



North Carolina  
**WILDLIFE  
FEDERATION**

# Journal

WILD LIVES □ WILD PLACES

Spring 2015



## ON THE CLOCK FOR WILDLIFE

From one end of the state to the other, NCWF works for wildlife. Our Top 9 initiatives tell the story.

### Trusting Public Resources



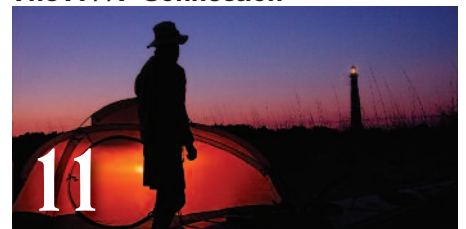
5

### Looking for Heroes



8

### The NWF Connection



11



# VISION QUEST

BY TIM GESTWICKI, CHIEF EXECUTIVE OFFICER

A vision quest is a rite of passage in many Native American cultures. For others, a vision quest refers to a journey or pathway towards something meaningful and significant.

A traditional Native American vision quest consists of a person spending time alone in nature, and not a few hours here or there, but days and nights at a stretch. During this time of intense spiritual reflection or communication, the person is said to receive profound insight into themselves and the world and perhaps their place in the world. This insight can arrive in the form of a dreamlike "vision" and is said to provide a reason for being and a feeling of destiny, and it's often described as a turning point in life.

The vision is the objective; the quest is the means of accomplishing the objective.

Not being a Native American myself, I offer another perspective of a vision quest. This one is by no means comparable; it is only closer to home for me and helps me relate to the concept. If I were to utter "vision quest" to my wife, the guaranteed response would be, "Oh, I love that movie!" There was a movie called, in fact, *Vision Quest*, that she apparently adored as a youth. I cannot disparage the movie as I have not seen it, but I surmise it has some sort of handsome fellow as the lead and probably a love interest in typical Hollywood fashion. The lead, as I understand it, is a high school wrestler who comes to the realization that in order for him to meet his calling—to assume his place in the world—he must do something out of the box. What he was currently up to must not have been working well, or at least not well enough to meet his goal. So he drops two or three (maybe four?) weight classes in order to wrestle at a place where he can meet his potential and make his mark. To lose the weight he turns to an older woman who guides and encourages him. I'm sure he does it, I'm sure he wins, I'm sure they fall in love and I am quite sure my wife fawned over the actor in her youthful exuberance. The point is the actor came to a turning point, a pivotal place in time, where he planned a significant change in order to realize his ultimate (okay a little dramatic in the case of this Hollywood movie) goal.

As an organization, NCWF went on its own vision quest over the last year, in the sense that we set out to find out who we were, how that related to who we thought we were, what we do, and how we do it. Those discussions informed deep discussion and introspective thinking into how we could do more and do it better. What transpired was many discussions, interviews of staff, board, and partners. We learned that we are a very effective, very credible, and much-needed organization dedicated to meeting the challenges facing wildlife and habitat. We realized that we are in a very good position, yet we need to expand, evolve and work hard to involve more people in this wonderful North Carolina Wildlife Federation family. We want to have an even more direct impact on our world. So over months upon months of conference calls, meetings, and debates, we have our vision and we have our path forward—our quest—to meet the ultimate mission we have: **to protect, conserve and restore wildlife and habitat in North Carolina.**

We will be focusing on key goals and following the core values that you can find on page 1 to accomplish our mission work, and we will actively seek out and depend on like-minded partners and funders to accomplish our mission. We will prioritize top wildlife issues (you can read about those on page 2) and will focus on our chapter network like the exciting new chapter in Washington, NC (page 12). We determined that the Public Trust Doctrine and North American Conservation Model are the yardsticks for us to uphold. You can learn more about them on page 4 of this Journal.

Here is our vision: **Our stewardship will result in a North Carolina with bountiful and diverse wildlife, including all species of wild flora and fauna, that is valued by its citizens and elected officials, and sustainably managed for future generations.**

It is exciting. We are ready for the many new challenges. We are building up current successes and we are working with a strong organization. And we will not let our strategic plan be a nice idea that turns into a dusty item on someone's bookshelf. To that end we have a very important internal 5th goal, one that will insure that we stay the course of our quest. It's called, "enablement through internal capabilities." It means we will manage continuous improvement of our internal resources and capabilities to enable achievement of our mission to the greatest extent possible.

So when my wife reads her spring NCWF Journal, I will inevitably gain a full clarification of any finer parts of the *VisionQuest* movie I misinterpreted or didn't digest well enough. But I will pledge to keep you apprised of our accomplishments as we strive to fulfill our very important blueprint for success, our "wildlife quest." **NCWF**

## STAFF

Tom Bean, *Director of Government Affairs*  
Mary Bures, *Manager, Great Outdoors University*  
Dom Canavaro, *Development & Operations Director*  
Autumn Chappell, *Membership & Volunteer Coordinator*  
Guy and Judy Gardner, *Project Managers, Farmers Manage Deer*  
Tim Gestwicki, *Chief Executive Officer*  
Richard B. Hamilton, *Camouflage Coalition Coordinator*  
Dan Harris, *Marketing Manager*  
Fred Harris, *Natural Resource Specialist*  
T. Edward Nickens, *Communications Editor*  
David Knight, *Policy Consultant*  
Chris North, *Conservation Coordinator*  
Liz Rutledge Ph.D., *Wildlife Specialist*  
Greta Salem, *Office Manager*  
Jennifer Mihills, *NWF Regional Representative*

## OFFICERS AND EXECUTIVE COMMITTEE

John Robbins, *Chair, Concord*  
Kelly Darden, *Vice Chair, Greenville*  
Bob Brown, *Vice Chair, Cary*  
Pinkney Bynum, *Secretary, Charlotte*  
Scott Fletcher, *Treasurer, Huntersville*  
G. Richard Mode, *NWF Affiliate Representative, Morganton*  
Carol Buie-Jackson, *Immediate Past Chair, Matthews*

## BOARD OF DIRECTORS

Jennifer Alligood, *Pantego*  
John Crutchfield, *Huntersville*  
Sterling Freeman, *Durham*  
John Fuller, *Hickory*  
John Hair, *Charlotte*  
Susan Harris Hileman, *Charlotte*  
Phil Hinton, *Sunbury*  
John Hislop, *Hubert*  
Bill Jarman, *Gastonia*  
Michelle Pentecost, *Charlotte*  
Joyce Shepherd, *Charlotte*  
Erin Singer McCombs, *Asheville*  
Ann B. Somers, *Greensboro*  
Lloyd 'Jock' Tate, *Southern Pines*  
Billy Wilson, *Mooresville*  
Dave Hargett, Ph.D., *NWF Region 3 Director, Greer, SC*

## PRESIDENTS EMERITUS

Alan D. Baker, *Huntersville*  
Dr. John Benbow, *Concord*  
C.B. Brown, *Burlington*  
Bill Kane, *Cullowhee*  
John Lentz, *Ellerbe*  
Dale Mosteller, *Lincolnton*  
Terry Pratt, *Merry Hill*  
Gary Shull, *Vale*  
Bryan Upchurch, *Raleigh*  
Harry Wilfong, *Newton*  
Nolan Yount, *Hickory*

## DIRECTOR EMERITUS

Mike Thomas, *Crouse*

## GENERAL CORPORATE COUNSEL

Robinson Bradshaw & Hinson

## ABOUT THE COVER

Cover photographs: North Carolina's white-tailed deer are thriving—but attempts to increase farm-raised deer are a recipe for disaster. Boy examining shell, USFWS. All others, unless noted: stock or courtesy of NCWF.

## CREDITS

Designed by: Kimberly KC Schott, Red Gate Design  
Printed by: Progress Printing, Lynchburg, VA  
Published by: North Carolina Wildlife Federation

## CONTACT

NCWF Raleigh office: (919) 833-1923  
1024 Washington Street, Raleigh, NC 27605  
NCWF Charlotte office: (704) 332-5696  
1346 St. Julien Street, Charlotte, NC 28205.

# North Carolina WILDLIFE FEDERATION *Journal* WILD LIVES □ WILD PLACES *Spring 2015*

Official publication, North Carolina Wildlife Federation (Affiliate of National Wildlife Federation)

## FEATURES

### 2 WHERE WE WORK

River conservation? Forest management? Endangered species?  
Hunting and fishing access? Check, check, check, and check.

### 8 SHINE THE LIGHT

The Governor's Conservation Achievement Awards  
nominations are open!

### 11 SHOULDER TO SHOULDER

NCWF's partnership with the National Wildlife Federation  
is a win-win.

## DEPARTMENTS

INSIDE FRONT COVER / Pathways

PAGE 10 / Federation News

PAGE 12 / Chapters Update

BACK COVER / The Season



## 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 bountiful and diverse wildlife, including all species of wild flora and fauna, that is valued by its citizens and elected officials, 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.

A person with their back to the camera, wearing a dark jacket and blue pants, sits on a large, flat rock at the edge of a mountain. They are looking out over a vast, green valley with rolling hills and some small patches of cleared land. The sky is a deep blue with some light, wispy clouds. The text "on the TOP OF OUR LIST" is overlaid on the image, with "TOP" in large, white, serif capital letters and "on the" and "OF OUR LIST" in a smaller, white, serif font.

# on the TOP OF OUR LIST

These 9 wildlife projects and programs are a 2015 focus.

The North Carolina Wildlife Federation's top wildlife priorities range from big game species to critical pollinators and from western North Carolina landscapes to our coastal waters that are home to some of the world's most diverse fisheries. We want you to know where we're working, and what we're doing to keep wildlife a vital part of our state. And don't worry if you don't see your favorite species or place listed here. That doesn't mean we aren't working on it. In addition to these priorities, we're involved in wildlife-friendly and renewable sources of energy. We tackle transportation issues such as ill-conceived roads, and monitor and advocate on behalf of troubled wildlife from bats to shorebirds. In addition to these wildlife priorities, we work hard—and successfully—to connect young people to nature, curtail poaching and other wildlife violations, and we will maintain a voice for strong wild deer management programs.



**MARINE RESOURCES REFORM AND MANAGEMENT >** North Carolina is blessed with a unique barrier island network and a vast inshore marine ecosystem, having the largest sounds on the East Coast behind only Chesapeake Bay. These sounds and the rivers, creeks, and inlets that feed them and their surrounding wetlands serve as critical nurseries for shellfish, finfish, and numerous terrestrial species including endangered and threatened species. To address inconsistencies with science-based management of the state's marine resources, NCWF has undertaken a critical initiative we call *Sound Solutions*.

This campaign covers three major tenets:

- Greater environmental protection for our estuarine and marine habitats.
- Reform of government management and oversight to be more science- and resource-based.
- Restriction of fishing gear and practices to address overfishing, habitat impairment, and bycatch waste with the goal of reaching sustainability in our marine fisheries stocks.



**FARMED CERVIDS >** NCWF views the commercial exploitation of our fish and wildlife resources, especially white-tailed deer and elk, both native wildlife species, as a serious deterioration of public trust resource management. Deer and elk are cervids, and maintaining the concept of public trust is especially critical as related to captive or farmed cervids. Cervids are the host for a prion that causes chronic wasting disease (CWD), an untreatable, fatal disease to deer and elk. Political pressures from a few cervid farmers to relax current rules to allow expansion of deer farms and importation of farmed cervids threaten the native deer and elk population from the heightened danger of CWD introduction. Expansion of the captive deer industry will lead to calls for high-fence deer hunting in so-called "shooter" pens to provide an economic outlet for captive deer. Recent history in other states demonstrates that farmed cervids jeopardize the health of wild deer and elk populations and the sport of deer hunting as we know it today.



**MEGAFAUNA/APEX SPECIES >** Megafauna species are those wildlife species in which adults characteristically weigh more than 100 pounds, and are an important part of the wildlife food chain and faunal diversity. Support for efforts to introduce, protect, and expand megafauna species is needed to restore diversity and balance to ecosystems, while lessening adverse impacts of exotic and feral species on the environment. Apex species, top predators such as bears, wolves, and sharks, also serve an invaluable function. NCWF will support science-based management and restoration of native species of megafauna and apex species through collaboration with state and federal agencies, species-specific stewards, and other conservation organizations. Upon reintroduction, we will support efforts to protect and expand the success of the newly introduced species.

**Elk.** Recently restored to western North Carolina, elk have spread from the Great Smoky Mountains National Park site of initial federal reintroduction to surrounding public and private lands. Our elk focus includes the expansion of state lands for elk and determining missing gaps in elk protection whether they be land lease programs or programs for reimbursement for damaged pastures, fields, or crops.

**Red wolf.** In the northeastern counties of Dare, Tyrrell, Hyde, Beaufort, and Washington, red wolves roam wild, the only place in the world where this apex species remains in the wild. The wolves have expanded from their original reintroduction locations on federal lands, leading to co-existence issues with landowners as well as jurisdictional and cooperative management struggles between state and federal agencies. NCWF supports science-based species reintroductions and continues to seek out opportunities and solutions with wildlife agencies to ensure the red wolves remain in North Carolina.

**Bison and cougars.** Once part of the NC landscape, these are appropriate species for NCWF to explore opportunities and strategies for reintroduction with appropriate agencies and conservation partners.

**Feral hogs.** NCWF will work for solutions to feral hog population spread and growth.



**WESTERN NORTH CAROLINA PUBLIC LANDS >** Opportunities exist to increase the public land holdings in western North Carolina adjacent to federal lands within the Great Smoky Mountains National Park. Elk are coming off the federal lands and on to privately held lands. NCWF is pleased to assist in working to identify lands for protection in Haywood County and to procure funding for purchase, leasing, and accompanying stewardship management efforts including habitat restoration and protection and restoration opportunities for elk and other species. The campaign will benefit multitudes of species, game and non-game, vertebrate and non-vertebrate, as well as a host of plants that will enhance the land, soil, water, wildlife and economy of the region.



**LITTLE TENNESSEE RIVER NATIVE FISH CONSERVATION AREA >** The upper Little Tennessee River supports almost 50 species of native fishes and about 10 species of freshwater mussels, which makes it one of our country's more species-rich aquatic systems. NCWF is coordinating more than 40 governmental agencies, organizations, and corporations in an effort to designate and manage the river as a Native Fish Conservation Area. This effort includes removing stream obstructions such as culverts that impede fish passage, restoring riparian stream banks, and increasing fish, mussel and other aquatic invertebrate population numbers.



**NANTAHALA-PISGAH FOREST MANAGEMENT PLAN >** This management plan will determine how 1.1 million acres of public lands in Western North Carolina will be managed for the next 15 years. The last forest management plan was created in 1987 and had major amendments in 1994 and lesser amendments since then. This plan revision is a major rewrite of the 1987 management plan using new science and addressing new concerns about how these public lands are managed. In what is a very complicated process that will bear great benefits to wildlife, hunters, anglers, hikers and other nature enthusiasts, NCWF is ensuring that wildlife considerations are a priority and that ecological integrity, protection and restoration are the focus of the plan revision. Affected are species such as elk, ruffed grouse, trout, golden-winged warblers, squirrels, bears, hawks, and owls.



**POLLINATORS >** From bees and butterflies to hummingbirds and bats, pollinator species provide critical ecological services through their voracious appetites for nectar. Without these species, food crops and native flora propagation would be in dire straits. This problem is already evident as bees and monarch butterflies are seeing their lowest levels as exemplified by the massive decrease in the monarch migration numbers recorded. In addition, bees, the key to crops and native flora propagation, are decreasing in population numbers. Over 90 percent of monarch habitat has been converted or destroyed. Through its wildlife habitat programs, NCWF is bringing focus to these species and emphasizing them in the restoration of habitats for certification. We are launching a "milkweed for monarchs" program as these species (both common milkweed *Asclepias syriaca* and butterfly weed *Asclepias tuberosa*) are the host plants upon which monarch caterpillars feed and lay eggs. Forage plants like coneflower, asters, and bee balm for the butterfly will support other nectar-loving butterfly species as well as hummingbirds and bees.



**MIGRATORY BIRDS >** Migratory birds found in North Carolina range from waterfowl to neotropical songbirds. NCWF benefits migratory birds in numerous ways from policy work to wetlands and mountain forest ecozone protections. In addition, we bring to bear our gardening for wildlife habitat programs that focus on providing food for birds during migration stopovers. NCWF's emphasis to reduce the chemicals sprayed on lawns that kill off critical protein sources will benefit the nearly 95 percent of the state's terrestrial bird species that feed their young a protein-rich diet of insects, mostly caterpillars and worms.



**LAND AND WATER CONSERVATION >** NCWF works for land and water conservation whether it takes the form of public acquisitions of gamelands or support of wildlife habitat initiatives on private lands. Forest or field, public or private, high country or cypress-ringed swamp—land is where conservation starts for wildlife. Every acre matters, which is why NCWF's work on behalf of land stewardship encompasses projects as diverse as landscape-scale planning for large public holdings and backyard habitat improvements for homeowners. Conservation of all wildlife species in North Carolina ultimately depends on habitat as the solution. Thus, increasing public land and water conservation will remain a top priority and this means investments. Advocating for robust and stable funding in North Carolina's Clean Water Management Trust Fund, Farmland Preservation Trust Fund, and State Park Trust Funds is at the top of the list for increasing conservation of wildlife habitat. In addition, the Land and Water Conservation Fund (LWCF) is the federal program to conserve irreplaceable lands and improve outdoor recreation opportunities throughout the nation. The program works in partnership with state and local efforts to acquire and protect inholdings and expansions in our national parks, national wildlife refuges, national forests, and national trails. **NCWF**

# Public Trust Resources Doctrine in North Carolina

*North Carolinians have a legal right to abundant wildlife and wild places.*

For the North Carolina Wildlife Federation, conservation is both passion-driven and science-based. The legal protections afforded wildlife cover all North Carolina species, and provide a guiding framework for our advocacy and policy work. This guiding doctrine is known as the “public trust doctrine,” and is the legal basis for the conservation of the state's wildlife and wild places.

Article I, Section 32 of the North Carolina Constitution declares that no person or set of persons is entitled to exclusive or separate emoluments or privileges from the community but in consideration of public service. This declaration, which is called the emolument clause, is the foundation of the public trust resources doctrine in North Carolina. It sets forth the principle that the community as a whole and its citizens are entitled to the benefits and enjoyment of the natural resources of the state for their collective well being. No one person may take or be given exclusive or proprietary rights to these resources. Under this constitutional protection, all citizens shall have equal right and access to the public trust resources of the state.

The General Assembly of North Carolina further defines and refines the doctrine of public trust resources by declaring in the Conservation Chapter of the General Statutes (G.S 113-131) that marine, estuarine, and wildlife resources of the State belong to the people of the State as a whole and that the Department of Environment and Natural Resources and the Wildlife Resources Commission are charged with stewardship of these resources.

Public trust resources are defined as public and private water and land areas subject to public trust rights. Public trust rights are those rights held in trust by the State for the use and benefit of the people of the State in common. They are established by common law as interpreted by the courts of this State. They include, but are not limited to, 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.

The public trust doctrine is the basis for the North American Model for Fish and Wildlife Conservation which sets forth the principle that fish and wildlife resources belong to all the people and are to be managed by the state in the best interests of all the people based upon principles of scientific management and the concept of equal access and fair chase.

Without these basic principles to guide the development of modern fish and wildlife management programs at the state and federal levels we could not have the modern era's progressive programs based on science, the welfare of the resource, and the best interests of all the public. NCWF is resolved to ensure that elected officials, decision-makers, agencies and the courts follow the legal protections in place for all North Carolina citizens.

## NC CONSTITUTION

### ARTICLE I, DECLARATION OF RIGHTS

That the great, general, and essential principles of liberty and free government may be recognized and established, and that the relations of this State to the Union and government of the United States and those of the people of this State to the rest of the American people may be defined and affirmed, we do declare that:

#### Sec. 32. Exclusive emoluments.

No person or set of persons is entitled to exclusive or separate emoluments or privileges from the community but in consideration of public services.

#### CHAPTER 113.

Conservation and Development

#### ARTICLE 13.

Jurisdictional of Conservation Agencies

#### G.S. 113-131. Resources belong to public; ...

- (a) The marine and estuarine and wildlife resources of the State belong to the people of the State as a whole. The Department and the Wildlife Resources Commission are charged with stewardship of these resources.
- (e) In this section, the term “public trust resources” means land and water areas, both public and private, subject to public trust rights as that term is defined in G.S. 1-45.1.



# NCWF SCHOLARSHIPS

We're looking for outstanding scholarship candidates—and celebrating the successes of past winners.

The Wildlife Federation provides scholarship grants to students enrolled and attending an accredited North Carolina college or university full-time. We're looking for deserving students and are soliciting applications for scholarship aid. Applicants must be majoring in the areas of wildlife, fisheries, forestry, conservation or environmental science. Need is a factor, and a good record of scholarship and extra-curricular involvement is considered.

**Scholarship applications will be accepted until 5 p.m. June 15, 2015. To obtain an application, go to [www.ncwf.org](http://www.ncwf.org). For more information, contact Autumn Chappell at [autumn@ncwf.org](mailto:autumn@ncwf.org).**

The NCWF scholarship program has a five-decade history, and to date has helped hundreds of North Carolina students pursue their dreams of studying and working in the conservation field. We are proud of all of our scholarship applicants, and particularly proud of those who have gone on to achieve significant success in the conservation field. Here are a few of their stories.

## 2008 RECIPIENT | ERIN SINGER MCCOMBS

When I received my North Carolina Wildlife Federation scholarship, I was just starting out as a graduate student at Appalachian State University studying aquatic ecology. The award was very meaningful, especially since I didn't have much money and my field site was in Alabama. So much has happened since receiving that scholarship. I've helped found a chapter of NCWF in Boone, worked on environmental conservation in Alaska, and, upon moving back to North Carolina, joined the board of NCWF. You can say I've grown up with NCWF's support and inspiration. Now, I'm proud to be the associate conservation director with American Rivers based in Asheville, and I work to restore streams across North Carolina, South Carolina, and Tennessee, with a primary focus on dam removal. When I received that scholarship I had no idea what an impact NCWF would have on my life. I couldn't be more proud to still be a part of one of the best, most effective conservation organizations in North Carolina.

## 1977 RECIPIENT | MANLEY K. FULLER

Even today, I keep the letter that accompanied my NCWF scholarship on the wall next to my computer. It reads: "The North Carolina Wildlife Federation recognizes the commitment to natural resources conservation of Manley K. Fuller, whose study, a preliminary ecological investigation of the American alligator in North Carolina, has been selected for support through a [fellowship grant]." I was then employed by the National Wildlife Federation as a wildlife biologist and natural resources professional in the Carolina Wetlands Project in Raleigh (which later became the Southeastern Natural Resources Center). The financial support and assistance of NCWF were very helpful to me in my career development, and I am very grateful for that. The support came at an important part of my decision-making process and no doubt was a significant positive factor in my pursuing professional conservation work. Today, I serve as president of the Florida Wildlife Federation.

#### 1973 RECIPIENT | **R. WILSON LANEY**

It meant a great deal to me to receive an NCWF scholarship, and it still means a great deal to me that the Federation took time to recognize me with such an award. I think that NCWF has clearly "continued unabated" to encourage, and to inspire, others in North Carolina to do just exactly what I hoped they would do, some 42 years ago now. I continued my education at North Carolina State University and received a PhD degree in Zoology with a minor in Marine Sciences in 1981. After working for the NC Fisheries Research Unit and Department of Zoology at NCSU as a Research Associate, I was hired by the U.S. Fish and Wildlife Service, Division of Ecological Services (ES), in May of 1981 and have been with the agency ever since. I am now in my 34th year. I currently serve as a senior biologist, Fisheries and Ecological Services, and also serve as the Southeast Region Federal Energy Regulatory Commission Hydro-power Coordinator. Since 2007, I have served as the FWS representative for the Southeast Region on the South Atlantic Fishery Management Council, and also on species Management Boards and Technical Committees, and several standing committees for the Atlantic States Marine Fisheries Commission. Along the way I received three other Governor's Conservation Awards from the NCWF during the course of my career and am very gratified and pleased to have received each of them.

My primary FWS mission is the restoration and sustainability of diadromous fish resources and their habitats in the South Atlantic drainages within the FWS Southeast Region, using a Strategic Habitat Conservation based approach which entails biological planning, conservation design, conservation delivery, monitoring and research. I love the work that I am privileged to conduct, and hope that I have been able to make a difference, and will continue to do so as long as I am able.

#### 1982 RECIPIENT | **DR. DAVID COBB**

I do remember winning the scholarship, both as an undergraduate and graduate student at NCSU. The scholarship, of course, meant some extra funds to put toward college expenses. At that age such assistance was much appreciated. But perhaps more importantly, the recognition was a clear indication of the confidence others had in my personal attributes and professional potential. As was said in another time and another context, the award was not so much for what I had done as for what I was expected to do. I took, and take, that admonition very seriously.

Currently I serve as the Wildlife Management Chief for the North Carolina Wildlife Resources Commission. My responsibilities include direction of wildlife conservation activities for nongame and game species, and their habitats, across North Carolina.

#### 1985 RECIPIENT | **SCOTT FLETCHER**

I was pursuing a Masters of Environmental Management at the Duke University Nicholas School of the Environment. Becoming aware of the NCWF scholarship program through my advisor, I thought my Master's thesis (wildlife use and practices on nonindustrial forest lands in the Piedmont of North Carolina) would be a good candidate for the scholarship. Being fortunate enough to be invited to the Governor's Award Banquet in Greensboro and be a recipient of the scholarship, I gained renewed energy and interest in pursuing my career in the environmental and natural resource management. Little did I know that 30 years later I would find myself active in the North Carolina Wildlife Federation, as well as on the organization's Board of Directors.

With this affiliation, the NCWF student scholarship means that much more to me now.

Upon graduating from Duke University and working with a state wildlife agency and several environmental consulting companies, I designed, prepared, and assessed wildlife and botanical resources, including those on rare, threatened, and endangered fish, mussels, plants and wildlife; wetland evaluations; aquatic and terrestrial habitat assessments; and related impact assessments in the Southeast, Northeast, Midwest and western United States. With my present employer, Duke Energy, I am the principal scientist responsible for wildlife, wetlands, RTE species assessment, avian risk assessment, general environmental impact analyses and assessments, EIS/EA preparation, and federal, state, and local licensing/permitting activities.



**ERIN SINGER MCCOMBS**



**MANLEY K. FULLER**



**R. WILSON LANEY**



**DR. DAVID COBB**

# We're looking for CONSERVATION HEROES!

## 2015 Governor's Conservation Achievement Awards



### 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 1, 2015. 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](http://www.ncwf.org).

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

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

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

Outstanding environmental education effort by an individual or organization.

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

Outstanding conservation effort by a person under the age of 18.

#### **CONSERVATION COMMUNICATOR of the Year**

Outstanding effort within communications profession to create public awareness of wildlife and natural resources or to examine a particular related issue.

#### **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.

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

Outstanding conservation effort by any federal, state, or local government entity, including efforts to aid the public's ability to enjoy natural resources.

#### **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.

#### **HUNTER SAFETY EDUCATION**

#### **INSTRUCTOR/ORGANIZATION of the Year**

Outstanding accomplishment by an individual or organization in the state's Hunter Safety Program.

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

Outstanding effort by any local, state, or national agency responsible for managing natural resources.

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

Outstanding scientific effort 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.

#### **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, to the North Carolina Wildlife Federation, ATTN: Awards Committee, P.O. Box 10626, Raleigh, NC 27605. Deadline for receiving applications is July 1, 2015. Please print or type all data below. This form may be duplicated.

Nominee \_\_\_\_\_

Complete 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 1, 2015.

*\*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.*



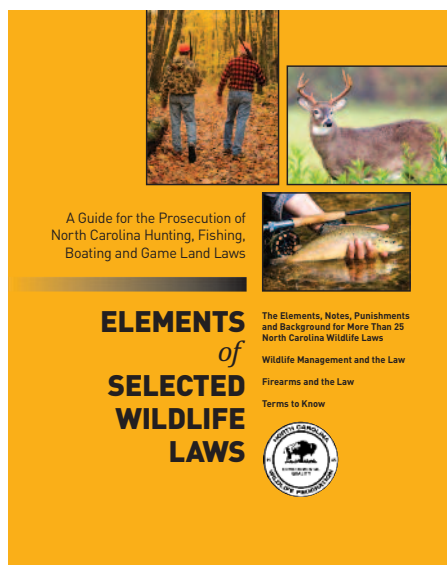
# Wildlife Law

Many people know that the roots and genesis of the 1945 founding of the North Carolina Wildlife Federation was based around the desire to establish a science-based state wildlife agency. The Federation saw its labors realized with the 1947 statutory establishment of the North Carolina Wildlife Resources Commission (NCWRC). Another chapter in the public-private partnership between the state agency and our non-profit is offered with the re-release of the Federation's publication *The Elements of Selected Wildlife Laws*.

*The Elements of Selected Wildlife Laws* is a practical guidebook designed to be used by prosecutors, judges, magistrates and others involved with the disposition of violations of hunting, fishing, game lands, boating, and related North Carolina laws. In many cases, the disposition of these wildlife-related law requires background knowledge and technical understanding that those unfamiliar with hunting, fishing, and boating may not possess. This book seeks both to educate those in the legal system about wildlife law and serve as a resource for those unfamiliar with technical terms and background required for a full understanding of such law.

NCWF printed and published *Elements* and provided copies to the state's prosecutors, district court judges, wildlife law enforcement officers and many magistrates' offices. "We hope it will serve as an invaluable resource to help steer prosecutors through the complex process of prosecuting wildlife violators," said Tim Gestwicki, CEO of the Federation. "The publication of *The Elements of Selected Wildlife Laws* puts outdoor outlaws in North Carolina on notice: Shooting over the limit, catching too-small fish or boating under the influence of alcohol are crimes no longer tolerated by a sporting public with an increasing concern for outdoor ethics."

The book's chapters cover wildlife management and the law, firearms and the law, a glossary of related terms, and separate chapters on selected violations. The offense is listed, followed by the



statute, elements of the offense, the punishment for the offense, notes relating to legal points not found in the statute, and background material that helps explain the wildlife management and technical aspects of the material.

The selection process with the NCWRC enforcement personnel for inclusion in *Elements* was thorough in determining which offenses to cover. The offenses were selected based on the following criteria:

- The frequency of violation, based on figures from the North Carolina Wildlife Resources Commission's Division of Law Enforcement.
- The complexity of the law, or the technical nature or background of the law.
- The relative importance of the law as regards public safety, wildlife management and ethical sporting conduct.
- Input and review from wildlife enforcement officers, prosecutors and judges.

"The N.C. Wildlife Resources Commission would like to express a sincere thank you to NCWF for its initiative, research and preparation of this publication," stated Colonel A.J. Evans of the NCWRC. "We further hope *The Elements of Selected Wildlife Laws* will aid prosecutors in understanding all aspects of related law, how those laws benefit citizens of our state, and will give them the tools needed to successfully manage cases in the courtroom."

## Newly Elected Board Member Brings Energy, Passion to NCWF

Billy A. Wilson is a philanthropist whose educational, career, and personal endeavors have been dedicated to public service and volunteerism. Holding an M.A. in public administration from UNC-Charlotte, Wilson has served in a variety of leadership capacities in the fields of human services, public safety, justice administration, and environmental protection. He resides in Mooresville, NC, and is currently serving his second term as president of the Lake Norman Wildlife Conservationists (LNWC), a local NCWF chapter. His election to the NCWF board of directors is a testament to the vital support that NCWF members provide at the grassroots level. As an avid angler and sailor, he joined the local chapter in an effort to contribute to the protection and enhancement of Lake Norman's wildlife and its habitat.





## Former Congressman Robin Hayes Joins NCWF Team



The North Carolina Wildlife Federation is honored to announce a collaborative partnership with former U.S. congressman Robin Hayes. A longtime conservation advocate, Hayes will serve as senior advisor for the Federation, providing invaluable guidance on public policy and legislation related to wildlife and habitat.

Hayes is using his vast political experience, knowledge, and connections to help keep priority issues at the forefront and support NCWF's ongoing conservation initiatives. He is currently advising the organization on multiple fish and wildlife matters, from marine resources to deer to habitat funding. "As a sportsman, I know first-hand the joy of being outdoors, and I have developed a great appreciation for the beauty of the creation and the wildlife of our great state," says Hayes. "The North Carolina Wildlife Federation is a commendable organization, and I'm honored to support its efforts to make North Carolina a better place for both residents and wildlife."

Robin Hayes served five terms in the U.S. House of Representatives, representing North Carolina's 8th district from 1999-2009. While in Congress, he was chair of the Congressional Sportsmen's Caucus and a leading champion for the State Wildlife Grants program. He also previously served as a commissioner for the N.C. Wildlife Resources Commission.

# We Believe

The North Carolina Wildlife Federation works closely with the National Wildlife Federation, and as NCWF re-examined its own policies and practices over the last year, it has strengthened its relationship with the nation's leading conservation advocacy group. At the annual meeting of the National Wildlife Federation this past March, affiliate organizations such as NCWF passed a resolution to clearly articulate the values and beliefs for which we work. The document was called, "We Believe."

America's experience with cherished landscapes and wildlife has helped define and shape our national character and identity for generations. Protecting these natural resources is a cause that has long united Americans from all walks of life and political stripes. To hunters, anglers, hikers, birders, wildlife watchers, boaters, climbers, campers, cyclists, gardeners, farmers, forest stewards and other outdoor enthusiasts, this conservation ethic has evolved and is now integral to our heritage and fundamental to the very pursuit of happiness enshrined at the founding of this great country. It is this heritage that we will defend and pass on to our children. And for all Americans, whether they venture into nature or not, whether they live in the middle of our most densely populated cities or in small towns or rural communities or somewhere in between, we all depend on clean air, clean water, and a healthy environment. Our ties to the land provide spiritual sustenance and a path to virtue; they suggest a perfection in nature that exceeds anything humans can create. As Americans we share a sacred duty and obligation to protect and build upon our conservation heritage for the sake of native wildlife, ourselves, our neighbors, and most of all for future generations.

### To this end, we believe...

- Our nation's wildlife, fish, healthy waters, clean air, and public lands are a birthright of all Americans.
- Government has a sacred duty to conserve and steward these public trust resources for all, including future generations, using the best available science and providing robust financial resources.
- Conservation on private land plays an essential role in supporting healthy fish and wildlife populations and providing and connecting their habitat.
- Our nation's healthy lakes, rivers, streams, wetlands, marine and coastal waters, forests, and other wild lands are vital to our public health, economy, wildlife, and quality of life.
- Diverse and abundant wildlife habitat is essential for urban, suburban and rural communities.
- We all have a right to enjoy sustainable and responsible outdoor recreation including: hunting, fishing, camping, birding, wildlife watching, hiking, climbing, swimming, boating, and gardening.
- Our nation must address climate change, continue moving toward cleaner energy sources, and make wildlife habitat and communities more resilient to such change.
- We have a national responsibility to get our children outdoors, for their health, their intellectual enrichment, their daily happiness, and to instill a conservation ethic in future generations.

As the National Wildlife Federation – a nationwide federation of state and territorial affiliate organizations and nearly six million members and supporters across the country:

- We embrace a national responsibility to conserve wildlife and wild places wherever they may be and to broaden the conservation movement so that it encompasses America in all its diversity.
- We dedicate ourselves to share respectfully with our neighbors our understanding and appreciation of our natural environment, of conservation, of cultural preservation, and of America's outdoor heritage.
- We commit to nurturing with resources, attention, and talent a diverse national conservation movement that inspires local, state, and national action and engagement on issues that transcend political boundary.
- And we fully accept our profound responsibility to speak up, to advocate, and to engage on behalf of America's wildlife.

## CHECK OUT OUR CHAPTERS!

Our wildlife chapter activities are endless and provide something for everyone.

For more information on how you can participate, contact Christopher North at [chris@ncwf.org](mailto:chris@ncwf.org).



Capital Chapter



Concord Wildlife Alliance



CROWN (Charlotte Reconnecting Ourselves With Nature)



F.I.S.H. (Fayetteville Increasing Sustainable Habitat)



PAWS (Gaston County Piedmont Area Wildlife Stewards)



HAWK (Habitat and Wildlife Keepers)



Lake James Area Wildlife and Nature Society



Lake Norman Wildlife Conservationists



Mountain Island Lake Wildlife Stewards



Mountain WILD



PACT (Protecting, Advocating and Conserving)



South Wake Conservationists



The Albemarle Conservation and Wildlife Chapter

## NEW CHAPTER CELEBRATES NC'S EAST



In March, the North Carolina Wildlife Federation's new chapter, Pamlico Albemarle Wildlife Conservationists (PAWC), was formally introduced to the world in Washington, North Carolina. The chapter launched to a standing-room-only crowd of wildlife enthusiasts who received presentations on the mission and reasons for forming the local wildlife chapter.

"We realized during the North Carolina Opposed to the Outlying Landing Field (NoOLF) battle that the use of an acronym was very advantageous towards inviting curiosity," said Jennifer Alligood, who helped spearhead the formation of the chapter. "It's a perfect segue to having a conversation concerning our cause."

Alligood offered the main reason for creating PAWC, a belief that the 1,634 square miles of land and 3,000 square miles of open water give the Pamlico Albemarle Peninsula the distinction as our nation's Garden of Eden. Unfortunately, the "Garden" is rural and poor and is under constant threat from large corporations, government entities, and even natural processes. The creation of PAWC allows a partnership with NCWF and the ability to work in unison for the protection of such a unique environment.

The peninsula is one of the largest networks of wildlands in North Carolina. Two state parks, five National Wildlife Refuges, and 12 gamelands account for more than 510,000 acres of state, federal, and private conservation lands—about the size of the Great Smoky Mountains National Park. Ecosystems include high scrub pocosin, low scrub pocosin, cypress-gum forest, brackish marsh, loblolly pine forest, mixed hardwood swamp forest, bay forest, freshwater ponds and lakes, and pond pine scrub pocosin.

The peninsula hosts the largest span of dark sky on the East Coast. The Albemarle-Pamlico estuary is the second largest estuarine complex in the lower 48 states, and includes eight separate sounds – Albemarle, Pamlico, Back, Bogue, Core, Croatan, Currituck, and Roanoke. Lake Mattamuskeet National Wildlife Refuge is the largest freshwater lake in the state and is home to bald eagles, osprey, black bear, white-tailed deer, red wolves, snow geese, tundra swans, teals, pintails, and many more others. The endangered red-cockaded woodpecker is found in all basins of the Albemarle-Pamlico region, and half of the juvenile fish habitat from Maine to Florida is represented by the Albemarle-Pamlico estuary. And it is the only place in the world where red wolves can be seen in the wild.


The new local wildlife chapter looks forward to creating awareness of issues in the region. And Alligood encourages everyone to come visit and see for themselves how imperative it is to protect our nation's Garden of Eden. Contact her at [framtech@gotricounty.com](mailto:framtech@gotricounty.com). 

PHOTO COURTESY OF VISITNC.COM



Here are four simple ways  
you can be a philanthropist

## for Wildlife

- Make a bequest to NCWF in your will or trust. Find out how easy it is to put wildlife in your plans.
- Realize the value of your retirement plan by making NCWF a beneficiary. You can consider full, partial or percentage options to benefit wildlife.
- Consider a gift of life insurance that your family has “outgrown” or making NCWF a partial or full beneficiary of your plan.
- Build your gift by using real estate and personal property.

If you or your attorney have questions, or would like NCWF to provide you with sample customized language for your will that is specific to your goal and interest, please contact NCWF's Development Director, Dom Canavarro. All inquiries are confidential. He can be reached at 919-833-1923, or drop him a note at 1024 Washington St., Raleigh, NC 27605.



## Charlie Shaw Society



NCWRC

John Robbins, owner of Greathorn Properties in Concord, and a long-time philanthropist and sportsman is the current chair of the Charlie Shaw Society. He encourages others to join him in support of the North Carolina Wildlife Federation.



### Current Members

Members in the Charlie Shaw Society are our most dedicated supporters—generous members who have made a commitment to the work and programs of the North Carolina Wildlife Federation through an annual contribution of \$1,000 or more. Gifts can be made in one lump sum or in any number of smaller contributions within a calendar year, and can be directed to any Federation program that is of interest to the donor.

To learn more about the Charlie Shaw Society and benefits of membership, please visit our website at [www.ncwf.org](http://www.ncwf.org), or Dom Canavarro, Development and Operations Director, at (919) 833-1923; [dom@ncwf.org](mailto:dom@ncwf.org).

Alen Baker  
John Benbow  
John Bishop  
Frank Bragg  
Robert Brown  
Mollie Brugh  
Pinkney Bynum  
Maurice and Addria Capps  
John Crutchfield  
Jerry Davis  
Leah Dey  
Roger and Sally Dick  
Alexander Dickey  
James Doyle  
Helen Eggers  
Paul Foos

Carol Gestwicki  
Tim and Karen Gestwicki  
Stephen Graf  
Fred Harris  
Susan Harris Hileman  
Carole Hart  
Robin Hayes  
Phil Hinton  
John Hislop  
Diane Honeycutt  
Jane Isbey  
Carol Buie and Jay Jackson  
Lawrence Kimbrough  
Jeffrey Martin  
Richard and Julia Mode  
Scott Morris

Patrick O'Leary  
Perry Patterson  
Michelle Pentecost  
Mark and Jane Ritchie  
John and Holly Robbins  
Tom Schmitt  
Rick Smith  
Denise Smith  
Jack and Jenny Spruill  
Fred and Alice Stanback  
Bill and Nancy Stanback  
Bill Staton  
Victoria Sutton  
Joye Thomas and Karen Redfern  
Dewey Wells

# THE Season

Jeff Beane's GUIDE TO  
NATURAL NORTH CAROLINA

North Carolina Wildlife Federation  
1024 Washington Street  
Raleigh, NC 27605

insert  
progress  
indicia

## MAY

**May 15:** Hardwood trees are in full foliage over most of the state. Longnose gar are spawning. Southeastern prickly-pear is in bloom.

**May 16:** Passion vine is in bloom. Mourning dove nesting peaks. Pine-devil moths are flying.

**May 17:** Our smallest reptile, the ground skink, is nesting. Unlike our four other skink species, this tiny lizard does not guard its eggs during their 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.

**May 20:** American alligators begin mating. Wild strawberries are ripening.

**May 23:** Purple pitcher plants are in bloom.

**May 24:** Spider lilies are in bloom.

**May 25:** Loggerhead sea turtles begin nesting.

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

**May 29:** Venus' looking-glass is in bloom. Cecropia moths—our largest moth species—are emerging.

**May 30:** Green, Cope's gray, pine woods, and barking treefrogs are breeding. Wild turkey eggs are hatching.

**May 31:** Several species of dusky salamanders are nesting. Ruffed grouse eggs are hatching. Eastern box turtles begin nesting.

## JUNE

**June 1:** Venus' flytraps are in bloom in the southeastern Coastal Plain. Galax is in bloom in the mountains and western Piedmont.

**June 4:** Flame azalea, columbine, and fire pink are in bloom in the mountains.

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

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

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

**June 14:** Rosinweed is in bloom.

**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.

**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 20:** 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:** Summer solstice happens at 12:39 p.m. EDT.

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

**June 23:** Nesting peaks for our state reptile, the eastern box turtle.

**June 24:** Northern pine snakes are nesting. These uncommon snakes, found mostly in our Sandhills region, lay the largest eggs of any of our snakes. Females typically spend several days digging a long tunnel ending in a nest chamber, where they will deposit their small clutch of large eggs. Their nest chambers are sometimes used as refugia by other animals.

**June 25:** Chickasaw plums are ripe; you might have to compete with foxes if you want to make preserves. Redlip shiners and mountain redbelly dace are spawning in mountain streams.

**June 27:** National Wildlife Federation's Great American Backyard Campout. Take a kid camping! Visit <http://www.nwf.org/Great-American-Campout.aspx> for more information.

**June 28:** IO moths are flying.

**June 30:** Loggerhead sea turtle nesting peaks.

## JULY

**July 1:** Black skimmers are nesting on our more remote beaches and barrier islands.

**July 4:** Blackberries are ripe.

**July 5:** Northern bobwhite eggs are hatching.

**July 7:** Summer runs of white perch make for good fishing on the Chowan River.

**July 8:** Bog turtles are nesting in mountain and foothill wetlands. Unlike most turtles, this rare species usually does not dig a nest in soil, but conceals its small egg clutch in a moss, grass, or sedge clump.

**July 15:** Peak flight period for our largest butterfly, the giant swallowtail, in the outer Coastal Plain.

**July 16:** Black bear mating peaks.

**July 18-26:** National Moth Week.

**July 20:** On hot, humid afternoons, watch and listen for the impressive dives and "boom displays" of the common nighthawk.

**July 22:** Our largest beetle and heaviest insect—the eastern Hercules beetle—is flying. Look for adults of this impressive beetle around lights at night.

**July 23:** Indian pipe is in bloom.

**July 27-30:** Southern Delta Aquarids meteor shower. Best viewing is usually just before dawn. Open fields, beaches, or other remote areas make the best viewing spot..

**July 31:** Blue moon tonight!