No we’re not talking about the folks in Canada who show up in Myrtle Beach in January. But the birds in this case are from up north and show up in our yards some time in October looking for a place to spend the winter. White throated sparrows, yellow-bellied sapsuckers and juncos are just a few of these visitors. Taylor Piephoff will help us sharpen our identification skills and provide us with some natural history of the winter birds found in our neighbor. This will help us get ready for the four Christmas Bird Counts that are coming up.

Don’t miss this informative presentation at 7:30 PM in the fellowship hall of the Seventh Day Adventist Church on Thursday, December 2nd. See you all there.

Juncos are the “snowbirds” of the middle latitudes. In the eastern United States, they appear in all but the most northern states only in the winter, and then retreat each spring. Some juncos in the Appalachian Mountains remain there all year round, breeding at the higher elevations. These residents have shorter wings than the migrants that join them each winter. Longer wings help the migrants fly long distances.

The Dark-eyed Junco includes five forms that were once considered separate species. The “slate-colored junco” is the grayest, found from Alaska to Texas and eastward. The “Oregon junco” is boldly marked blackish and brown, with a distinct dark hood, and is found in the western half of the continent. The “gray-headed junco” has a brown back and gray sides and lives in the central Rocky Mountains. The “white-winged junco” is all gray with white wingbars, and breeds only near the Black Hills of South Dakota. The “Guadalupe junco” of Baja California is dull and brownish. Two other forms may be distinguish-
Each year more than 50,000 observers participate in this all-day census of early-winter bird populations. The results of their efforts are compiled into the longest running database in ornithology, representing over a century of unbroken data on trends of early-winter bird populations across the Americas. Simply put, the Christmas Bird Count [aka CBC] is citizen science in action.

The primary objective of the Christmas Bird Count is to monitor the status and distribution of bird populations across the Western Hemisphere. The count period, which is from December 14th to January 5th, in North America is referred to as “early winter,” because many birds at this time are still in the late stages of their southward migration, so it is not “true” winter. When these data are combined with other surveys such as the Breeding Bird Survey, we begin to see a clearer picture of how the continent’s bird populations have changed in time and space over the past hundred years.

The information is also vital for conservation. For example, local trends in bird populations can indicate habitat fragmentation or signal an immediate environmental threat, such as groundwater contamination or poisoning from improper use of pesticides.

From feeder-watchers and field observers to count compilers and regional editors, everyone who takes part in the Christmas Bird Count does it for love of birds and the excitement of friendly competition -- and with the knowledge that their efforts are making a difference for science and bird conservation. For more information on Christmas Bird Count, visit the website of the American Birding Association or contact the local CBC coordinator.

Charlotte Area CBCs

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<th>Saturday, December 18th</th>
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<tr>
<td>Gastonia CBC</td>
<td>Charlotte CBC</td>
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<tr>
<td>Contact: Judy Walker</td>
<td>Contact: Wayne Covington</td>
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<tr>
<td>704-537-8181</td>
<td>704-362-1774</td>
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<td><a href="mailto:Birdwalker@mac.com">Birdwalker@mac.com</a></td>
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<td>South Lake Norman CBC</td>
<td>Pee Dee NWR</td>
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<tr>
<td>Contact: Taylor Piephoff</td>
<td>Contact: Judy Walker</td>
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<td>704-532-6336</td>
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<td><a href="mailto:PiephoffT@aol.com">PiephoffT@aol.com</a></td>
<td><a href="mailto:birdwalker@mac.com">birdwalker@mac.com</a></td>
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FieldTrips

Saturday, December 4th
Winter Waterfowl
Although Coddle Creek Reservoir [or what it is called now] has become the place to see waterfowl in the Charlotte area, there are several other spots we will check as well. Hopefully, the weather up north will be co-operative this year and push the ducks our way. This trip will be a warm up for the numerous Christmas counts later this month.

We will meet at 8 AM at the McDonalds at University Place and will return about 12:30 PM. If you plan to join the group contact Taylor Piephoff at 704-532-6336 or PiephoffT@aol.com.

Did you know on the first Christmas Bird Count on December 25, 1900, 18,500 individual birds [90 species] were seen by 27 people in 25 different locations.
Collisions with windows are estimated to claim the lives of as many as one billion birds in North America each year. The collisions occur in every season and have been reported wherever both birds and glass occur, but systematic monitoring of houses suggests that most birds are killed in winter, when many are attracted to bird feeders.

That disturbing fact places well-intentioned bird feeders on the horns of a dilemma: Should they continue to provide food, thereby setting the stage for bird-glass collisions, or take down their feeding stations, thereby removing the potentially fatal attraction but forcing hungry birds to fend for themselves? Keep feeding, answers biologist Daniel Klem Jr. in the March 2004 issue of the Wilson Bulletin, but move your feeders closer to the window.

Klem and colleagues at Muhlenberg College conducted trials aimed at determining the effect on bird mortality of the distance at which feeders are placed from conventional, vertically oriented windows panes. The result? The proportion of fatal window strikes grew markedly as the distance between the feeder and window increased, but feeders located as little as three feet from the glass resulted in no bird kills.

“Avian injury and mortality from collisions with glass can be reduced worldwide by those who feed birds,” Klem writes. “Feeders placed within one meter of a pane led to no fatalities and offer the most protection for birds, especially at residential buildings and visitor centers of local, state, and federal parks and other recreational facilities.”

From Birder’s World, December 2004 [www.birder’sworld.com]
Audubon North Carolina announces the release of Important Bird Areas of North Carolina, a scientific assessment of the most important habitats for birds in the state. The culmination of six years of study, the publication identifies 92 places from the mountains to the coast that are vital for breeding, migrating, and over-wintering birds.

The nearly 4.5 million acres of land and waters encompassed by the report range from internationally known natural heritage sites such as 300,000 acres of Great Smoky Mountains National Park to a handful of two-acre islands that are little known but vital to breeding waterbirds. Manmade features, such as Falls and Jordan lakes, known for their growing populations of Bald Eagles in the midst of developing cities, also made the list. One Important Bird Area (IBA) includes 600,000 acres of ocean off Cape Hatteras where seabirds congregate and forage in huge numbers.

Important Bird Areas have no minimum or maximum size limit. What the sites have in common is they all are important and essential to North Carolina’s birds.

The National Audubon Society is the lead agent for the United States in implementing the global Important Bird Areas (IBA) program. As part of a nationwide initiative and a global partnership to identify and conserve habitats critical to birds, Audubon has initiated IBA programs in 46 states with programs in all 50 states expected in 2005.

IBAs are identified at a state level by a thorough analysis of bird populations and habitats, then approval by a state IBA Technical Committee, comprising leading experts on birds and their habitats. These areas may hold large concentrations or an exceptional diversity of birds, harbor rare or endangered species, or harbor a representative assemblage of birds associated with rare or threatened habitat. Once approved at a state level, sites can then be reviewed by the National IBA Technical Committee for continental or global IBA status.

Being named an IBA places no restrictions on property or its future uses. However, Audubon seeks to work cooperatively with interested landowners and managers to monitor, protect and improve these sites for birds and other wildlife. The program dovetails with other natural heritage protection efforts, such as the state’s One North Carolina Naturally initiative.

As a voluntary program, IBA recognition is meant to inspire rather than require. To inspire greater appreciation of priority landscapes and more sensitive management, to inspire partnerships toward expanded protections & community stewardship.

Of the 92 North Carolina locations described and mapped in the report, 68 are in the coastal plain and sandhills, 16 are in the mountains, and 8 lie in between in the Piedmont. The distribution of sites reflects where expanses of relatively undisturbed or suitable lands exist for concentrations of at-risk, sensitive or diverse species of birds.

Over the next three years, Audubon will focus its conservation efforts on a number of priority sites from the coast to the mountains. These focal IBAs are places where opportunities for acquisition or other protections of vulnerable lands are available, where current management needs improvement, and/or where additional data collection is needed.

Some IBAs have been targeted for purchase so the sites will forever be protected. The Lea-Hutaff Island complex along the southern coast is one of the last relatively undisturbed barrier islands in the state. Cooperative efforts to buy-out owners of the island have been ongoing and will be increased, with final ownership being transferred to the state under Audubon’s management. The island supports breeding species such as the threatened Piping Plover, Least and Common terns, American Oystercatchers, and thousands of migrating/wintering shorebirds.

Other sites, such as the Pocosin Lakes National Wildlife Refuge, seemingly protected as public natural lands, are actually under great threat. Audubon is currently challenging in federal court an attempt by the U.S. Navy to place a jet landing field just miles away from this prime wintering ground for 100,000 Tundra Swans and Snow Geese.

Continued on Page 7
One outcome of the IBA process has been the identification of gaps in knowledge of bird numbers across the state. Audubon, working with other organizations and volunteers, is undertaking additional data gathering at locations thought to be prime bird habitat but insufficiently documented. The popular Grandfather Mountain has long been known as a place to see birds, such as Northern Saw-whet Owls, Peregrine Falcons, and Red Crossbills. But scientific methods for monitoring populations were only recently initiated under Audubon’s leadership.

Presenting the results of the initial identification phase of the Important Bird Areas program is only a first step. The assessment of North Carolina’s birds and their habitats is ongoing and the list will be continuously updated. But the real success will be accomplishing on-the-ground conservation that results in the long-term protection of birds and their habitats.

For more information, and to see the full text of the Important Bird Areas of North Carolina, visit www.ncaudubon.org or call 910/686-7527.

### IMPORTANT BIRD AREAS by County

#### Coastal Plain
- Alligator River Lowlands
- Bald Head/Smith Island
- Battery Island
- Beacon Island
- Big Swan Island
- Bigfoot Island
- Bird Island-Twin Lakes
- Cape Hatteras National Seashore
- Cape Lookout National Seashore
- Carrot Island-Bird Shoal
- Cat (Wood) Island
- Cedar Island Marsh
- Chainshot Island
- Chowan River Bottomlands
- Clam Shoal
- Croatan Forest Marshes/Pine Island
- DOT Island
- Dunahoe Bay
- Eagle Island
- Ferry Slip Island
- Great Dismal Swamp
- Great Island
- Green Swamp
- Gull Island
- Hobucken Marshes
- Hog Island
- Holly Shelter-Angola Bay
- Judith Island Point
- Lake Mattamuskeet-Swanquarter
- Lea-Hutaff Island
- Lower Neuse River Bottomlands
- Lumber River Bottomlands
- Mackay Island
- Masonboro Island
- Middle Marsh
- Monkey Island
- Morgan Island
- New Dump Island
- North Pelican Island
- North Rock Island
- Ocracoke Village Heronry

#### Piedmont
- B. Everett Jordan Lake
- Caswell Game Lands
- Catawba River/Mtn. Island Lake
- Eno River Bottomlands
- Falls Lake
- Pee Dee NWR
- Pilot Mountain
- South Mountains

#### Mountains
- Amphibolites
- Black & Great Craggy Mountains
- Blue Ridge Escarpment Gorges
- Bull Creek
- Bullhead Mtn-Mahogany Rock
- Chimney Rock-Hickory Nut Gorge
- Grandfather Mountain
- Great Smoky Mountains NP
- Highlands Plateau
- Joyce Kilmer-Slickrock Wilderness Area
- Max Patch
- Nantahala Mountains
- New River Corridor
- Plott and Great Balsam Mountains

#### Old House Channel, Island C, L, MN
- Onslow Bay [N/a]
- Oregon Inlet Shoals
- Outer Banks, Inshore Ocean
- Outer Continental Shelf, Cape Hatteras
- Outer Green Island
- Palmetto Peartree-Buckridge
- Pea Island
- Pocosin Lakes-Pungo
- Raccoon Island
- Rawls Island
- Roanoke River Bottomlands
- Roanoke Sound, Island G
- Roos Point
- Sand Bag Island
- Sandhills East
- Sandhills West
- Sheep Island
- South Pelican Island
- Striking Island
- Upper Neuse River Bottomlands
- Waccamaw River Bottomlands
- Wainwright Island
- Whitehurst Island

#### Catawba River/Mtn. Island Lake
- Eno River Bottomlands
- Falls Lake
- Pee Dee NWR
- Pilot Mountain
- South Mountains
What color should I wear while birding? This question, considered by birders and professional field ornithologists worldwide, has been speculated upon, but never answered satisfactorily. The reason there is no adequate answer to this question is because we (humans) do not understand the perceptual world of any non-human animal. In fact, we frequently have a tough time understanding the perceptual world of humans different from ourselves. For example, it is hard to imaging what being blind, or even color blind, is like if you have normal vision. It may even be harder to imagine how other sensory modalities can be enhanced over our normal experience.

Birds see color, i.e., they have color vision. Their color vision is not only good, but it is actually better than our own. These two definitive statements describe what vision researchers are pretty sure is true - however, at the highest levels of scientific rigor they have not been firmly established. Today it is widely accepted that the avian eye, not the human eye, is the quintessential color vision system. It is believed that birds see more colors (hues) than we do and the colors also appear more saturated to birds than do ours to us. They are able to do this because they have four (or more!) cones and pigmented oil droplets in their photoreceptors. Whereas we have short, middle and long (also called blue, green, & red, respectively) cones, they not only have short, middle, and long cones, but also have an UV cone.

When we talk about what colors we should wear in the field, we assume colors look the same to birds as they do to us. This assumption may not always be correct. Birds probably do see colors similar to the way we see them, but they are most likely never exactly the same, and may indeed be quite different. To clarify, a flower that is red to us is probably also red to most diurnal birds, but is probably seen by them as a different hue of red. If a flower (or other object) reflecting the red light is also reflecting UV light, the color (hue) seen by birds will almost certainly be different than anything we see.

When I teach bird watching I try to get students to think about how the world looks from the bird’s point of view. With the bird that is thirty yards away try to transport a piece of your mind into the bird’s head. Then, through the bird’s eyes, look from its perch back at yourself. From its vantage point what would be the view? This exercise isn’t restricted to colors of birders’ clothing but is something to develop into a general practice -- do this anytime you are in the field. Birds are living entities and possess highly developed brains. Like you, they experience life and have individual perceptions. It is fun to not only see birds, but to see the birds’ world. You then feel a closer communion with them.

Ok, you ask, so what is that world like? Again, no human knows. My best guess is that birds see colors slightly differently than we do in most cases and significantly different in some cases. Further, I assume colors appear even more saturated to birds than they do to us. Following these assumptions, earth tones should appear more natural to birds than bright colors that are not part of their normal environment. Since most of my birding is well away from human activity, I wear subdued earth tones except for dark blue jeans. Bright colors not only make us more conspicuous, but they amplify all our movements. For example, if you are wearing a white shirt with long sleeves and you move your arms that movement will be magnified against a natural back-
ground. Any other color that stands out against the background will have the same effect. The effect will be greater yet if the white also reflects UV. Bright yellows, hunter orange vests, and other conspicuous objects are not normally part of such environments, and so are novel items to forest birds. Many birds are understandably neophobic (wary of anything new).

It has been observed that aside from bird photographers few birders wear camouflage clothing. I hypothesize this is related to the fact that few birders ever sit still for any length of time. This is a hunting technique and birders today tend to regard hunters as enemies. And no one wants to look and behave like the enemy. This is really unfortunate because hunting has much to teach birders about how to ‘stalk’ their quarry. Many hunting techniques can be employed that I never see birders use. You don’t have to kill the animal in order to find these techniques valuable, as bird and nature photographers know. If you sit and/or move slowly, camouflage is very effective.

Also always wear a hat, a baseball cap, to hide your face and eyes from birds. If you are a nice morsel for a predator, as most birds are, you are in constant danger of predation and you know you’re in trouble if a predator has focused his stare on you. Think about the last time you noticed someone staring at you on a bus, or at any other public place. You feel more comfortable when you look around and there are no eyes looking at you. This is the case for birds also - they look to see who is looking back. They know to watch for peering eyes and the ones that are still alive are good at it.

The bird on a branch looking back at you is looking at your eyes to see what you are up to. It is no coincidence that our eyes are our best birding tools, and we go to great lengths to enhance them with fancy optics. The bill of the baseball cap provides a shield by which you can hide your eyes and break up the outline of your face. I frequently turn my head and body away, looking off to the side of the bird, and then peek out from under my cap to try to sneak a candid camera view - another hunting tip. The point here is that no matter what color clothing you wear, if your big ole round face is sticking out like a neon sign then you’ve failed to pay attention to the part of you that has the most salience to birds.

So, to summarize:

- Avoid anything that reflects in the UV.
- Avoid bright colors.
- Avoid wearing white.
- Do wear camouflage and subdued colors that match natural surroundings, especially when you intend to sit still.
- Restrict your body movements at all times. Sitting still means not only that you are seated, but also that you make yourself appear as small as possible and your arms and head are also still.
- When you move, move slowly and smoothly.
- Avoid jerky and fast movements.
- Disrupt the outline of your face and eyes. Hide your eyes as much as possible.
- Use your peripheral vision to sneak peeks.
- Never stare at a bird unless it is some species that is known to accept stares, e.g., eagles. Look off to the side of the bird about 30 degrees and pan across to 30 degrees on the other side of it, stopping only long enough to capture a look. Then look away, and do it again.
- Learn “intention” movements and stop for a while if the bird is behaving as if it might fly. After it settles down, pan again. Too many birders see intention movements then think they have to get a good look before the bird is gone. They don’t realize in doing so they are actually pushing the bird to fly.
- Learn to be patient. We take up birding because we want to stop to smell the roses, then we get so caught up in list-and-run birding we still never take time to smell the roses. Bird watching is an activity that encourages us to use our time to look closely at birds for more than their field marks.
Birds pay a price for the advantages of flight. They must commit their forelimbs almost entirely to that enterprise. As a result the bill often must assume responsibility for diverse functions for which many mammals use their forelimbs – grasping, carrying, scratching, fighting, and digging.

The bill (or “beak”) consists of the upper and lower jaws (mandibles), ensheathed in a layer of toughened skin. The horny outer layer tends to be especially thick near the tip, where the most wear occurs. The edges of the bill may be sharpened for cutting, or serrated for grasping. But the edges of some bills, including those of ducks, are blunt and relatively soft except at the tip, which is hardened.

Ducks often must sort insects and seeds from murky water, and the edges of their bills are richly supplied with touch receptors that help them to detect their food.

In most birds the upper mandible is perforated by nostrils, although in some high-diving birds like gannets the external nostrils are missing. Gannets avoid flooding by being “mouth breathers” and keeping their mouth shut when they hit the ocean. Similarly the nostrils of woodpeckers are reduced to narrow slits. In the albatrosses and their relatives, the nostrils are a tube (storm-petrels) or pair of tubes (albatrosses, shearwaters and fulmars) on top of the bill.

In most birds the horny sheath exfoliates (peels) and is continuously replenished from underneath. Sometimes the sheath develops special protuberances that are used in courtship and subsequently shed. The large, eye-catching grooved bill of the breeding Atlantic Puffin returns to its smaller, duller appearance after the fancy scales peel away at the end of the reproductive season.

As tools, bills are not used just for eating food, but also for catching it, prying up bark that conceals it, filtering it from water, killing, carrying it, cutting it up and so on. Bills also serve for preening, nest building, excavating, egg turning, defending, attacking, displaying, scratching, hatchling, climbing and so on. It’s no wonder bill size and shape are characteristics that vary enormously from species to species and among major groups. And small wonder that the adaptations of bills to these various functions have long fascinated ornithologists.

The most obvious adaptations of bills are those related to feeding. Birds that catch fishes with their bills must maintain a tenacious grip on slippery prey. Thus albatrosses and pelicans have hooked upper bill tips, and mergansers have serrated margins. Most waders hunt by probing in mud and sand and have long, slender, forceps-like bills for finding and grasping their prey. Avocets, however, tend to feed more at the water’s surface and swing their upward-curved bills from side to side. Oystercatchers have especially stout bills designed for hammering and prying open recalcitrant mollusks.

Whip-poor-wills and their relatives have a wide-gaping bristle-fringed bill that acts as an aerial vacuum cleaner, sweeping in insects during flight. And tyrant flycatchers, such as kingbirds, pewees, phoebes, Myiarchus and Empidonax flycatchers, have ligaments connecting the upper and lower jaws that act as springs to snap the gaped jaw shut when the insect is snared.

Birds such as warblers and creepers that glean foliage or bark for insects tend to have slender bills that may or may not be down-curved. Those subsisting on seeds, such as sparrows, buntings, and other finches, have short, stout bills adapted for cracking and husking seeds. The stout, crossed mandibles of crossbills have evolved for the job of extracting seeds from conifer cones. The bills of omnivores like crows have an intermediate shape between those of insectivores and those of seed-eaters.
Skimmers have one of the most interesting bills of all. Since, when foraging, they fly with their lower mandible slicing through the water, the mandible would be quickly eroded away by friction if it did not grow at roughly twice the rate of the upper mandible. Skimmers in zoos, deprived of the opportunity to skim, soon have lower mandibles much, much longer than the upper.

In summary, a great deal can be surmised about bird’s feeding habits simply from examination of their bills. One should always keep in mind, however, that bills do serve other functions.

[Adapted from The Birder’s Handbook, by Paul R. Ehrlich, David S. Dobkin and Darryl Wheye.]
Evergreen Preserve Workday

Mecklenburg Audubon is a chapter of National Audubon. Meetings are held at Sharon Seventh Day Adventist Church, 920 N. Sharon Amity Rd., on the first Thursday of each month, September through May at 7:30 PM.

**ACTIVITIES CALENDAR**

- 12/2 - Snowbirds - Monthly Meeting
- 12/4 - Waterfowl - 1/2 day Field Trip
- 12/4-5 - Wings of Winter [Huntington Beach St. Park]
- 12/18 - Gaston Christmas Count
- 12/19 - Lake Norman Christmas Count
- 12/26 - Charlotte Christmas Count
- 1/2 - Pee Dee NWR Christmas Count
- 1/6 - Potluck/Members ‘Slides’ Night
- 1/22 - Huntington Beach St. Park [Full Day]

For additional activities and information go to http://meckbirds.org