



North Carolina  
**WILDLIFE  
FEDERATION**

# Journal

WILD LIVES □ WILD PLACES

*Spring 2022*



## BEARS IN THE DRIVEWAY

What does mountain black bear biology tell us about the future for urban wildlife?

GOVERNOR'S CONSERVATION AWARDS OPEN!

BREAKING NEWS: DEER, SALTWATER ANGLING,  
WILDLIFE HABITAT & MORE



## Win Some, Learn Some

BY TIM GESTWICKI, NCWF CEO

The saying “you win some and you lose some” invariably is uttered by someone who just lost. It’s accompanied with a shrug of defeat, but also the unspoken connotation that the person isn’t giving up. That makes it different than the less-hopeful maxim “that’s just the way the cookie crumbles,” a phrase that carries a sort of resignation to the loss. The underlying sense of futility, or even a fatalistic feeling, that the outcomes are inevitable to win some, but lose more, dictates that destiny.

The expression can be traced back to origins in the early 1900s among gamblers who bet on sporting events. These days, the utterance is oft heard by gamblers and losing coaches or politicians, but easily can be declared following a losing battle with a large fish, the one that got away in Hemingway-esque fashion, just without the reverence. To buffer losses, some may follow with the adage that they “live to fight another day.” Perhaps. But let’s be honest—being on the losing end, whether in a trivial athletic contest or a desired job interviewed for, is not awesome. I’ve heard many famous coaches, such as Carolina’s legendary Dean Smith, reflect that they internalized the suffering from big losses way more than they celebrated or were satisfied by big wins.

I much prefer swapping out the word “lose” for “learn.” After all, life is a journey, and in this journey, learning something every day builds blocks of experiential wisdom for self-growth along the way. This way

Life is a journey, and in this journey learning something every day builds blocks of experiential wisdom for self-growth along the way.

of thinking is much more in the spirit of the North Carolina Wildlife Federation’s history of tackling complex issues like threatened species, water pollution, resource depletion, invasive species proliferation, and more.

As an organization, we must remain resilient and learn from losses. We have developed a learning organization, one where expectations allow that mistakes or missteps may be made, which offer opportunities for learning. We want folks unfearful of reaching far and wide to solve conservation problems.

We craft a working environment in which people recognize that mistakes sometimes lead to positive results.

This column is chock-full of phrases, so let’s add one more: “If at first you don’t succeed, try, try again.” Upon any setback or roadblock, we need to reconnoiter, reflect, and do deep strategizing in order to achieve the desired outcome. Finding solutions to counter resource exploitation, develop wildlife-friendly energy, reconnect youth to nature, and prevent habitat loss are real and large issues, but they are the righteous and goodliest causes that deserve steeled resolve, no matter the hurdles and obstacles.

Some issues require problem-solving from multiple angles and approaches, and may not solve holistic problems. Our feature coverage of the iconic black bear sheds light on the various facets needed in the conservation puzzle. In coexisting with this species, education, research, management and solutions are required. Forest planning, with a vast array of diverse interests from horseback riding and rock climbing to habitat restoration and old-growth stand protection, is another example of complex conservation work.

There are clear failings in the management of our wildlife heritage, such as the precipitous declines of North Carolina marine fish species, problems that have straightforward solutions. But there are many degrees of political pitfalls. Paid lobbyists and hired mouthpieces, hiding behind the guise of advocating for working commercial fishing families and preserving historical cultural fishing communities, spare no false narratives nor facts as they shill for a few big fish monopolies, large industrialized fleets, and entitled attitudes. All of which are vastly polar to the public trust amicus brief we cover in this journal.

Wildlife conservation certainly can be complicated, especially when it involves landscape scale and systemic changes. Like many things in life, navigating through diverse opinions and emotional issues is like “threading a needle.” It requires steady hands, careful and thoughtful actions, excellent listening, and a strong light to enable a full pursuit of the issue. Which is why your Wildlife Federation will remain just as laser-focused on winning as we are on learning. For the learning will help net favorable results for wildlife and for us all. **NC WF**



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## ABOUT THE COVER

Cover photograph That's a stand-up bear!  
Photographer Cassia Rivera has spent more than 12,000 field hours pursuing this iconic North Carolina species. See more at [www.cassiariverphotography.com](http://www.cassiariverphotography.com).  
Contents photograph Butterfly / Lynn Swafford.  
Other photos, unless noted, courtesy of NCWF.

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# North Carolina WILDLIFE FEDERATION Journal

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## NORTH CAROLINA WILDLIFE FEDERATION

**MISSION** To protect, conserve and restore North Carolina wildlife and habitat.

**VISION** Our stewardship will result in a North Carolina with healthy, bountiful and diverse flora and fauna that is valued by all its people, and sustainably managed for future generations.

Our strength is derived from values driven leadership – science-based decision making; non-partisan approach to policy; stewardship of North Carolina's natural resources; inclusivity of broad wildlife interests and perspectives; and partnering with organizations and individuals who share our vision and our passion for wildlife.

**GOALS** Toward that vision, we will:

**POLICY AND PROTECTION** – Strongly influence state and federal policy that affects wildlife and habitat in North Carolina using established conservation models to guide our positions.

**NETWORK OF IMPACT AND INVOLVEMENT** – Foster a diverse, robust network of chapters, members, affiliates and partners; a network fortified by a variety of wildlife and outdoor interests.

**EXPERIENCE AND LEARN** – Enhance and expand opportunities for youth and adults that foster awareness and appreciation of wildlife and the important role healthy habitat plays in sustaining wildlife and humanity.

**SIGNATURE PROGRAMS** – Sponsor and support programs for the enjoyment and conservation of wildlife and habitat, including ethical and sustainable outdoor recreation pursuits.



BEYONDMYLENS



SCOTT RIDENHOUR

# CITY BEARS, COUNTRY BEARS

New research highlights the pros and cons of urban and suburban life for black bears.

Authors: Nicholas P. Gould<sup>1</sup>, Roger Powell<sup>2</sup>, Colleen Olfenbuttel<sup>3</sup>, and Christopher S. Deperno<sup>1</sup>

<sup>1</sup>Fisheries, Wildlife, and Conservation Biology Program, NC State University

<sup>2</sup>Department of Applied Ecology, NC State University

<sup>3</sup>Wildlife Management Division, NC Wildlife Resources Commission

With bear populations thriving in North Carolina, NCWF looks at weights and reproduction of young American black bears with experts at N.C. State University and the N.C. Wildlife Resources Commission. The following research is from Dr. Nick Gould's four-year study on black bears that was funded by the Pittman-Robertson Federal Aid to Wildlife Restoration Grant.

(For a previous article on survival and mortality of urban black bears, visit [www.ncwf.org](http://www.ncwf.org).)



Human demands for space and increased urbanization have modified the quality, amount, and spatial arrangement of wildlife habitat. The change in habitat caused by urbanization affects wildlife populations and can alter wildlife species diversity and reduce genetic diversity by restricting gene flow among isolated populations. Interestingly, the majority of wildlife species loss in the United States is a result of urbanization, but approximately 20 percent of endangered species in the U.S. occur in urban areas. This highlights the important ecological role that suburban and urban habitats can serve in protecting local biodiversity of flora and fauna. Wildlife, such as American black bears (*Ursus americanus*), that exhibit flexibility in their behavior can take advantage of resources in suburban and urban areas and, as a result, may benefit from high reproductive output and survival.

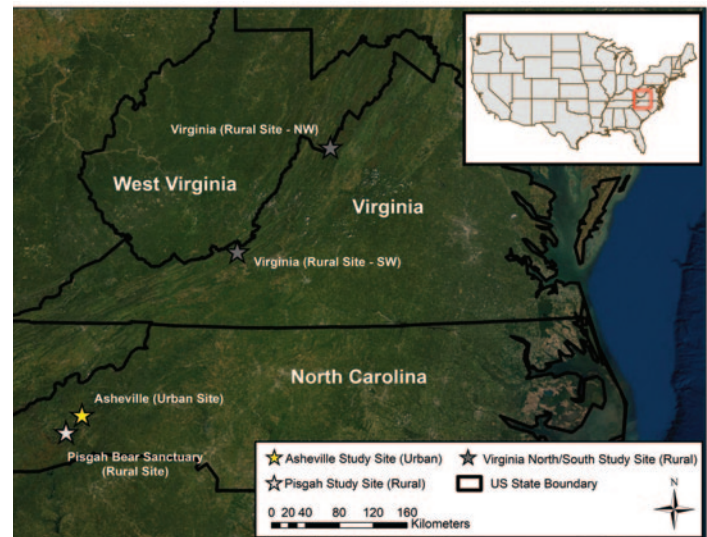
American black bears exhibit many characteristics associated with adaptation to urbanization and habitat fragmentation. Bears are behaviorally flexible omnivores and, although generally most active at dawn and dusk, they can be active during the day and night. Bears consume a wide variety of natural foods, such as insects, vegetation, deer fawns, acorns, and wild berries. They also exploit supplemental foods, including vegetables from gardens, fruit from ornamental trees, seed from bird feeders, garbage, and foods purposely left for them by residents. Thus, all these supplemental foods may allow urban bears to grow faster than bears in less developed areas.

In most areas across the range of black bears, females breed for the first time at three years of age or older. At any age, breeding, implantation of the embryo, gestation, timing of birth, and lactation all depend on a female's body condition. Specifically, summer and autumn food production (e.g., berries and acorns) affects an individual bear's fat reserves and determines whether a female bear produces cubs the following winter and how many she will produce. When female black bears that breed during summer have access to abundant autumn nuts, which are high in good fats and protein, most produce cubs and have large litters, whereas bears with access to low-quality diets or if autumn nuts are in low abundance may have small litters or not produce cubs at all.

Although some female black bears in rural areas with high natural food productivity have produced large litters (i.e., more than 3 cubs) or produced cubs at three years old or younger, these same bears are still limited in cub productivity during their lifetimes, due to annual changes in natural food abundance. Limited information exists about how urban development influences the reproductive ecology of female bears, including young black bears three years in age or less. Therefore, our research focused on whether availability of acorns in autumn affects early reproduction differently for young female black bears living in an urban environment compared to rural bears.

We conducted research on urban black bears in Asheville, North Carolina, a 45-square-mile city of 92,000 people. Additionally, we conducted research on three rural study areas that lacked human development. One was on the

Pisgah National Forest adjacent to the southwest boundary of Asheville, and the other two study areas were 162 miles and 267 miles northeast of Asheville on the George Washington Jefferson National Forest in western Virginia (Figure 1).



**Figure 1.** We captured yearling black bears at four study sites, one urban and three rural, in the mountains of North Carolina and Virginia.

We captured black bears on all four study sites and, for bears greater than one year of age, we recorded the date and capture location, weight, sex, morphological measurements, body and reproductive conditions. We placed an ear-tag in each ear, applied a tattoo inside the upper lip, and removed an upper first premolar to estimate age. We fitted each bear with a GPS or VHF transmitter collar that did not exceed 3 percent of the bear's weight. At all sites, we located female bears with active collars at their winter dens between October and February. We entered the dens from February through mid March to conduct physical examinations of the female bears and to document the presence of cubs.

To obtain a measure of acorn abundance, the NC Wildlife Resources Commission (NCWRC) and the Virginia Department of Wildlife Resources collected data in the Appalachian



## NCWF Supports North Carolina BLACK BEAR FESTIVAL

NCWF is proud of the fact that Eastern North Carolina has the world's largest black bears and the highest black bear densities, and the Federation works hard to educate people about these magnificent animals. NCWF is now a proud sponsor of Bear

Fest, an annual event in Plymouth, North Carolina, that attracts thousands of participants to an educational, whimsical, entertaining and diverse event. Located on the banks of the Roanoke River, Bear Fest is part river festival and part bear festival with over 30 ever-changing activities each year including music, food, wildlife refuge tours, films, river paddles, hot air balloon rides, wildlife exhibits and more. Don't miss it this June 4–5; for more information, visit [www.ncbearfest.com](http://www.ncbearfest.com).



## High Marks for Mountain Bear Management

Thanks to conservation and management efforts by the NCWRC since the 1970s, in partnership with hunters, the Mountain Bear Management Unit's (Mountain BMU) bear population recovered from historically low numbers and is now restored.

The Mountain BMU's bear population consists of 7,000 to 8,000 black bears and is growing at a rate of 5-6 percent per year. The NCWRC's black bear management plan's population objective for the Mountain BMU is to stabilize the bear population by reducing population growth rate to close to 0 percent. As outlined in the black bear management plan (Objective #2), regulated hunting is the primary method to achieve and maintain bear population objectives. Where the objective is to slow bear population growth, regulated hunting can meet this objective effectively and is the most practical method for meeting this objective, and allows subsistence use of harvested bears by people. The NCWRC will continue to use research and science to monitor bear populations and to guide management decisions to assure that black bear populations thrive for generations.

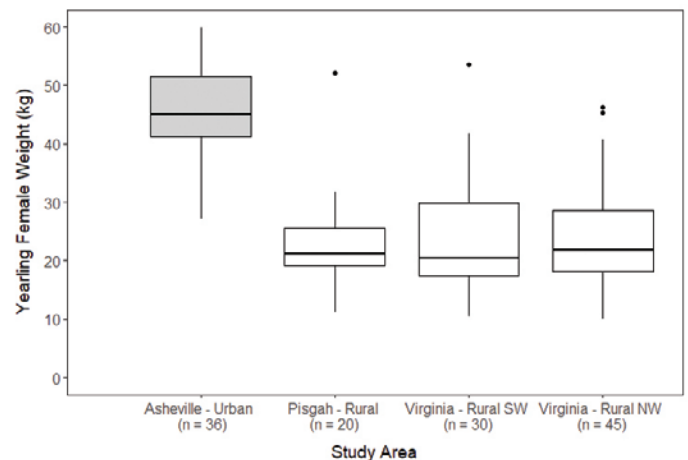
CASSIA RIVERA PHOTOGRAPHY



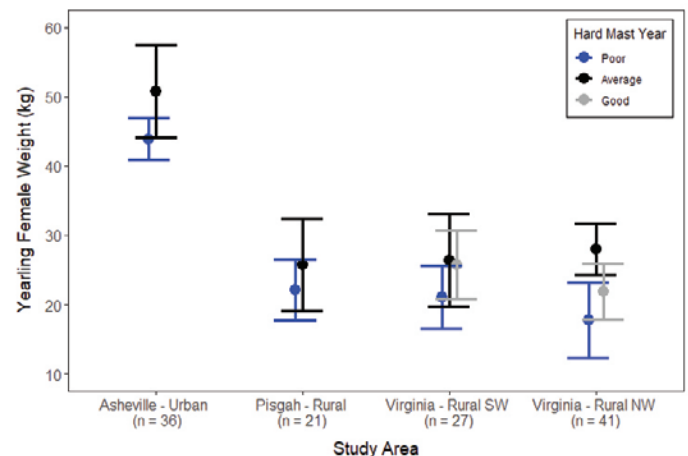
region of their respective states. Acorn abundance was categorized as failure, poor, average, good, and bumper. Results of NCWRC's annual acorn survey can be found at [www.ncwildlife.org/bear](http://www.ncwildlife.org/bear)

### RESEARCH HIGHLIGHTS

- Yearling female bears in Asheville weighed more than yearling female bears at rural sites (on average 99 pounds vs. 53 pounds; Figure 2).
- Fall acorn abundance did not affect weights of yearlings the following spring/summer, regardless of study site (Figure 3).
- Seven of 12 yearling female bears that we handled in Asheville produced cubs in their second year of age (mean litter size = 1.6), but no two-year-old female bears at rural sites produced cubs.
- Production of acorns during autumns did not affect cub production by two-year old female bears in Asheville.



**Figure 2.** Average weights of yearling female black bears in one urban (Asheville) and one rural (Pisgah National Forest) study site in North Carolina, and two rural study sites in Virginia.



**Figure 3.** The effects of autumn nut production on average weights of yearling female black bears in one urban (Asheville) and one rural (Pisgah National Forest) study site in North Carolina, and two rural study sites in Virginia.



At all four study sites, summer weights of yearling bears were unaffected by the acorn production during the previous autumn when they were still cubs. This suggests that spring and summer foods that occur when bears are one year old may be as important for the growth of yearlings than prior autumn foods. Yearling bears in Asheville were heavier than the yearling bears from the rural sites, suggesting that fruit trees, gardens, bird seed, garbage, and other urban foods may provide supplemental calories for urban bears.

Our research demonstrates that urban bears will breed as yearlings and then produce cubs in their second year of age. We hypothesize that, being heavier than their rural counterparts, the urban bears have the fat reserves to sustain pregnancy and provide sufficient milk to cubs. The urban two-year-old bears that produced cubs weighed 116 pounds on average as yearlings. In comparison, the two-year-old rural bears, none of whom produced cubs, weighed 53 pounds on average as yearlings. The supplemental foods available in the urban environment likely contributes to a younger age of reproduction, which may contribute to dense bear populations in Asheville.

Our results show that abundant acorns in autumn are not required for young bears to gain weight rapidly in their first two years of life. This is likely due to foods other than acorns that contribute to the weight gain and early reproduction observed in urban female black bears. Phase 2 of the Urban Bear Study will confirm what foods urban bears are consuming and how that diet effects black bear life history and health. In addition, the current study will explore the effectiveness of outreach efforts to encourage residents of Asheville to live responsibly with bears and to become “bearwise.” For more on those strategies, see the sidebar “Be BearWise.”



## The Bear Facts

North Carolina’s Albemarle-Pamlico Peninsula has **the highest black bear densities in the world.**

Black bears have **42 teeth**, compared to humans’ 32 (28 if no wisdom teeth), which support their omnivorous diet.

Black bears have a wide array of vocalizations with as many as **11 different communicating sounds** including barking, grunting, moans, roars, and purrs.

The current world record heaviest black bear is an **880-pound bear** from Craven County in 1998.

Black bears not only have climbing ability, but may run up to **35 miles per hour.**

Delayed implantation is a biological mechanism that allows bears to take advantage of resource availability. **When food is abundant, more bears will be born.** When there is a lack of abundant food sources, female bears will not reproduce every two years, but alternatively, every three to four years. <sup>NC</sup>WF

## Be BearWise

BearWise™ ([bearwise.org](http://bearwise.org)) is a regional outreach effort to provide science-based resources and communicate consistent and effective messaging about how to live responsibly with black bears. BearWise encourages residents, businesses, and entire communities to take actions to keep bears wild and people safe by implementing six BearWise Basics:

- Never feed or approach bears
- Secure food, garbage, and recycling
- Remove bird feeders, including hummingbird feeders, when bears are active
- Never leave pet food out
- Clean and store grills
- Let neighbors know when bears are in the area

Each community is unique in landscape, bear densities, and people’s attitudes, so interested communities should work closely with the state wildlife agency to become a recognized BearWise community. For more information on becoming a recognized BearWise community or business in North Carolina, go to [ncwildlife.org/bearwise](http://ncwildlife.org/bearwise) or email [bearwise@ncwildlife.org](mailto:bearwise@ncwildlife.org).



# Court Filing Aims to Protect the Public Trust Doctrine

For NCWF, conservation is driven by passion and based on science. The legal protections afforded wildlife are central to the public's ability to advance the conservation of our shared wildlife resources. The public trust doctrine is a keystone legal component of fish and wildlife conservation. It mandates that resources are held in government trust for the benefit of all present and future generations and that states hold natural resources in trust for the people.

But now, the public trust doctrine that should protect our lands, waters, and wildlife for the benefit of the public is being tested. In 2020, the Coastal Conservation Association and 86 North Carolinians filed a lawsuit in Wake County Superior Court, contending that the State has allowed unsustainable fishing practices that have depleted inshore marine fisheries. These practices violate the State's obligations to the public under the public trust doctrine.

For the public trust doctrine to provide meaningful protection of trust lands and resources, citizens must have the ability to hold the State to its obligations. However, the State argues it can't be sued and accordingly asked the trial court to dismiss the case. After the trial court denied that motion, the State appealed the North Carolina Court of Appeals decision.

Protection of public trust resources, including restoration of coastal fisheries, has long been a top priority of our organization. As such, NCWF weighed in to protect the public trust doctrine with an amicus, or "friend of the court," brief at the North Carolina Court of Appeals.

**LEGAL CASE** The case presents novel issues on the scope of the public trust doctrine, the State's obligations under the doctrine, and, importantly, the ability of the public to hold the State accountable for its failure to protect our fish and other wildlife.

Our filing highlights the importance of the public trust doctrine in assuring proper conservation of trust lands, waters, and resources and the need to guarantee that citizens can access the courts to ensure the State meets its stewardship obligations for these public resources.

Protecting the public trust doctrine is especially important in North Carolina, which has incorporated this centuries-old legal concept into its state laws. Our state statutes define public trust rights to include "the right to navigate, swim, hunt, fish, and enjoy all recreational activities in the watercourses of the State and the right to freely use and enjoy the State's ocean and estuarine beaches and public access to the beaches."

NCWF has weighed in with similar "friend of the court" filings over the years about public access to North Carolina beaches and public waters. This latest filing seeks to ensure this protection extends not just to public access but to state protection of North Carolina's fishery resources for the benefit of the public.

Upholding the State's sovereign immunity defense would nullify the public trust doctrine in North Carolina, endangering coastal fisheries and other natural resources the Federation has fought to protect for many decades. This is a critical issue, and one that demands action.

For more information, the entire legal brief filing is online at [www.ncwf.org](http://www.ncwf.org). For an email version, send a request to [info@ncwf.org](mailto:info@ncwf.org).

“The State’s sweeping claim of sovereign immunity would eviscerate the public trust doctrine in North Carolina. In the State’s conception, the State (and only the State) can enforce the public trust doctrine, but it can never violate the public trust doctrine, or be held accountable to its citizens for violating the doctrine. If the State were correct, then it would have no duty to the public under the doctrine. Thus, no amount of mismanagement of trust resources could lead to judicial intervention. No North Carolina case has ever adopted the State’s argument.”

—from the NCWF “friend of the court” brief

RYAN MCGURL



# NCWF Deploys Large-Scale Rock Fishing Habitat

Much of the North Carolina Wildlife Federation's habitat restoration work takes place on the ground, whether it involves cleaning litter, planting trees, expanding wildlife crossings, or increasing grasslands and early succession habitat. And other times, our efforts happen out of sight and under water.

Such was the case when volunteers and staff members from NCWF, Duke Energy, Lancaster Custom Dock & Lift Systems, and Jim Myers & Sons (JMS) headed to Lake Norman to install caution buoys and large-scale reef rocks near the Hager Creek Access Area fishing pier.

The improvements—funded through a Catawba-Wataree Habitat Enhancement Program grant—will help attract fish, support aquatic fish habitat and spawning, and reduce jet ski and boat traffic interference. The habitat enhancement program funding benefits fish, wildlife, and habitat along the Catawba-Wataree and its North Carolina and South Carolina tributaries.

## CREATING FISH REEFS IN THE INLAND SEA

With more than 530 miles of shoreline, Lake Norman sits in the North Carolina Piedmont as a vast inland sea. In 2020, Duke Energy completed the Hagers Creek public access area and fishing pier on Lake Norman as a Catawba-Wataree Hydroelectric Project License requirement. The

improvements are part of ongoing efforts to make quality access areas available for public recreational use on Duke Energy-managed lakes. The existing pier, 85 feet long and 60 feet wide, allowed anglers access to relatively shallow water and minimal structure to attract fish.

"As with older large reservoirs, the bottom of Lake Norman is generally barren and doesn't provide habitat structures such as woody debris, vegetation, and rock outcrops that attract fish," said Billy Wilson, a NCWF board member and project coordinator. "The structure enhancements will increase ecological viability, food, cover, and spawning opportunities for fish."

Once all permits were procured, the aquatic habitat restoration effort focused on the end of the pier, an approximately 0.60-acre area, and enhancing the substrate with multi-dimensional rock. Arranged like a coral reef in the ocean, the rock reef will attract fish so that, regardless of an angler's position on the pier, structure can be reached with a cast. The area also incorporates five lighted caution buoys with stainless steel anchors encircling four to five rock reef fingers, each beginning 10 feet away from the pier and extending a maximum length of 75 feet. Riprap was scattered around the fingers and within the immediate vicinity of the pier to provide cover for fish moving among the fingers and to the shoreline.



**1 and 2.** A LARGE BARGE AND CRANE LIFTED AND PLACED 18 LOADS OF ROCK FOR THE ARTIFICIAL REEF.

**3.** JMS PRESIDENT AND CEO DAVE MYERS DIDN'T JUST DELIVER THE ANCHORS, BUOYS, AND CABLES AND THEN LEAVE. INSTEAD, HE CAME READY TO VOLUNTEER AND WELCOMED THE CHANCE TO SPEND THE MORNING ON LAKE NORMAN. "I'VE BEEN ENJOYING THIS LAKE FOR 50 YEARS," HE SAID, "AND HAD AN OPPORTUNITY TO GIVE BACK."

**4.** AN OVERHEAD DRONE IMAGE OF THE COMPLETED PROJECT.

## 2022 GOVERNOR'S CONSERVATION ACHIEVEMENT AWARDS

# WE'RE LOOKING FOR CONSERVATION HEROES!



## North Carolina WILDLIFE FEDERATION

Each year the North Carolina Wildlife Federation presents the prestigious Governor's Conservation Achievement Awards, an effort to honor individuals, governmental bodies, organizations, and others who have exhibited an unwavering commitment to conservation in North Carolina. These are the highest natural resource honors given in the state. By recognizing, publicizing, and honoring these conservation leaders— young and old, professional and volunteer—the North Carolina Wildlife Federation hopes to inspire all North Carolinians to take a more active role in protecting the natural resources of our state.

The nomination period for the Governor's Conservation Achievement Awards is open through July 5, 2022. These awards are presented each year at a gala banquet. Award recipients receive a handsome statuette and certificate. On the opposite page is the official nomination blank. Additional forms are available by request. For more details or to download a form, go to [www.ncwf.org/programs/awards](http://www.ncwf.org/programs/awards).

### **CONSERVATIONIST** *of the Year*

Overall outstanding effort and achievement in any field of natural resources conservation.

### **WILDLIFE CONSERVATIONIST** *of the Year*

Accomplishments in the management, study, or restoration of wildlife, fisheries, or habitat.

### **SPORTSMAN OR SPORTSWOMAN** *of the Year*

Exemplary efforts by an individual to encourage good sportsmanship and/or outdoor ethics.

### **LAND CONSERVATIONIST** *of the Year*

Outstanding effort by individual, organization, or agency in the arena of land conservation, such as private or public land acquisitions, management, or conservation.

### **WATER/MARINE CONSERVATIONIST** *of the Year*

Outstanding effort by individual, organization, or agency in the arena of water conservation or marine conservation issues, such as water pollution control, stream/river protections, wetlands and/or coastal estuarine protections, or aquatic or marine wildlife conservation.

### **FOREST CONSERVATIONIST** *of the Year*

Outstanding effort by individual, organization, or agency in the arena of forest conservation or the conservation of forest wildlife. marine resources conservationist of the Year Outstanding effort by individual, organization, or agency in the conservation of marine resources.

### **ENVIRONMENTAL EDUCATOR** *of the Year*

Outstanding effort by individual or organization to advance environmental education in the classroom or the public sphere.

### **YOUNG CONSERVATIONIST** *of the Year*

Outstanding conservation effort by a person under the age of 25.

### **CONSERVATION ORGANIZATION** *of the Year*

Outstanding accomplishment by an organization in affecting a particular issue during the year, or for raising awareness about conservation and/or wildlife habitat.

### **LEGISLATOR** *of the Year*

Outstanding effort by a member of the North Carolina legislature in support of conservation.

### **BUSINESS CONSERVATIONIST** *of the Year*

Outstanding effort by any firm, business, or industry that has displayed an unwavering commitment to conservation or the public's ability to enjoy natural resources.

### **NATURAL RESOURCES AGENCY OR SCIENTIST** *of the Year*

Outstanding effort by any local, state, or national agency responsible for managing natural resources, OR by an individual working for governmental agencies, educational institutions, or related enterprise.

### **WILDLIFE VOLUNTEER** *of the Year*

Outstanding effort by a citizen volunteer in the service of North Carolina's wildlife and wild places.

### **PUBLIC LANDS CONSERVATIONIST** *of the Year*

Outstanding effort by a citizen volunteer or non-profit organization in the service or protection of North Carolina's public lands.

### **NCWF CHAPTER** *of the Year*

Outstanding effort by member chapter in one or more of the following areas: wildlife habitat, environmental education, youth participation, and/or community involvement in conservation issues.

### **AFFILIATE** *of the Year*

Outstanding support effort by NCWF affiliate.



## OFFICIAL NOMINATION FORM

To make a nomination, send one copy of this form, with all supporting attachments and a resume of achievements by e-mail attachment to [awards@ncwf.org](mailto:awards@ncwf.org) along with supporting documentation or submit a hard copy by mail to North Carolina Wildlife Federation, ATTN: Awards Committee, P.O. Box 10626, Raleigh, NC 27605. Deadline for receiving applications is July 5, 2022. Please print or type all data below. This form may be duplicated.

Nominee \_\_\_\_\_

Complete address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Daytime phone number \_\_\_\_\_ Email address \_\_\_\_\_

Award category\* \_\_\_\_\_

\_\_\_\_\_

*(Nominees may be nominated for more than one category, but send a separate nomination blank for each award category. Multiple copies of supporting materials are not necessary.)*

Nomination made by \_\_\_\_\_

Complete address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Daytime phone number \_\_\_\_\_

## NOMINATION INSTRUCTIONS

1. Fill out Official Nomination Form completely.
2. Attach a resume of achievements or nomination essay explaining why the nominee deserves the award. Attach nominee's resume if available, and information about the nominee's affiliations, past recognitions, and other references for substantiation. Full documentation is needed by the Awards Committee—the only information the Awards Committee will have is what you provide. Please be particular about the specific acts on which the nomination is based.
3. Deadline for receiving nominations is July 5, 2022.

\*The Awards Committee reserves the right to place nominations in the appropriate categories as the case may arise. In the case of insufficient nominations in any category the Awards Committee reserves the right not to name a category winner.



## First CWD-Positive Deer in North Carolina

OFFICIALS WITH THE NORTH CAROLINA WILDLIFE RESOURCES COMMISSION (WRC) announced that a sample collected from a hunter-harvested, white-tailed deer in Yadkin County has tested positive for Chronic Wasting Disease (CWD). This is the first case of CWD detected in North Carolina's deer herd and was confirmed by the National Veterinary Services Laboratory in Ames, Iowa.

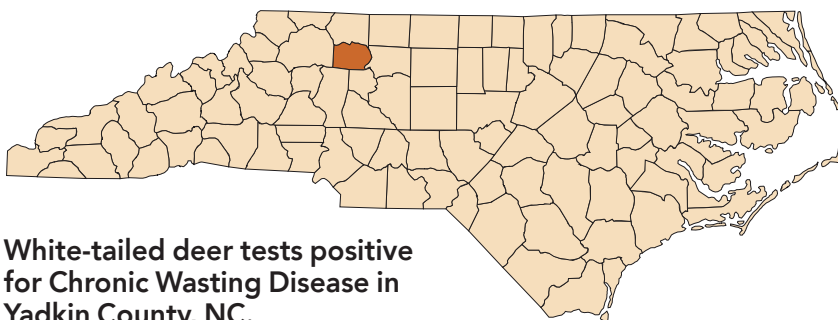
CWD is caused by abnormal proteins, called prions, that slowly spread through a cervid's (deer, moose, elk) nervous system, eventually causing spongy holes in the brain that lead to death. The disease is spread between deer through direct and indirect contact contamination from infected saliva, urine or feces of live deer, or carcasses and body parts. CWD is always fatal to cervids.

The deer was harvested in northern Yadkin County in December 2021. The sample was sent in by a taxidermist through a cooperator program established by the WRC. Wildlife Commission staff ramped up testing this past season and collected over 7,200 samples from cooperators and hunters due to the discovery of a CWD-positive deer 33 miles away from the North Carolina border last year in Montgomery County, Virginia. The WRC's CWD Response Plan for a four-county focal area (Alleghany, Surry, Stokes, and Rockingham) was initiated because of the 2021 Virginia CWD-positive deer. Now that a positive detection has been verified, agency staff will continue to follow the CWD Response Plan in collaboration with the N.C. Department of Agriculture and Consumer Services.

NCWF is actively advocating for passage of a bill in Congress that would authorize both research and management programs by funding state and tribal wildlife and agriculture agencies to manage and mitigate CWD outbreaks, as well as fund research institutions to study mechanisms for containment and testing. Testing will be imperative because it's nearly impossible to tell if a deer has CWD by observation unless the CWD is in a very progressed form. Signs of illness may not be apparent for 16 months or more after infection. The slow incubation period, ease of transmission, and lack of a vaccine, treatment or cure makes CWD a looming threat to the state's deer and elk herds. NCWF will advocate for all resources WRC needs from the General Assembly to meet the challenges CWD presents in wildlife enforcement, testing needs, education, and resources for containment.

"It's unfortunate news, but not surprising, given the steady spread of this disease across America," says NCWF's director of wildlife resources, Dr. Liz Rutledge. "We are going to provide our full support to the agency as it will take us all, including hunters, processors, researchers, and wildlife advocates, to combat this disease."

NCWF will cover more fully the ramifications and impacts of this wildlife disease in our next Journal—what CWD in the state means for our wildlife agency, what hunters and processors should be aware of, and how this impacts all wildlife in North Carolina. For now, ongoing updates can be found at [www.ncwildlife.org/CWD](http://www.ncwildlife.org/CWD)



**White-tailed deer tests positive for Chronic Wasting Disease in Yadkin County, NC.**



BUGLING BULL ELK BY DEBORAH ROY OF CHARLOTTE WAS THE 2021 WINNER IN THE CRITTERS CATEGORY.

## It's Time to Get Snapping!

**HEY PHOTOGRAPHERS!** Did you catch an Eastern tiger swallowtail on a tulip tree or an osprey diving over the water to catch its meal? How about a memorable sunset vista in the Blue Ridge Mountains or a picturesque sunrise on Cape Hatteras? Maybe you snagged a wow-worthy photo of your child kayaking?

The Federation is accepting submissions from professional, amateur, and youth shutterbugs for its fourth annual Wildlife Photography Contest.

► **The photography entry deadline is July 31, 2022.** ◀

Categories include "Carolina Critters," "People in Nature," and "Scenes of North Carolina." New this year is a "Pollinators and Insects" category. Images should highlight the beauty of North Carolina's nature and wildlife, in your backyard or across the state.

With a donation of \$15 or more on the entry form, you may submit up to 12 photos (3 images maximum per category). All proceeds support wildlife habitat conservation and restoration in North Carolina. There will be one adult winner per category for each experience level (professional and amateur) plus one overall youth winner (16 and younger). Photographs submitted in previous contests have been featured on NCWF's website, social media accounts, quarterly journals, postcards, and bookmarks. Visit [ncwf.org](http://ncwf.org) to submit your photos electronically. Good luck, and get snapping!





## Scholarship Nominations Open

SINCE THE 1970s, North Carolina Wildlife Federation has awarded scholarships to more than 300 college students from across the state, helping them follow their dreams of studying and working for wildlife and conservation. Many award recipients achieve significant success in their fields, making a difference for wildlife and habitat.

Qualifying students who are committed to environmental and natural resource conservation or management are encouraged to apply. The Federation's scholarships are highly sought after and always competitive, and we appreciate the opportunity to identify and recognize deserving students and provide scholarship aid.

To qualify, students must be enrolled full-time at an accredited North Carolina college or university with a major related to wildlife, fisheries, forestry, conservation, or environmental studies. Academic merit, socio-economic elements, and extra-curricular involvement all impact final decisions.

NCWF will provide up to seven grants, which may include one \$2,500 Conservation Leadership grant for a student of outstanding merit. Students must submit scholarship applications and supporting documents online by June 27.

Visit [www.ncwf.org/scholarships](http://www.ncwf.org/scholarships) to learn more or apply. For questions or requests to apply by mail, contact Sarah Hollis at [sarah@ncwf.org](mailto:sarah@ncwf.org).



**Federation Earns International Recognition** ▶ Two NCWF blogs earned Gold Awards in the content marketing category of the AVA Digital Awards, an international competition that recognizes outstanding work by creative professionals. The NCWF Honors 18 Conservation Heroes at 57th Annual Governor's Awards Banquet blog won in the single post category, and GoU Breaks Barriers to Connect Kids blog won in the writing category. Read the award-winning blogs at [www.ncwf.org/blog](http://www.ncwf.org/blog).

## Take a Peek Inside Den of Most-Endangered Wolf on Earth

Wildlife and nature lovers from all over the world can now get a 24/7 glimpse into the life of a pair of captive red wolves, thanks to recently installed webcams at the Red Wolf Center in Columbia. Red wolves are rare and naturally shy, making it nearly impossible to view them in the wild. The red wolves at the center—a 14-year-old male dubbed #1714 and an 8-year-old female known as #206—can't be released into the wild. With one webcam in their den and the other in their outdoor enclosure, viewers can watch the wolves anytime as they move about and interact, snooze, sniff, eat, and maybe even howl. The cameras also help staff and caretakers observe the wolves from a distance to continue learning about their behavior and needs. The webcams transport viewers virtually to the center for a rare opportunity to observe these amazing creatures and their behavior up-close and personal. Check out the live streaming at [www.ncwf.org](http://www.ncwf.org).

## CHAPTERS GETTING GOOD AND DIRTY

by Tara Moore, Director of Conservation Partnerships

North Carolina Wildlife Federation staff and Community Wildlife Chapter volunteers did a whole lot of dirt-digging, planting, litter collecting, and bird watching in March to promote healthy wildlife habitat and get people outside.

**Concord Planting with Boys and Girls Club** Concord Wildlife Alliance volunteers led a tree planting where 30 trees were planted at McGee Park, a public park along the Carolina Thread Trail. Fifteen Boys and Girls Club kids joined the volunteers to plant the trees and learn about native species. Trees planted included redbuds, serviceberries, maples, pines, and oaks.

**Charlotte Tree Planting** Charlotte Wildlife Stewards joined Charlotte-Mecklenburg Stormwater Services volunteers for a tree planting at Chantilly Ecological Sanctuary to benefit the local wildlife and people frequenting this picturesque park. Seventy native trees were planted, including tulip poplars, river birches, black gums, flowering dogwoods and more.

**Neuse River Hawks Optimal Equity Planting** The Neuse River Hawks have been contacting developers in their area to encourage them to use native plants in their landscape designs. Recently, they planted 65 native plants around their headquarters building to enhance habitat and more will be added in April.

**Pollinator Garden Install at Yates Mill County Park** NCWF's South Wake Conservationists worked hard to clean up an old pollinator garden at Yates Mill County Park and supplement it with other native pollinator plants.

**Wilmington Bird Walk** Island Wildlife teamed up with the folks at Wild Bird Garden for a bird walk at Greenfield Lake in Wilmington. All donations were earmarked for the new Cape Fear Bird Observatory. Sightings included yellow-throated warblers, a red-shouldered hawk, a barred owl, rusty blackbirds, an osprey, anhingas, cormorants, and more.

**Celebrating Wildlife** After postponing it for two years, the Gaston PAWS chapter hosted its annual banquet. It was a massive success in bringing together conservation-minded folks from across Gaston and Mecklenburg counties.

**Durham Planting** Bull City Trailblazers partnered with Village of Wisdom and Emerging Minds Academy to install raised planters to support local wildlife and educate local youth on wildlife and the environment.

**Lake James Annual Cleanup** The Lake James Area Wildlife and Nature Stewards gathered for its annual trash cleanup to remove over 8,000 pounds from both shorelines and roadways near Lake James State Park. Large, bulky items like tires and wood planks were collected and removed, as well as harmful small plastics that can suffocate wildlife.

**Tree Planting along the Neuse River Trail Greenway** NCWF partnered with Raleigh Parks and Recreation and We Plant It Forward to plant 170 trees along the Neuse River Trail Greenway off of Thornton Road in Raleigh. The project helped replace canopy that was lost to fallen ash trees after the invasion of the emerald ash borer.

### THREE WAYS NCWF HELPS YOU HELP HABITAT

**Download our Habitat Restoration Volunteer Toolkit** to learn how you can organize trash clean-up and planting events in your community.

**Sign up for our weekly Butterfly Highway newsletter**, which has everything you need to know about pollinators and native plants for your yard and where to buy them.

**Explore our Events Calendar** to find out where NCWF and our Wildlife Community Chapters are hosting habitat restoration activities near you.

**CHECK OUT OUR CHAPTERS!** For more information on how you can participate, contact Tara Moore at [tara@ncwf.org](mailto:tara@ncwf.org).



ALBEMARLE CONSERVATION  
AND WILDLIFE CHAPTER



BULL CITY  
TRAILBLAZERS



CATAWBA RIVER  
WILDLIFE COALITION



CHARLOTTE  
WILDLIFE STEWARDS



CONCORD WILDLIFE  
ALLIANCE



EEDRC (ENFIELD ECONOMIC  
DEVELOPMENT AND  
REVITALIZATION COMMISSION)



HAWK (HABITAT AND  
WILDLIFE KEEPERS)



INNER BANKS  
WILDLIFE



ISLAND WILDLIFE



LAKE JAMES AREA WILDLIFE  
AND NATURE SOCIETY



LAKE NORMAN WILDLIFE  
CONSERVATIONISTS



MARSH (MARVIN AREA  
FOR THE RESTORATION  
AND SUSTAINABILITY  
OF WILDLIFE HABITAT)



MOUNTAIN WILD!



NEUSE RIVER HAWKS  
(WAKE FOREST)



NEW BERN  
WILDLIFE CHAPTER



PAWS (GASTON COUNTY  
PIEDMONT AREA  
WILDLIFE STEWARDS)



SOUTH WAKE  
CONSERVATIONISTS



SOUTHWEST RENEWAL  
FOUNDATION



TRIAD WILD



UNION COUNTY  
WILDLIFE CHAPTER



# A Rose Can Grow in Concrete

Residents of urban areas face challenging conditions when grappling with conservation issues, but Bull City Trailblazers (BCT), a community wildlife chapter of NCWF, aims to help “roses blossom from the concrete” by engaging residents and bringing resources to address litter proliferation and tree canopy inequities in underserved communities in Durham.

Naadii Salaam, BCT founding member and president, grew up in a Pennsylvania suburb, but she now calls Durham her second home and takes pride in forming BCT with other women. “Black women of color aren’t always as vocal about being lovers of nature,” she says, “but Beth Leigh, Nikki Liles, and I came together to create community around nature.”

Naadii majored in biology with a minor in marine science at UNC-Chapel Hill, and has always loved nature. “I grew up camping in Montana with my dad,” she says. “I’ve always loved hiking, trails, lakes, and streams. They are all interwoven.”

Litter in Durham and other underserved communities can be a problem that isn’t typically found in more affluent, upper income neighborhoods, and Naadii isn’t the only one that sees the inequities. Historically, discriminatory practices such as “redlining” communities by the federal government have limited investments and economic growth in communities of need due to their racial compositions. These practices still can exist today, affecting quality of schools, and the amount of litter, tree canopy, and green space available.

“Trash reflects a lack of caring for the immediate environment and the earth,” Naadii explains.

When she is picking up litter, some people stop to thank her and others will help for a while, asking how they can get involved. “People come to learn about the connections in their community and come in the spirit of helping.”

Understanding who you are, where you come from, and being a good steward is important to Naadii. “I work to be that way; genuine, not fake,” she says. “I am most proud of the fact that I am able to show up as my authentic self in most situations. I grew up challenging myself to walk the walk because talk is so cheap.”



CHARLIE SHAW  
SOCIETY  
Donor Story

NAADII SALAAM (MIDDLE) FLANKED  
BY FELLOW FOUNDERS OF BCT

*“I’ve always loved hiking, trails, lakes  
and streams. They are all interwoven.”*

—NAADII SALAAM

Investing in the values she holds dear is why she joined NCWF’s Charlie Shaw Society. “NCWF is a small but mighty organization,” Naadii says. “I enjoy meeting people excited about the inner workings of planet earth, so we can all cohabitate this planet for a while. When a rose can grow in concrete, who can deny the power of nature?”

JEFF MCENTIRE



## *Your Legacy protects their future.*

Having a will is important to ensure your wishes are fulfilled as well as to care for that which you love — family, friends, pets, and even conservation. We want to make it easy for you to take action and have partnered with FreeWill to give you a free, online tool to help you write your will in 20 minutes or less. This is the most powerful way to protect the people you love, and can even be a bold step to ensure your legacy continues to protect, conserve, and restore wildlife and habitat of North Carolina—without spending a cent today.

Get started at [FreeWill.com/NCWF](https://FreeWill.com/NCWF) or contact Dom Canavarro, NCWF Director of Development, at (919) 239-3361 or [dom@ncwf.org](mailto:dom@ncwf.org), and he’ll walk you through the process and answer any questions you have. Already have a will and committed a gift to NCWF? We’d love to know, would enjoy thanking you, and ensuring your wishes are acted upon.



# THE Season

Jeff Beane's GUIDE TO  
NATURAL NORTH CAROLINA

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## MAY

**May 16:** National Love a Tree Day—the perfect day to hug your favorite tree. Passion vine, eastern prickly-pear, and goat's-rue are in bloom. Longnose gar are spawning. Pine-devil moths are flying. Common nighthawks are nesting.

**May 17:** Our smallest native reptile, the ground skink, is nesting. Unlike our other four skinks, this species does not attend its eggs during incubation.

**May 18:** Least terns are nesting, mostly on our more remote beaches and barrier islands.

**May 19:** Diamondback terrapins, the world's only uniquely estuarine turtles, are nesting in our salt marshes. Southern beardtongue and Small's ragwort are blooming.

**May 20:** American alligators have begun mating. Sweetbay magnolia is in bloom.

**May 21-27:** National Safe Boating Week (they're called "life jackets" for good reason).

**May 21:** Grassleaf roseling, tread-softly, sandhills dawnflower, and Pickering's dawnflower are in bloom in the Sandhills.

**May 22:** Snakemouth orchid, white colic-root, fly poison, and yucca are in bloom in the Coastal Plain.

**May 23:** World Turtle Day—a day for celebrating North Carolina's 21 native species! Purple pitcher-plants are in bloom.

**May 24:** Spider lilies bloom in the Coastal Plain.

**May 25:** Coal skinks are nesting in the Mountains and Foothills. Like most of our more familiar skinks, these uncommon and poorly known lizards attend their eggs during incubation.

**May 26:** Loggerhead sea turtles begin nesting.

**May 27:** National Sunscreen Day—celebrate outside (with sunscreen)! Common mullein and queen's-delight are in bloom. Breeding is well underway for most treefrog species. Fragrant white water-lily is in bloom.

**May 28:** Snapping turtles are nesting. Larvae of our official state salamander—the marbled salamander—are transforming; juveniles disperse from ephemeral wetlands into terrestrial habitats on rainy nights.

**May 29:** National Learn About Composting Day. Cecropia moths are emerging and mating. This single-brooded species is our largest moth.

**May 30:** Wild turkey and ruffed grouse eggs are hatching. Littleleaf sensitive-briar is blooming.

**May 31:** Our state reptile—the eastern box turtle—has begun nesting. Some females may nest more than once during a season. Several dusky salamander species are also nesting. Mountain laurel is in bloom.

## JUNE

**June 1:** Venus flytraps are in bloom in the southeastern Coastal Plain.

**June 2:** Galax is in bloom in the Mountains and western Piedmont.

**June 3:** Flame azalea, columbine, and fire pink are in bloom in the Mountains.

**June 4-12:** National Fishing and Boating Week (lasts nine days)—a national celebration highlighting the recreational values and traditions of fishing and boating.

**June 4:** Peak flight period for Belle's Sanddragon—one of our rarer dragonflies—so far, known only from a few of the large Carolina bay lakes in Bladen County.

**June 5:** World Environment Day—a day to be especially aware of critical environmental issues, of which there are plenty.

**June 6:** Great-spangled fritillaries are flying. Sampson's snakeroot is blooming.

**June 7:** Grass pink orchid and orange milkwort are in bloom in Coastal Plain savannas.

**June 8:** Rosy maple moths are flying.

**June 11:** Peak flight period for King's hairstreak, an uncommon butterfly found mostly in our Sandhills and southern Coastal Plain.

**June 12:** Japanese beetles are emerging.

**June 13:** Bluehead chubs are spawning. The large stone nests constructed by these abundant, stream-dwelling minnows are used by several other minnow species.

**June 14:** Rosinweed is in bloom. Ten-lined June beetles are flying. The first Supermoon of the year appears tonight. This full moon was known by early Native Americans as the Strawberry Moon, Rose Moon, or Honey Moon.

**June 15:** Spotted salamander larvae are transforming; juveniles disperse into terrestrial habitats on rainy nights.

**June 16:** Gray's lilies are in bloom in the Mountains. Carolina gopher frog tadpoles and tiger salamander larvae are transforming in the Sandhills and Coastal Plain. Early this morning will be the best time to view the planet Mercury, which reaches its greatest western elongation of 23.2 degrees from the Sun and will be at its highest point above the horizon in the morning sky. Look for the Swift Planet low in the eastern sky just before sunrise.

**June 17:** Five-lined, southeastern five-lined, and broadhead skinks are nesting. Unlike most reptiles, these lizards remain with their eggs, guarding them until they hatch.

**June 18:** IO moths are flying.

**June 19:** Peak bloom for rhododendron and mountain laurel in the Mountains. Good places to admire this floral show include Roan Mountain in Mitchell County and Craggy Gardens on the Blue Ridge Parkway in Buncombe County.

**June 21:** Another hot summer is here! Solstice will be at 5:14 a.m. EDT (0914 Universal Coordinated Time).

**June 22:** Sourwood is in bloom.

**June 23:** Sandhills thistle, Appalachian mountain-mint, and Nash's meadow-beauty are in bloom. Eastern box turtle nesting peaks.

**June 24:** Spurred butterfly pea, sticky false-foxtail, and sandhill dayflower are blooming. Lark sparrows are nesting. These ground-nesting sparrows are rare and occasional breeders in our state; most breeding records are from military drop zones and other large, grassy areas in the Sandhills.

**June 25:** National Catfish Day—North Carolina has nearly 20 species to celebrate. Chickasaw plums are ripe. Redlip shiners and mountain redbelly dace are spawning in mountain streams.