# Natural Resources Stewardship Committee News


**Clemson University** Doctor Forest and team have begun conducting sampling studies on Connestee's four lakes. The Lake Management Study that will provide: 1) a comprehensive watershed survey, addressing run-off, sediments, nutrients, submerged habitats, seasonal water quality, best water release strategies, invasive land and lake species, including parrot feather; 2) fishery surveys, including fish species composition, predator to prey analyses and largemouth bass modeling. Clemson will use this information to develop a comprehensive Lake Management Plan with recommendations about how Connestee Falls should manage our lakes and streams to balance long-term sustainability with recreational use.

University personnel will be on the lakes in gas-powered boats that have been outfitted with specialized equipment to conduct surveys and take samples. Please greet them courteously as they work and direct any comments about the lake study process to cfpoa@connesteefalls.com.

**The NRSC Invasive Plant Subcommittee** (IPSC) is organizing efforts to mitigate a variety of invasive plants (IP) including Japanese stilt-grass, Asiatic bittersweet and multiflora rose as a priority for mitigation. The NC Native Plant Society lists these and dozens of other plants including Bradford pear, Princess tree and English ivy as "Exotic plant species that have invasive characteristics and spread readily into native plant communities, displacing native vegetation."

Evaluation of the parrot feather that was treated with the herbicide *Sonar PR by SePro* in Little Atagahi initially appeared to show some die-off. However, in some areas the weed rebounded, which indicates that chemicals alone may not be sufficient to meet the current mitigation goals.

Non-herbicide management options include biological and physical control that can also reduce or eliminate the need for chemicals treatments. As a test of physical control, an NRSC task force recently conducted a small "hand pull" on Lake Tiaroga to remove a narrow but well-established cluster of parrot feather along 15' of the shoreline at the CFPOA access drive.

Before starting, the team inspected the area and netted several fragments that were free-floating just offshore. The team moved slowly along the shoreline, gently tugging the weed near the bottom to loosen the relatively shallow root systems. Once loosened, the stringy roots, solid stems and leaflets were easily lifted, netted, and placed onto a row cover on the shore to drain and dry. Some of the deeper, heavier clusters had to be lifted onto a paddle board and then unloaded onto the shore.

Careful inspection during the controlled pull efforts found few free fragments, which were also netted and placed on the row cover. The weed was transferred to a 30-gallon garbage can and moved to the community debris area where it was laid out in the sun to dry and die. The team will continue to monitor the test and debris areas to determine the effectiveness of the test effort.

# NRSC Wildlife Watch
# BATS: Myths and Facts

Little Brown Bats
Photo by Katherine Caldwell, NCWRC

*By Judy Merrifield, NRSC Volunteer Writer*

**Myth #1:** Bats are blind. This is not true because bats have excellent eyesight. The fact that bats prefer to hunt at night and use echolocation is misleading.

**Myth #2:** Bats get tangled in your hair, which is not true. Bats have such superior echolocation that they can detect a single strand of hair, and they would prefer to stay away from people.

**Myth #3:** Bats will bite you to drink your blood-also not true. Only the Vampire bat will drink blood and only from the hooves of cows. (Note that vampire bats don't live in WNC.)

**Myth #4:** All bats are rabid. Although bats can carry rabies, less than 3% of bats tested in NC had rabies. Even if they do have rabies, it will not make them aggressive. Bats do have the potential to carry a fungus called histoplasmosis, which can be inhaled as well as salmonellosis, which is contracted by consuming bat guano or eating bats. (I have my own thoughts on the third one, like why on earth…?)

The truth is that bats are superheroes for insect control, as pollinators and seed spreaders, and indicators of air quality. In the wild they have a 30-year life span and breed in the fall before hibernation. The female will store sperm until spring and if food is abundant, fertilization will occur. Typically, she will give birth to only a single pup. Females will live together in a "maternity roost" that faces west, which provides more warmth for the pups.

Many bat species are threatened due to climate change, habitat destruction, persecution, white nose syndrome, human structures and lighting, and wind energy facilities. Bats are a protected species, and it is unlawful to eliminate roosting sites from your dwelling during pup rearing season between May 1 and July 31. They do not need more than ¼ inch to find a way in and once settled they use a bat version of social media to let others know where to come and their numbers could reach a hundred or more.

When a bat does find its way into your house there is no need to freak out. You can simply open a window, turn off the lights and close the door as you leave the room. Be sure to give it a little time to find the way out before reentering the room. Chances are good that it will be gone.

If you spot a bat on the ground DO NOT TOUCH IT because if cornered, bats will bite even though they are not considered aggressive. It is best just to leave it alone and typically they are gone by the next time you come around. However, this is another good reason to leash your dog while out walking as this author has spotted several bats in the past few years.

Of the 17 bat species that occur in North Carolina, three are federally endangered and one is federally threatened. You can learn more about local bat species, what you can do to help protect their habitats, and how to deal with problematic bats from the NCWRC Bat Species Overview.

NRSC News Continued

# What Bears Do in July

## From BearWise.org

***July At A Glance:*** *By July, cubs born this year have grown to the size of a raccoon or a small dog with big ears. Yearling bears now on their own can be the size of medium dogs. Bears of both sexes mark trees and adult bears mate. Cubs smell their mother's breath to learn what's good to eat. Bears' great memories help them return to proven food sources.*

### How To Tell the Difference Between A Cub and A Yearling

Yearling bears are about 18 months old in July and out on their own for the first time. Sometimes people mistake these young bears for abandoned cubs and think they need help. In July, cubs of the year are about the size of a raccoon or a small dog; yearlings are quite bigger, closer to medium-sized dogs.

***Fun Facts:*** *One way to distinguish yearlings is by their large ears. A yearling bear's ears are as long as they will ever be, so as the bear gets older and bigger, the ears seem to shrink, but actually, the bear's head is getting larger and wider. Cubs born this year are usually still with their moms; if they are left alone, they may cry and whimper. Yearlings seldom vocalize, but they do roam around looking for a home range of their own.*

Female yearlings are often allowed to share their mom's home range, but males are forced to move out. It may be several years before male yearlings find a permanent home of their own. Yearlings of both sexes are now trying to find food without their mom's help. That's why it's so important to make sure there's nothing around your place to attract them. They need to learn to find natural foods if they're going to grow up wild.

### Signs Of Bear Activity

Bears often mark trees, especially in the summer mating season. Bears stand on their hind legs and scratch the trees with their claws and sometimes teeth. Both males and females mark trees. Many researchers believe bears create marker trees to announce they are in the area and let other bears know how big they are. Sometimes males will claw the tree above another male's markings, as if to say, "I'm bigger than you are." Bears often deliberately scratch aromatic trees such as conifers, cedars and cherry trees or creosote-soaked poles or structures because the scent created is stronger and carries further than the aroma the bear leaves behind.

### Bears Are Still Looking for Mates

Bear mating often begins in June and goes on throughout July. Mature males may be more active in the daytime now as they travel longer distances throughout their home range. Female bears ready to mate also travel throughout their home range. Bears are very focused on finding mates, so try not to hike alone, pay attention and make noise if you're out in the woods.

## Bears in July Continued

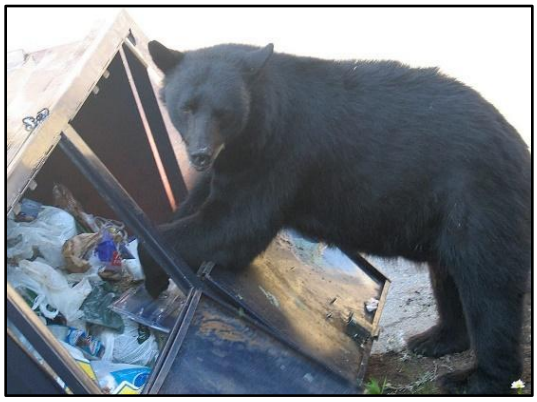
Large male bears chase off younger, smaller rivals but may do battle with other mature males for the right to mate. This is normal mating behavior; both bears may end up with wounds and scars, but even the loser is unlikely to be seriously injured. It's not safe to approach or interfere. If you are lucky enough to spot two bears that clearly want to be together, just smile and give them some privacy.

Female bears can be ready to mate around age three but may be as old as eight (depending on food availability and conditions). Male bears are also mature at age three but usually must wait longer to mate because the youngsters can't compete with big mature males.

### Cubs Follow in Mom's Footsteps

Cubs are big enough now to follow mom as she goes foraging for food. If mom is a wild bear, she teaches them what's good to eat and how to find and eat specific foods. She shows the youngsters how to eat berries, catch fish and dig for insects. She even lets them smell her breath, so they learn to associate certain smells with foods. Yum, termites!

### NOT ALL LESSONS ARE GOOD ONES



If mom has learned to rely on human-provided food sources, one whiff of mom's breath will teach the cubs to associate the smells of human food and garbage, pet food, bird seed, and more with a full tummy and easy meals. Instead of learning how to forage in the wild, they learn how to raid dumpsters and garbage cans, knock down bird feeders, empty pet food bowls and prowl through campgrounds. If they grow up, they'll teach their own cubs this same behavior.

Bears have more than a hundred times as many smell receptors in their noses as people do and can detect and follow scent trails a mile or more back to the source. Because bears are omnivores and much of their diet is vegetation, insects and carrion (dead animals), their sense of super-smell is vital to their survival. They also have a much better sense of direction than most people. Their built-in GPS guides them back year after year to wherever they found food, whether it's the berry patch that ripens in July or the trash that goes out every Thursday night.

***Make It A BearWise Summer:*** *Explore our online resources so you can avoid attracting bears and stay safe at home and outdoors. Thanks for doing your part to keep bears wild!*BearWise®. Created by bear biologists. Supported by State Wildlife Agencies. Dedicated to helping people live responsibly with black bears. 

# Remember that DOGS + BEARS = TROUBLE

According to Bearwise, a mama bear will always protect her cubs from predators, including coyotes. "To a mother bear, a barking dog is a potentially dangerous predator that means harm; if she cannot quickly or easily get her cubs to safety, she will defend them." It may be tempting to let your dog run free, but don't put your dog, yourself or others in the area at risk. Leash up and read the Dogs and Bears Bulletin at bearwise.org for more dog owner safety tips.

# Where Have All the Birds Gone?

By Mary Freudenberg, NRSC Member

I haven't seen any woodpeckers in my yard in weeks! Where have all the hummingbirds gone? The dark-eyed juncos had babies, but I haven't seen any of them for days. These are some of the comments I hear every summer from friends, neighbors, and fellow birders and there's a good explanation why.

In general, bird populations fluctuate seasonally, and from one year to the next. When we notice birds have gone missing from our yards, this is part of that normal variation.

*Dark-eyed Junco parent feeding babies*
*Photo courtesy of Mary Freudenberg*

According to Cornell Lab of Ornithology, the causes of these changes include:

**Fluctuating food supplies/requirements**: Cones, berries, seeds, and insects change from year to year, causing birds to move about to take advantage of food surpluses and to escape from areas with food shortages. Also, birds have different dietary needs during different times of the year, so they may move to or away from your feeders seasonally.

**Weather:** Birds may temporarily move out of areas to avoid droughts, floods, storms, exceptional heat and cold waves, and other unusual weather conditions.

**Predator populations**: Foxes, birds of prey, cats, and other predators have fluctuating populations too. When their populations are high, bird populations may fall. This can also happen on a very local scale, such when a hawk takes up residence in your yard. When the predators move on, your birds will come back. Click here to learn about what to do if a hawk is around

**Disease**: On rare occasions, outbreaks of diseases can sharply reduce numbers of certain birds. Examples include the effect of West Nile virus on crows in the early 2000s; House Finch eye disease; and salmonellosis on feeder birds. Click here to learn more about diseases and how to keep your feeders clean

**Habitat change**: Tree removal, housing developments, land clearing, fires, and other changes can change the number or types of birds you see.

**Molting:** Late spring and early summer often mark the beginning of the molting season for many adult birds. Molting is the process of shedding old, worn feathers and growing new ones. This process makes birds more vulnerable to predators and less agile in flight. While molting, they may also be less inclined to visit open areas like feeders, where they might feel exposed.

In addition to seasonal fluctuations, many bird species are declining. Since it is difficult for scientists to monitor birds on a continent-wide scale, science has turned to bird watchers for help via the emerging field of citizen science, which brings together thousands upon thousands of individual observations into centralized databases.

Projects such as NestWatch and FeederWatch focus on gathering information on birds during breeding and winter-feeding times respectively. And eBird allows people to enter bird observations anywhere, anytime, into a worldwide database. eBird also allows you to use maps to view real-time sightings of species, create charts detailing which birds are seen in your area, and when, and make graphs to compare species occurrence for an area over a period of up to 5 years.

Programs like Birdcast use data from sources such as eBird to compile bird migration forecasts, pinpointing where species are at certain times during migration. Both eBird and Birdcast are great resources to find out more about where species of birds might be after they disappear from your backyard.

Just as the days reach their longest and the promise of a vibrant summer seems fully realized, a subtle yet noticeable shift often occurs in our backyard birdlife across the United States. The cheerful chirps and flitting movements that defined spring, suddenly seem to dwindle. Where once a flurry of activity surrounded feeders and bird baths, a relative quiet descends.

## The Red-bellied Woodpecker

is often confused with the red-headed woodpecker. Although both of have red on their heads, the red-bellied woodpeckers have red on the top and back of the head, a white face, chin, cheeks, and a white belly with smaller patches of red, which can be hidden.

Red-headed woodpeckers, on the other hand, have an entirely red head, including chin and face. The red-bellied woodpecker has a black-and-white striped coloration on their back and wings that forms a zebra-like pattern.

Woodlands and forests with both living and dead oak, hickory and pine provide important habitat this and other wood-pecker species. A pair of woodpeckers may nest in the same dead tree, dead limb, or fence year after year. The female lays her eggs on a bed of wood chips from an excavated nest cavity

Woodpeckers eat mostly insects, spiders, and other arthropods that live in and around trees.  Forest plant materials like acorns, nuts, pinecones, seeds, and fruits are also important to its diet.

*Male red-bellied woodpecker feeding its fledgling.*
*Photos By Mary Freudenberg*