Sweep, the nation’s first statewide waterway cleanup. Since it’s founding, North Carolina Big Sweep has had more than 200,000 volunteers and collected over seven million pounds of trash from North Carolina watersheds.

For information about local activities contact Meredith Moore, Mecklenburg County Big Sweep Coordinator at 704-432-1383, or send an email to: moorems@co.mecklenburg.nc.us.

North Carolina Big Sweep was founded as Beach Sweep in 1987 by Dr. Lundie Spence of the North Carolina Sea Grant College Program.
MEXICO CITY (AP) -- The population of Monarch butterflies has suffered a drastic decline, but Mexico -- where deforestation has long devastated Monarch wintering grounds -- is now blaming the United States and Canada.

Mexico’s Environment Department said on Wednesday that 75 percent fewer Monarch butterflies have appeared in 2004 compared to previous years.

It blamed cold weather and intensive farming -- including genetically modified crops -- in areas of the United States and Canada where the butterflies spend the summer and reproduce.

In past years, Mexico acknowledged the butterflies were affected by illegal logging of the central Mexico fir forests that make up the winter nesting grounds.

Activists and researchers suggested Mexico may be trying to offload some of the blame, after its own highly-publicized efforts to stop illegal logging ran up against often violent resistance from logging gangs.

“This is an incomplete and tendentious report, that seeks to put all the blame on other countries which do share responsibility,” said Homero Aridjis, whose Group of 100 environmental organization has long opposed illegal logging.

The Mexican government said the decline was due to a number of factors, including an unusually cold summer in the United States and a high mortality rate for the butterflies in Mexico in 2003 due to cold, wet conditions.

The announcement focused almost exclusively on events in the United States and Canada, including “industrial agriculture that displaced breeding and feeding grounds,” “the use of herbicides and loss of habitat,” and the planting of genetically modified crops not used in Mexico.

The government claimed Mexican forests “are healthy or in full recovery,” and logging had been completely eradicated in the butterfly reserves, statements disputed by activists like Aridjis, who say illegal logging is a huge problem.

“The main problem is the illegal loggers,” Aridjis said. “If nothing is done, looking at it pessimistically, we’re going to see fewer and fewer butterflies.”

In some widely publicized laboratory experiments, Monarch butterfly caterpillars died after eating milkweed coated with genetically modified corn pollen. In its own studies, the U.S. Environmental Protection Agency said there probably is little risk to butterflies.

While acknowledging that U.S. and Canada factors played a role in the butterflies’ problems, one researcher who spoke on condition of anonymity said Mexico was trying to put a spin on the research results.

The announcement was based on a report of total nesting ground areas prepared by Mexican government agencies, the World Wildlife Fund, and Mexican and U.S. researchers.

Researchers measured the area covered by butterflies, a fairly accurate indicator since they tend to literally blanket forest areas in dense orange-and-black clumps.

The government called the conclusions preliminary, based on reports from 12 of the 22 nesting grounds, and said they would have to be confirmed with further study.

The annual arrival of butterflies from across North America to winter in Mexico -- where they stay from October to late March -- is an aesthetic and scientific wonder.

The butterflies have proved remarkably resistant to both natural and manmade threats. In 2001, driving rain and bitter cold killed millions, leading scientists to speculate that migrating populations would be seriously depleted in 2002. To their surprise, anywhere from 200 million to more than 500 million monarchs returned that year -- twice as many as some predicted.
Monarch Butterfly Facts

In addition to being beautiful, monarch butterflies have an amazing life cycle. Many people—students, naturalists, scientists and others—have made it their life’s work to learn more about this incredible insect!

* No other butterfly in the entire world migrates like the monarchs of eastern North America. Individuals travel much farther than all other tropical butterflies, up to 2,000 miles.

* Monarch females can lay several hundred eggs, usually laying a single egg on a plant. The eggs hatch about four days after they are laid.

* Monarch caterpillars eat plants only in the milkweed family. There are over 100 known species of milkweeds in North America. Monarchs have been reported to feed on 27 of them, but they undoubtedly feed on others as well.

* Adult monarchs drink nectar from many species of flowers. Nectar contains sugar, which serves as the main energy source for monarchs.

* Monarchs have an effective chemical defense to protect them from predation; when they eat milkweed, they sequester the poisonous cardiac glycosides in the milkweed. Cardiac glycosides are poisonous to vertebrates; as a result, most monarchs face little predation from frogs, lizards, mice, birds and other species with backbones. Their bright colors also serve as a warning to predators that they contain these poisonous chemicals.

* Several species of birds—most particularly black-headed grosbeaks and black-backed orioles—can eat adult monarch butterflies in the overwintering colonies. While grosbeaks are relatively insensitive to the cardiac glycosides, the orioles have figured out which parts of the monarch bodies are safe to eat and avoid the most poisonous parts. Grosbeaks and orioles can kill more than 10% of the total monarch populations in a winter.

* The monarch caterpillar stage is also known as the larval stage; the caterpillar is an eating machine, taking few breaks even for resting.

* The monarch larva molts, or sheds its skin, five times before entering the pupal stage. The entire larval state lasts from 9-14 days under normal summer temperatures.

* The pupal stage is often called a chrysalis and usually lasts from 8-13 days (the lower time corresponds to warm conditions). It is not a cocoon, since it has no silken covering.

* Male and female monarchs are easily distinguished: males have a black spot on a vein on each hind wing that is not present on the female.

* Adult monarchs in summer generations live from 2-5 weeks; those that emerge in late summer and early fall can live up to 8-9 months to survive the trip to and from their overwintering sites in Mexico.

* Most monarchs found east of the Rockies winter in the Transverse Neovolcanic Mountain Belt in Mexico. Those found west of the Rockies winter along the California coast where they roost in Eucalyptus trees, Monterey pines and Monterey cypresses. California monarchs make up about 5% of the overall worldwide monarch population.

* In Nahuatl, an indigenous language of Mexico, butterflies are called 'papalotl'. From this word comes the Spanish word for kite: ‘papalote’. Monarchs are known as kites of the mountains.

* Monarch butterflies are found throughout the U.S., in southern Canada, Caribbean Islands, Australia, New Zealand and other Pacific Islands.

* In 1983, the IUCN Invertebrate Red Data Book designated monarch migration a threatened phenomenon.

* Not all monarchs migrate. There are continuously-breeding populations throughout the New World tropics and the Caribbean that remain in the same place throughout the year.

* When monarchs migrate, they are in a physiological state called “reproductive diapause,” or arrested sexual development. These monarchs will not mate or lay eggs until
their diapause ends in the late winter or early spring.

* Monarchs use “thermals,” or updrafts of warm air, to allow them to glide as they migrate, thus conserving energy for their long flight. Migrating birds also use thermals.

* Monarchs are in the butterfly family Nymphalidae. Members of this family appear to have only 4 legs, but they really do have 6; their front pair of legs is greatly reduced in size and tucked up under their head.

* Mating monarchs remain in copula for up to 16 hours. During that time, the male transfers nutrients to the female, along with sperm. These nutrients are used by the female in egg production.

* Spiders, mites, ambush bugs, ants, lacewings, wasps and stinkbugs all eat monarch eggs or larvae.

* Monarch larvae, like other caterpillars, have very poor vision. They see through six pairs of simple eyes, called ocelli.

* The long black tentacles on monarch larvae are not antennae. The antennae are very small and are on the bottom of the larval head.


A Schedule to Keep

March 21st – Remigrate to Gulf Coast and establish first spring generation
May 6th – First spring generation migrates to the Great Lakes region
June 21st – New summer generation migrates across the Appalachians
August 6th – Last summer generation begins fall migration
September 21st – Migration to Gulf Coast
November 6th – Migration across Tropic of Cancer to overwintering areas
December 21st – Overwintering for 90 days in Mexico at 3,200 m.
In many areas of western North America, the melodious song of the Black-headed Grosbeak is a familiar harbinger of spring. This species breeds from subalpine forests to desert riparian zones throughout western North America from southwestern Canada to southern Mexico. Relatively tolerant of human disturbance, it breeds in yards and gardens if adequate cover for nesting and feeding is available. Along river corridors in the Great Plains, the range of the Black-headed Grosbeak overlaps that of the closely related Rose-breasted Grosbeak (Pheucticus ludovicianus), and the two species are known to hybridize.

Black-headed Grosbeaks are medium-sized songbirds with short, thick bills. They are sexually dimorphic and socially monogamous. Adult males have a flashy black, white, and cinnamon plumage with a black head, rusty-orange breast, nape, and rump, black back, wings, and tail, and white patches on its wings. The under-wing linings are yellow, and the outer tail feathers are white; both of these can be seen in flight. Despite their showy plumage, males share about equally with females in incubating eggs and feeding young.

The female is drab and streaked, but also has yellow under-wing linings. She has a dark crown, a white line above the eye and below the cheek, and two white wing-bars on each wing. First-year males are streaked like females but have more orangey underparts.

Black-headed Grosbeaks are typically found in broad-leaved or mixed forests, and especially in brushy, riparian areas and tolerate human interaction fairly well. They are generally not found in coniferous vegetation, but will inhabit patches of broadleaved trees and shrubs within conifer forests, including streamside corridors, wetlands, and suburban areas. They forage on the ground or in low vegetation. During courtship, males fly with their wings and tails spread. Both sexes sing, but have different songs.

Both male and female Black-headed Grosbeaks sing their robin-like song from conspicuous perches, and forage in the foliage. They also often do so from the nest. Male song appears to function primarily in territory defense. Female song is generally a simplified version of male song and appears to function in communication between mates and in maintaining family groups once the young fledge. Occasionally, females sing full "male" song, apparently to deceive mates about the presence of intruders and force greater nest attentiveness.

Black-headed Grosbeaks are highly migratory and winter in Mexico. After the breeding season, they wander into berry-rich areas and may form migrating flocks at this time. They migrate early in the fall and return late in the spring.

On the wintering grounds, Black-headed Grosbeaks eat many seeds. During summer, they eat insects, spiders, snails, and berries. The Black-headed Grosbeak is one of the few birds that can eat monarch butterflies, despite the noxious chemicals the monarchs accumulate from their milkweed diet. Black-headed Grosbeaks eat many monarchs on their wintering grounds.
Let's See What You Learned!

1) Does every adult monarch migrate?  
   a) Yes  b) No

2) How long do summer monarchs live as adults?  
   a) 2-6 days  
   b) 2-6 weeks  
   c) 2-6 months

3) Do monarchs migrate during the day or night?  
   a) Day  b) Night  c) Neither

4) How long do autumn monarchs (those that migrate) live as adults?  
   a) 6-9 days  
   b) 6-9 weeks  
   c) 6-9 months

5) About how many eggs can a female monarch lay in her lifetime?  
   a) 50  b) 500  c) 5000

6) On what part of an adult monarch's body are the wings?  
   a) On the abdomen  
   b) On the head  
   c) On the thorax

7) On what part of an adult monarch's body are the legs?  
   a) On the abdomen  
   b) On the head  
   c) On the thorax

8) Are there more kinds of mammals or insects in the world?  
   a) Insects  
   b) Mammals

9) Which usually lasts longer, the egg or larva stage of monarchs?  
   a) Egg  b) Larva

10) How many true legs does a monarch caterpillar have?  
    a) 4  b) 6  c) 10

11) Would the larval stage last longer in cold weather or warm weather?  
    a) Cold weather  b) Warm weather

12) What are Lepidoptera?  
    a) Butterflies and moths  
    b) Butterflies  
    c) All butterflies in the same family as monarchs

Answers:  
1. b  2. b  3. a  4. c  5. b  6. c  7. c  8. b  9. a  10. b  11. a  12. a

Mecklenburg Audubon Society
Join now and your membership will be effective until June 2006.

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 and cost of meetings.

Name ___________________________ Phone ___________________________

Address [Street, City, ST, and Zip] ___________________________ E-mail ___________________________

- Please, save trees and send me/us the newsletter electronically.
- Please, add me to Meckbirds, the local electronic discussion list 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 at one of the local preserves.
- I [we] would be willing to do a program.

Return to: Lucy Quintilliano, Treasurer, Mecklenburg Audubon Society, P. O. Box 221093, Charlotte, NC 28222
Who’s New?

Ron and Deb Kitchen
Mina Lavendol
Vicki Lindow
James Mcraken
Mike & Risha Metzler
Jill Palmer
Justing & Susan Baldwin
Alan Church
Doug Dunnam
Natasha Goins
Richard & Donna Helms
Chris Huffstickler
Penny Soares
Tim & Lu Anne Stokes
Bill C. Teague

Calendar of Activities

- Evergreen Preserve Workday [1/2 day Field Trip] - Sat. 10/1
- Amazing Monarchs [Monthly Meeting] - Thu. 10/6
- Huntington Beach, SC [All Day Field Trip] - Sat. 10/8
- Marvin Rd. Greenway [1/2 day Field Trip] - Sat. 10/15
- McMullen Greenway [1/2 day Field Trip] - Sat. 10/22
- Owl Prowl (evening Field trip) - Sat. 10/29
- Important Bird Areas [Monthly Meeting] - Thu. 11/3
- McDowell Prairie [1/2 day Field Trip] - Sat. 11/5
- Pee Dee NWR [All Day Field Trip] - Sun. 11/13
- Savannah River NWR [All Day Field Trip] - Sat. 11/19