THE BULLETIN

Chapel Hill Bird Club

c/o Ginger Travis
5244 Old Woods Rd.
Hillsborough, N.C. 27278

Vol. XXIX, No. 6-9 *September 2000*

Monthly Meeting

Monday, September 25, 2000, at 7:30 pm

Program — *Carolina Wren Song Recognition,* presented by **Jeremy Hyman**, UNC-CH

Location — Binkley Baptist Church, the Lounge. Binkley is on Willow Drive at 15-501 in Chapel Hill, near University Mall.

Carolina Wren Song Recognition

by Ginger Travis

How do birds recognize and remember other individuals of their species? Jeremy Hyman, a graduate student of Haven Wiley, investigates the ways that neighboring male Carolina wrens learn to recognize one another and how they can use this recognition to treat neighbors differently from strangers, and good neighbors differently from bad neighbors.

We'll continue last year's tradition of having refreshments before the meeting. Come at 7:15 if you want to grab a cookie and swap tales about the good birds you saw this summer. See you there!

Mark your calendars

Upcoming fall CHBC meetings:
Oct. 23 Dan Frisk on the Pee Dee NWR
Nov. 27 Dr. Alan Feduccia on birds and dinosaurs
No meeting in December.

Field Trips

Saturday morning trips leave the Glen Lennox parking lot (on the north side of 54 just east of the intersection with 15-501 in Chapel Hill) at 7:30 am sharp and return by noon. Reservations are not necessary. Beginners and visitors are welcome! Bring binoculars, boots (or old tennis shoes), a scope if you've got one, and be prepared for a hike. Field trips are scheduled for September 9 and 30. Destinations have not yet been set. There may be a special trip to the Mount Mitchell area on Sept. 23. Contact Doug Shadwick (942-0479) for more details.

More trips, dates

Eno River State Park runs trips for birders. Leaders are Edith Tatum or Lori Marlow. Trips are free, but you must register ahead of time. Call 383-1686 to register and get directions to the meeting place.
Saturday, Sept. 16, 8:30 a.m., Birdwatching 101. Few's Ford Access.
Sunday, Sept. 24, 9 a.m., Birdwatching hike (moderate) Occoneechee Mountain.
Saturday, Sept. 30, 3 p.m., Hawk watch

Chatham Co. fall count, Sept. 16

What's better than a bird count during migration? And Chatham Co. is both large and relatively underbirded, so there are still good places to discover. Join the fun on Sat., Sept. 16.; contact Will Cook: 967-5446 or cwcook@duke.edu

Cuckoos and caterpillars

by Clyde Sorenson, Raleigh

I had an interesting observation last Thursday evening [Aug. 10]. I have two catalpa trees I planted in my backyard specifically to grow catalpa sphinx caterpillars (the very best bream (bluegill) bait in the world). These caterpillars are extremely gregarious and display aposematic (warning) coloration in black, white and lime green. These traits usually mean that insects are well protected from predators by noxious chemicals they pick up from their host plant, and, indeed, the scientific literature suggests that these guys store lots of alkaloids (the same chemical family that includes nicotine, caffeine and cocaine) they acquire from the catalpa in their hemolymph ("blood" to an insect). Thursday, I was out in the yard when I saw a yellow-billed cuckoo land in one of the two trees. He casually peered around the tree, spotted a suitable caterpillar, snatched

Membership Information

Calendar-year (Jan.-Dec.) dues for most individuals and families are $15; for students, $10. If you wish to renew for more than one year, multiply the annual dues rate times the number of years. Please send your check (payable to the *Chapel Hill Bird Club*) to club treasurer Fran Hommersand, 304 Spruce Street, Chapel Hill, NC 27514. If you have questions, please call Fran at 967-1745.

Name(s): _____

Address: _____

_____

_____

Telephone: (_____) _____ - _____

E-mail _____

it, manipulated it then swallowed it. I have never seen any other bird attempt to eat one of these caterpillars although I have seen many birds of several species in the vicinity of heavily infested trees, so I got my binocs out to see what the cuckoo was doing. Under closer scrutiny, I saw that what he did was mash the caterpillar rapidly from end to end with his bill; he then flicked his head repeatedly from side to side, and I could see droplets of hemolymph scattering away. In other words, it appears that he was processing the insects to remove the noxious chemicals they contained in their hemolymph. He then swallowed it and looked for the next victim.

Yellow-billed cuckoos are caterpillar specialists, and they are one of the few species that routinely eat hairy caterpillars like webworms and tent caterpillars. They often attempt to knock the hairs off these species before eating them, so maybe this catalpa sphinx processing behavior is an extension of the hair sweeping behavior.

Kestrels nest in Raleigh

by Clyde Sorenson (June 6)

The kestrels nesting in the appartment tower behind the K-mart on Western Blvd. in west Raleigh have apparently fledged at least one chick. They have been out flying around the grassy hill behind the tower all morning, with one obviously begging from the others.

Hummingbirds studies raise questions about birdsong evolution

Duke University news release by Monte Basgall

DURHAM, N.C. -- In a collaborative study, American and Brazilian scientists have discovered that hummingbirds, parrots and songbirds orders of birds that are evolutionarily distant from one another have evolved remarkably similar brain structures in order to learn to sing. The finding, reported in the Aug. 10 issue of Nature, will not only help understand the evolution of song in birds, but also offer insights into language in humans.

According to Duke University Medical Center neurobiologist Erich Jarvis, the paper's lead author, while most of the 23 orders of birds can vocalize, like the rooster that crows, these vocalizations are not learned but are genetically hardwired sounds. Only three orders of birds the songbirds, parrots and hummingbirds have the ability to learn songs from their adult tutors and repeat them in the right context, said Jarvis. This type of vocal learning is very similar to the way that humans learn to speak.

Surprisingly, these singing birds are not closely related to each other, and in fact have close relatives that cannot learn song, he said. Despite their evolutionary distance, the new research indicates that hummingbirds use the same seven structures in the brain that parrots and songbirds use when they are singing their learned vocalizations structures that aren't even present in non- vocal learning orders of birds.

The finding raises the evolutionary question of whether the three orders of birds developed the ability to learn song independently, and each time developed similar brain structures to serve this purpose. Alternately, there may have been a common ancestor with the ability to learn song, and only a few of the descendants retained this ability along with the specialized brain regions.

Jarvis said that all the evidence supports the former explanation (that vocal learning developed independently three times) and points to another example of independent evolution the similar development of wings from limb structures in pterosaurs (ancient flying dinosaurs), bats and birds.

"The reason why wings evolved in a similar way is because there is an environmental constraint, the center of gravity, placed on how animals can fly," he explained. "Here, I think there is an interaction between the environment and the brain, and Mother Nature has a basic constraint, even instructions, on how you can develop brain structures for a complex behavior such as vocal learning."

In applying the bird findings to mammals, Jarvis pointed out that, like the bird family, mammals have only a few members who demonstrate learned vocalizations humans, bats, whales and dolphins. The evolutionary implications of the bird research may impact the study of how and why these few mammals have developed the ability to learn speech or sing.

Jarvis and the other lead collaborator, Claudio Mello of Rockefeller University, gathered much of their data for this study in Espírito Santo, Brazil, where a living museum and nature reserve of the Atlantic Tropical Forest dedicated to hummingbirds was established. They observed birds in their natural state, using binoculars, video cameras and sensitive audio recorders to record natural hummingbird behavior and song complexity. A few of the birds were captured and their brains were studied to define the regions that become activated while singing.

Baby-sitting a tern-skimmer colony

by John Fussell

I spent yesterday [July 16] baby-sitting the tern-skimmer colony on Sand Dollar Island (Rachel Carson Reserve), Beaufort Inlet, NC.

This is a very small island and very small colony--we've marked off about 200' x 200' x 200'. There are about 20-40 nesting pairs of Common Terns and Black Skimmers.

The colony is certainly doing better than would be the case if we had not roped it off and were not doing some policing of it.

However, now that some of the young are large, I see that we are actually facing the most tenuous part of the endeavor. Many, many beachgoers come to the island, often bringing dogs. The oldest young are now 1)inclined to panic easily because of disturbance; 2) inclined to move toward the shore, where it's cooler (and thus outside the roped-off area).

Deceased Member

Ellen Spalt of Carolina Meadows, on May 19, whose life list (as reported in 1995) stood at 619 species.

20-30 years ago, I wouldn't have thought it justified to try to protect such a small colony, but with the decline of nesting colonies of these species, I think it's justifed now. Besides, it doesn't seem right to not protect a nesting colony in a Reserve named for Rachel Carson.

Eight species of colonial waterbirds believed to be declining

by Chris Powell in Wildlife in North Carolina, April, 2000
[reprinted with permission]

A recent survey of colonial waterbirds along North Carolina's coast has revealed an apparent decline among eight species.

David Allen, coastal non-game project leader for the N.C. Wildlife Resources Commission, said the waterbirds of concern include the Black Skimmer, Gull-billed Tern, Forster's tern, Black-crowned Night Heron, Glossy Ibis, Tricolored heron, Snowy Egret and the Common Tern.

"Most species of colonial nesters are faring well," Allen said, "but we have noticed a decline in these eight particular species."

The decline is largely due to the rapid development of coastal areas, which has caused the stabilization of beaches, Allen said. Most of these waterbirds need habitat consisting of sand-shell beach areas with little or no vegetation. This type of habitat historically has been created by ocean overwash that knocks down dunes and pushes sand and shell onto the beach.

"The most serious decline has occurred in Common Terns," Allen said. "We had 4,885 nesting pairs in 1977 but only 888 pairs in 1999. Also, Gull-billed Tern-nesting numbers have dropped from 621 to just 154 during the same 22-year period. And Black Skimmer nests have dropped from 1,925 to 679."

While there are no simple solutions to providing the habitat needed to reverse these trends, there are things individuals can do to give colonial waterbirds a helping hand.

"The most obvious thing is that if you see a posted area for nesting birds, stay out of that area," Allen said. "Also, don't let your cats run free on the beach and keep dogs on a leash."

Once every two years, Wildlife Commission biologists and other personnel perform waterbird surveys between April and July. The participants line up about 10 feet apart and walk across an area, counting nests or chicks. During the 1999 survey, a total of 78 colonies of colonial waterbirds were found in the estuaries and barrier beaches of North carolina. These sites contained 56,689 nests of 23 different species.

NC nest sites for Peregrine Falcons in 2000

by John Cecil

[May 30] The Nongame and Endangered Wildlife Program of the North Carolina Wildlife Resources Commission monitors nesting Peregrine Falcons in North Carolina. Currently we know of ten sites where peregrines are present, six with chicks.

The sites are as follows: Big Lost Cove, Avery Co.; Blue Rock (Hickorynut Gorge), Rutherford Co.; Devil's Courthouse (Blue Ridge Parkway), Transylvania Co.; Grandfather Mt., Avery Co.; Hanging Rock State Park, Stokes Co.; Linville Gorge (Shortoff Mt.), Burke Co.; Looking Glass Mt., Transylvania Co.; Pantertail Mt., Transylvania Co.; Whiterock Cliff, Madison Co.; Whiteside Mt.; Jackson Co.

The most accessible sites for viewing falcons are: Devil's Courthouse (from the parking lot you can see into the eyrie with a scope), Whiteside Mt. (from the top falcons may be observed in flight), Looking Glass Mt. (falcons maybe seen in flight from some of the trails), and possibly along the Profile Trail at Grandfather Mt.

Four Red-shouldered Hawk fledglings leave nest

by Alan and Sally Johnston, Chapel Hill

This has been an exciting week for the four young Red-shouldered Hawks in the nest in the Hickory Tree in our yard in Chapel Hill. Since this is a quite successful brood so far, we'd like to record the events day-by-day:

On Tuesday, May 23 (the 28th day from the hatching of the first chick), we noted that all four young hawks had almost fully developed their juvenile plumage. The feathers at the top of the head seemed to come last, but by this day three had brown streaky heads, and one seemed about two or three days behind, and now had a blotchy brown head. Otherwise, they all seemed ready to fly, but none had yet left the nest. For the first time we saw them taking turns standing on the edge of the nest, flapping their wings vigorously, and jumping up and down 4 or 5 inches. They spent a lot of time preening, and despite the crowded conditions on the nest still seemed to get along quite amicably.

On Thursday, May 25 (the 30th day) we saw one of the young hawks jump about three feet up on to one of the branches that formed the fork for the nest, and after awhile jump back down to the nest.

Friday, May 26 (the 31st day) was the big day. When we first looked in the morning, 3 of the young hawks were in the nest, and 1 was missing. It must have jumped along one of the branches out of sight. In the evening we saw 1 still in the nest, but the other three were now out of the nest. One was only 3 or 4 feet from the nest; the other two were much bolder. They were jumping and flapping their wings, jumping from branch to branch, and both eventually flew to nearby trees (1 hickory and 1 pine) about 50 feet away. Their flying seemed strong, their landings needed some practice. One hawk, presumably the youngest one, stayed in the nest, but that meant it had the first go at food brought in by the adults. We saw it try to swallow a small mole, all in one piece, but the young hawk eventually gave up, held the mole down and tore it up with its beak to eat it in a proper manner!

Saturday, May 27 (the 32nd day). All four were away from the nest this morning, but we found them all sitting on various branches in the nesting tree 10 to 20 feet from the nest. The nest is in a three-pronged fork in a Shagbark Hickory, with the nest about 60 to 65 ft. high. They all stayed up at that height, about 60 to 70 ft., with two of them flying to trees about 50 ft away, which took 5 wingflaps of very solid, coordinated flying. All four have now been seen flying from

branch to branch. When we looked around 3:00 p.m. this afternoon, all four were back at the nest, and they seemed to have just finished a meal (their gullets all puffed up).

We presume that the first egg or eggs were hatched on Wednesday, April 26, because we saw the mother fussing with something underneath her. We saw the first two chicks on April 27, a 3rd was visible on April 28, and all four were clearly seen on April 29, but we cannot be exactly sure of the sequence of hatching; the last one could be two days or so behind the first one. So at least three had left the nest by the 31st day, with the last one leaving on the 32nd day. At least two were clearly flying by the 31st day, and all four were flying by the 32nd day. Ehrlich, The Birder's Handbook (1988, page 230) gives a range for "time to fledging" for Red-shouldered Hawks, of 39 - 45 days. Perhaps this range should be extended at the lower end to 31 days. The definition of "fledging" (David M. Bird, "The Bird Almanac," 1999) is "acquisition of first true feathers by a young bird." These four hawks seem to have their full juvenile plumage, and are all now rapidly expanding their universe.

One other note: this brood of hawks has been raised in a neighborhood which also has Barred Owls, who may very well also be breeding, who can be heard very clearly each day from the Hawks' nest.

Boats for birding - Sept. demo days

by Ginger Travis

Several CHBC members are happily using kayaks to sneak up on birds. For others who are considering it, the Pro Canoe stores in Raleigh and Greensboro, as well as REI in Cary, will be holding demo days and sales in September. What's a demo day? The store and/or boat manufacturers show up at a local lake with tons of canoes and kayaks. They put all those boats on the beach for people to get in and paddle. No charge, no hassles. (Though it's definitely a mob scene - and someone invariably turns over.) Included will be a few kayaks that are excellent for wildlife observation on flat water - boats that are fairly light (40-50 lbs.), fairly inexpensive (under $500), and very, very stable. These boats are known as recreational kayaks - and they're definitely NOT meant to be rolled! A few brands and models to look for are Perception's Swifty and Sierra, Dagger's Zydeco, Bayou and Delta, Old Town's Loon (several sizes), and Wilderness Systems' Rascal, Pungo, Chesapeake and Pamlico (tandem). Fit and ease of paddling vary a lot in kayaks. Also crucial, can you lift and carry the boat you like? It's important to try before you buy, and that's what demo days are all about.

Sept. 9 (call for time) Pro Canoe Raleigh 877-853-0539 Lake Wheeler
Sept. 16 (call for time) Pro Canoe Greensboro 800-450-6819 Lake Brant
Sept. 30 3-7 p.m. REI 919-233-8444 Lake Crabtree

Jordan Lake Osprey Nest Platforms

Sept. 16: Volunteers needed to build Osprey nesting platforms Jordan Lake is losing its standing dead timber where up to 12 pairs of ospreys nest. Solution: volunteers will build platforms, which CP&L will install. The first work day will be Sat., Sept. 16, 8 a.m. till noon, at the NC State Recreation Area Headquarters maintenance area on NC Hwy. 64. To participate, contact Michael Hosey, Conservation Biologist, US Army Corps of Engineers. 919-567-1032 Ext 26 or email michael.l.hosey.II@usace.army.mil

2000 Chapel Hill Spring Bird Count

by Will Cook

The 43rd Chapel Hill spring bird count on 5/14/2000 was a little below average in number of species (120), probably due to the late date, but, thanks to a high level of participation, we had our second highest count of individual birds ever (11242). Our best birds included a female Anhinga seen soaring high near Jordan Lake by Steve Graves (only the second record on a Chapel Hill spring count), an Olive-sided Flycatcher seen at Mason Farm by Will Cook (our fourth record), a very late Brown Creeper well described by Bobbie Wilkerson, a Wilson's Warbler seen at Mason Farm by Will Cook (our fifth record). Other birds that we usually miss included 4 Wild Turkeys, a Chuck-will's-widow, and 2 Canada Warblers.

The number of parties and party-hours was the highest in years, so we set a large number of record highs. The count of 87 Great Blue Herons shattered the record of 23 from last year. Boosting the number was our first ever heronry, which had 18 active nests, found on Cub Creek in Chatham County by Alan Johnston and Edith Tatum. The count of 43 Red-shouldered Hawks blasted past the old record of 28 set in 1997, thanks in part to Alan Johnston's neighborhood family of five. The 27 Song Sparrows more than doubled the old record of 13, because of their increased use of urban habitats such as shopping mall parking lots, where they formerly were absent. Other record highs were set for Black Vulture, Turkey Vulture, Canada Goose, Mallard, Killdeer, Ruby-throated Hummingbird, Downy Woodpecker, Pileated Woodpecker, Great Crested Flycatcher, Red-eyed Vireo, American Crow, Carolina Chickadee, Tufted Titmouse, White-breasted Nuthatch, Blue-gray Gnatcatcher, Pine Warbler, Summer Tanager, Northern Cardinal, and Indigo Bunting.

A few species were seen in unusually low numbers. The count of 55 Bam Swallows was our lowest since 1974, far below the mean of 96. Because of the late date we only found 4 Black-throated Blue Warblers (mean 31), and 4 Yellow-rumped (Myrtle) Warblers (lowest ever; mean 163), and 3 White- throated Sparrows (ties record low; mean 66). Field Sparrows were also scarce, with only 21 (lowest since 1969; mean 43).

Club officers

President: Magnus Persmark (933-2255, emp34157@glaxowellcome.com)
Vice President (CH): Judy Murray (942-2985, jmurray.uncson@mhs.unc.edu)
Vice President (RDU): Karen Bearden (birders@aol.com)
Secretary: Karen Piplani
Treasurer: Fran Hommersand (967-1745)
Field Trip Chairman: Doug Shadwick (942-0479)
Bulletin Editor: Ginger Travis (942-7746, Ginger_Travis@unc.edu)
http://www.duke.edu/~cwcook/chbc
8/25/2000