



**Legislative Update** 



**Chapters at Work** 



**Autumn Calendar** 





#### Trail Markers

BY TIM GESTWICKI, NCWF CEO

I 've taken many road trips, some for pleasure and others for work. Longer trips, or those to new destinations, have sometimes involved situations in which the traveling didn't go quite as planned, or the directions didn't quite pan out. And at times there were conversations between my wife and I that entailed her telling me to pull over and ask for directions and me stubbornly pressing on because I knew the destination was just ahead or just around the next turn. Which was rarely the case.

I've also had experiences in the woods, waters, or in the field, especially in my earlier years, in which I'd head out —alone or with a similarly hard-headed buddy—thinking we were exploring a trail below our level of expertise. For want of adventure we'd start bushwhacking off-trail, having a blast but invariably winding up way off course and calling for a ride home from a kind stranger's cabin or begging for a ride to avoid any wrath from my parents. I've had a few sketchy moments lost in a swamp and one memorable experience in a Colorado canyon during which I got out a few hours after dark. I survived them all and learned from those experiences.

Our strategic conservation plan, detailed in this Journal, is our map for maximum conservation impact. It is the result of great introspection and a conscious effort to digest where we've been, where we are, where we need to go, and how we'll get there. Similar to my expeditions and road trips that evolved with experience and were aided by technology, we have determined the tools we will need to succeed. I now have plenty of supplies in my pack when I head into the woods, and my car trips have been made much more error-free through GPS technology and that helpful Siri guiding my turns. Similarly, at NCWF, the necessary tools we have collected include our experience, having the best scientists and program managers, following our core principals, and our credibility.

A few years ago, a poll was taken with the focus of determining from sportsmen who they depend on for credible information on issues ranging from climate change, protecting public lands and waterways, and the exploitation of natural resources including wildlife. Choices included a slew of highly recognizable nonprofit groups and governmental agencies. The top choice on each category was the Wildlife Federation. I mention this not to toot our horn or diminish our partners in conservation, but to point out the responsibility we must be able to shoulder.

Why choose NCWF to support? Many conservation organizations are hard at work. So what sets us apart? First of all, we are all-encompassing when it comes to wildlife and outdoor interests. This big tent approach, welcoming all and working for each species and their habitat, has proven to be an important niche and role for us over the past seven decades. Our skill and experience building and leading collaborations amplifies our impact and the impacts of others. Sharing approaches that work is a hallmark of NCWF. Our efforts are aimed at fundamental changes in policies and processes and relationships and power structures that currently impair quality of life for all North Carolinians. Our plan positions us as an influential, relevant, and powerful change agent for how our lands and waters and wildlife are managed and cared for now and into the future. The programs and policies we have chosen will work to get at the underlying fundamental issues that are blocking state level systemic change for conservation. These policies will be catalysts for change, and that kind of decision-making is a hallmark of the Federation. I believe that is what attract folks to us as donors, volunteers and supporters.

We are prepared, but just as I am prepared for being in the wild—or on some brand-new bypass around somewhere—sometimes a storm comes up or a rock slide closes a highway. We will ongoingly track our route on this plan and shift our efforts to accomplish our goals. We will beat the storm.

I am no longer that young buck who can wander off carelessly into the bush. This doesn't mean I don't have fun and get out into the wild, but I just do it more smartly these days as I have a family that depends on me. Similarly, at the Federation, we have a responsibility to the species and special places that have no voice. And we have a responsibility to you. I invite you to join us on this journey. And if you think we need to stop and ask for directions along the way, I promise you, we're ready to listen. In fact, for NCWF, that's the first step towards action.



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Months in the making, NCWF's new Strategic Plan is a road map to making North Carolina a better place for wildlife.

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#### NORTH CAROLINA WILDLIFF 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.



## HERE to THERE

#### INTRODUCTION

The two key words in our mission are wildlife and habitat. They are linked hand-in-hand as there can't be one without the other, and to accomplish impactful wildlife and habitat conservation there must be a critical mass dedicated to ensuring that wildlife and habitats are valued and conserved. Therefore, after thoughtful discussion and forecasting, we have determined that our organizational commitment for the next few years will focus on three main drivers: wildlife, habitat, and connecting people with nature/conservation education.

/ ith this strategic plan, we find ourselves right where we planned to be. In a challenging environment our policy work was sharpened, our programs matured, and our operational structure became well-oiled. We solidified our partners, especially with National Wildlife Federation, and proved we could shoulder multiple campaigns, various relationships, and bridge divides. This new plan builds upon the foundation achieved in order to have greater impact towards a sea change across the conservation landscape of North Carolina, focusing on what we do best—wildlife and habitat—while remaining nimble and opportunistic, as well as being positioned to confront unforeseen attacks.

The activities we engage in give us purpose. Early life experiences resonate for the rest of our lives as a foundation for decision-making, expenditures, and as core guiding personal principles. That is why NCWF will be dedicated to ensuring that the next (and current) generations have opportunities to connect with nature, as we must ensure that people, especially kids, have strong affinities for the outdoors. If we lose these connections—built on outdoor experiences such as fishing, hunting, camping, hiking or just exploring outside—we will lose the next elected officials, voters, decision makers, and business leaders who care about stewardship and conservation.

For wildlife this is a straightforward task. We will speak and work for all wildlife, regardless of its beauty or charismatic nature. Every species matters, so every species will be considered. We will, however, prioritize some species for focused conservation work in the coming years.

Not only do we believe strongly that every species matters, we believe that every acre matters, too, which is why NCWF's work on behalf of land stewardship encompasses a broad scale of diverse projects from landscape-scale planning for large public holdings to backyard habitat improvements for homeowners. Conservation of all wildlife species in North Carolina ultimately depends on habitat as the solution.

There can be no discussions or work for elk, owls, monarchs, trout or deer without a focused understanding of habitat and what every species needs for survival. We realize we cannot be an effective wildlife group if we don't fully rely on and help others understand and embrace the foundation for all wildlife, which is their habitat.

Habitat conservation has many facets including protection, funding, managing, restoring and enhancing, all of which the Federation has prioritized in our planning. Acquiring lands for conservation can be step one, but then managing those lands for wildlife becomes critical. Invasive plants can displace (think kudzu) native fauna while monoculture ecosystems like pine plantations provide diminished diversity of species. Habitat changes like newer, cleaner farming areas with few or absent weedy hedgerows have led to the sharp decline in quail.

Fragmentation of habitat is another major consideration as populations explode and development becomes more rapid. Many species that need larger forage and breeding areas for genetic diversity, such as elk and large predators, are severely impacted by new highways. Those factors make wildlife crossings and connecting habitats a needed priority. Of course, pockets

of habitat do serve a valuable purpose for some species like migratory birds or monarchs who need to fuel up and rest on their journeys. The Federation's signature gardening for wildlife programs for landowners is helping, while converting useless fescue into natural gardens that attract butterflies and birds.

Habitat unites, as well. The places we choose for resource-based recreation—the habitats—support all wildlife, whether you like to fish, bird watch, hunt, paddle, camp, explore, hike, or you simply cherish and value wildlife. We will continue our big tent philosophy. Whether gamelands, refuges, preserves, backyards, parks, or impoundments support particular hobbies or preferred species, the lands and waters provide habitat and ecological services for all wildlife and humans alike.

We are positioned well to accomplish our conservation plans. We have determined we don't need to create new programs or entrées into the organization. We simply need to build upon the foundation laid over recent years with our signature programs, policy work, board development, and grassroots network. Now more than ever we need to maximize our impact. We need to work more strategically, utilizing our relationships, partnerships, programs and credibility to increase our programmatic output. We will indentify and seek ways to utilize the foundational credibility and trustworthiness we have built, leverage our relationships, coordinate our network, and forge new collaborations to maximize our impact and expand our programs.

From hunters and anglers to birders and gardeners, and from conservatives to liberals, NCWF bridges divides and provides a conduit for consensus and change. All are needed to meet the many and various conservation chal-

lenges. Our principals of non-partisanship, science-driven approach, collaboration, stewardship-oriented inclusiveness of diverse wildlife interests, along with our enviable conservation network, positions us well to heed the work at hand and meet the challenges conservation faces these days.

We want more people involved, and believe more are needed, working for conservation. We believe we have built the best mouse trap. Now we need to let more North Carolinians know about the wildlife machine that is NCWF, inspiring and inviting them to participate with their dollars, time, skills, and service. There is plenty of room and ways to welcome more wildlife participants and advocates into our conservation network, which will be key to building enough capacity to have a meaningful impact within our strategic drivers and strategies.



BROWN PELICANS GATHER ALONG THE DUNE LINES OF THE OUTER BANKS USFW

USFWS / JACKIE ORSULAK

Wilderness is not a luxury but a necessity of the human spirit.

-Edward Abbey



WILDLIFE / HABITAT / CONNECTING PEOPLE to NATURE Strategic Drivers to Accomplish Conservation Impact

#### 

Wildlife conservation was the genesis of this organization and remains its reason for being. Speaking and working for wildlife is our cornerstone, and informs our advocacy and outreach. Supporting citizens' efforts to enjoy wildlife, whether through traditional hunting and fishing or activities such as bird-watching, camping, and paddle sports, underscores the value of wildlife to human communities and knits together our diverse programs. Whether the creatures of focus fly, swim, burrow, hop, slither, scamper or climb, there is a deep commitment to protect, conserve and restore all wildlife in North Carolina.

**MANAGEMENT:** It is critical to have well-funded fish and wildlife agencies that use science-based wildlife management techniques to ensure that a diversity of wildlife is conserved. North Carolina has a successful history of bringing wildlife back from the brink of extinction through professional wildlife management combined with collaborative, on-the-ground conservation.

- a. Ensure wildlife remains in the public trust.
- b. Defend state and national cornerstone wildlife protection laws, while supporting targeted improvements to the Endangered Species Act and other laws that would improve their ability to recover all species and respond to current and emerging threats.
- Dramatically increase funding for proactive management and recovery of the full diversity of fish and wildlife resources.
- d. Support enforcement of the public trust in, and ownership of, wildlife.
- e. Defeat efforts to interfere with wildlife management authorities or to transfer authority over wildlife management away from wildlife agencies, including attempts to move fisheries management in North Carolina to other agency purview.

**FUNDING:** Many game species such as wood ducks, turkey, and white-tailed deer are largely thriving in North Carolina because license fees and excise taxes paid by hunters and anglers have been dedicated to the conservation of their habitat. Today we face a new wildlife crisis. There are 457 species of pollinators, fish, amphibians, birds, and reptiles in North Carolina at risk.

a. NCWF will collaborate with N.C. Wildlife Resources
 Commission to educate and advocate the N.C. Congressional delegation to support the Recovering America's
 Wildlife Act and will work hand-in-hand with NWF
 as first partners.

- b. Lead a N.C. legislative effort to pass the Recovering America's Wildlife Act to secure \$1.3 billion annually in new dedicated federal funding for state and territorial fish and wildlife agencies focused on preventing wildlife from becoming endangered through implementation of State Wildlife Action Plans.
- c. Secure a legislative solution to preclude the diversion of U.S. Forest Service wildfire abatement funding needed for effective and proactive forest habitat management and restoration of the 190-million-acre National Forest System.

**SPECIES OF FOCUS:** All species matter, so our work will address overarching wildlife conservation; however, some species deserve particular attention. We have determined that pollinators, migratory birds, deer, elk, red wolves, and marine fisheries are the areas we will devote resources towards with these underlying goals:

- Achieve high profile species recovery efforts that both demonstrate the capacity to increase wildlife populations and help captivate and inspire more public engagement and support.
- b. Restore the monarch butterfly's Atlantic flyway by promoting large-scale plantings including milkweed and pollinator habitat restoration.
- c. Reverse the downward spiral of marine fishery stocks for croaker, spot, weakfish, and southern flounder.
- d. Improve deer management via harvest programs and disease prevention.
- e. Advance migratory bird conservation including waterfowl and birds of prey.
- 1. Elk In the mountains of North Carolina more than 150 wild elk roam their historic eastern range. The triumphant return of this majestic species to the Southern Appalachians is nothing short of a wildlife success story, and one that is still being written today. Elk populate the Great Smoky Mountain National Park, but in order to achieve a healthy and sustainable herd actions will be needed to increase public land holdings, navigate co-existence issues with private land owners, and implement wildlife crossing corridors for safe passage, migration and herd expansion, all with an eye towards eventual limited hunting opportunities.
  - a. Participate in an elk collaring effort to learn where elk are crossing highways and where they are going.
  - b. Retain lease on elk land parcel at Cove Creek.
  - c. Participate in the 12-mile Collaborative, a habitat connectivity opportunity for wildlife, especially elk, in the Nantahala-Pisgah National Forest.
  - d. Forge opportunities to support reducing elk depredation both via policy and direct conservation measures, i.e. additional leases and fencing.
  - e. Elevate elk awareness and appreciation through an annual Elk Celebration Day in Haywood County.
  - f. Ensure elk habitat management is included in final adopted Nantahala-Pisgah forest management plan.

- 2. Red Wolves North Carolina's Albemarle Peninsula is home to the only wild red wolves in existence. There is a continuing need to better inform and engage the public at large, and local communities in particular, regarding the many complex natural resource challenges on the Albemarle Peninsula, and to promote and draw attention to the incredible wildlife resources of this area. Hampering recovery efforts are a significant lack of trust, spread of misinformation, and frayed relationships between federal and state agencies and residents in and around the Red Wolf Recovery Area. Our goal is for there to be a healthy red wolf recovery program with red wolves actively managed in the wild and in an area, of both public and private lands, that is sufficient for a sustainable population.
  - Forge a cooperative agreement with the Fish and Wildlife Service to embed a staffer at the USFWS center in Columbia, N.C.
  - b. Re-open the red wolf recovery education center.
  - c. Provide year-round educational programming, and build and manage a volunteer base while assisting with community and landowner outreach.
  - d. Comment on USFWS red wolf updated recovery plan and rules.
  - e. Increase education on red wolf recovery.
- **3. Marine Fisheries** N.C. is blessed with vast marine ecosystems, but it is becoming more known for unsustainable fishing practices, waste, and overcapacity. It is critical that fishery management in North Carolina be viewed as an activity aimed at protecting sustainable marine resources rather than the jobs that depend on those resources. NCWF embarked on a campaign to reform marine resource conservation and is committed to enhancing education, raising awareness and taking actions to drive true change. Our goal is to change the paradigm from North Carolina fisheries managed by an allocation-based model to being managed by a conservation-based model. Our goals are to establish the position of the Executive branch that healthy fish stocks provide opportunities resulting in economically vibrant coastal communities, as current conditions of our marine fisheries are contrary to realizing that position. Further, it will become the policy of the Executive administration, and thereby the Department of Environmental Quality and the Division of Marine Fisheries, to implement measures to end overfishing for any fish stock that has failed to achieve this requirement during the initial 2 year phase-in period.
  - a. Achieve meaningful by-catch reform in the shrimp trawl fishery by continuing to pursue the rulemaking requests in our petition for rulemaking and doubling those efforts with involvement in the upcoming amendment to the Shrimp Fishery Management Plan.
  - b. Advocate for reforming the commercial and recreational licenses system for marine fisheries which includes ending out of state transfer licenses and limiting in state transfers.

- c. Develop reasonable and defensible modifications to the current rebuilding standards for marine fisheries.
- d. Promote adoption of ecosystem-based management by fisheries councils with emphasis on sustainability of forage fish such as menhaden.
- e. Initiate having the Marine Fisheries Commission begin development of a Fishery Management Plan for spot and croaker to address the significant declines in those fisheries and establish reasonable first order management measures such as mesh sizes, size and bag limits.
- f. Gain adopted policies that the harvest of any fish stock, with the exception of fishes with a life span greater than 20 years, be immediately reduced by 50% if the 10 year rebuilding period has expired without achieving an end to overfishing. This restriction on harvest shall remain in effect until a peer-reviewed stock assessment affirms that the stock is no longer overfished.
- g. Update the Fisheries Reform Act to include biological benchmarks that indicate healthy fish stocks with clearly defined repercussions when benchmarks are not met.



BLANKET FLOWER PROVIDES POLLEN FOR A BUMBLEBEE

© CAN STOCK / BHI

- **4. Pollinators** More than 80 percent of the world's flowering plants require a pollinator to reproduce. Animals that assist plants in their reproduction as pollinators include species of bats, butterflies, moths, flies, birds, beetles, ants, and bees. North Carolina is home to approximately 170 species of butterflies, 1,200 species of moths and 500 species of native bees. Our goal is to protect and restore the diversity and health of pollinators in North Carolina. This will be accomplished through partnerships with key stakeholders to create opportunities for habitat stewardship and enhancement, civic engagement, advocacy, education, and outreach.
  - a. Establish NCWF as a leader in pollinator conservation statewide, nationally and regionally.
  - b. Align the priorities of NCWF with state, national, and international guidelines on pollinator conservation.



WILDLIFE / HABITAT / CONNECTING PEOPLE to NATURE: Strategic Drivers to Accomplish Conservation Impact

- c. Partner with U.S. Fish and Wildlife Service, state wildlife agencies, departments of transportation, and others to restore the eastern population of the monarch.
- d. Provide science-based technical, policy support, and guidance on pollinator conservation.
- e. Establish and lead a N.C. Pollinator Conservation Alliance of multi-stakeholders to address pesticide use, pollinators in agriculture and the energy sectors, research, education, and seed resources.
- f. Publish a "state of N.C. wild pollinators" white paper that synthesizes research, policy, and data on native wild pollinators in N.C.
- g. Participate in research initiatives on pollinators in agriculture with at least one peer reviewed publication.
- h. Launch the Butterfly Highway citizen science initiative with focus on urban butterfly monitoring.
- **5. White-tailed Deer •** Our Farmers and Communities Manage Deer program originated from the need to manage high numbers of deer in agricultural areas to reduce farmer reliance on deer depredation permits while using a sustainable natural resource to benefit local communities in the form of food for the needy. Deer are prevalent across much of N.C. and are the most sought-after game species. Disease prevention is critical to sustaining a healthy population. Our goal is to achieve significant growth with our current community-based model to manage white-tailed deer in N.C. and promote sustainability of this model by increasing the number of locations where hunters can donate deer, boosting fundraising efforts for deer processing, and providing educational tools to landowners in agricultural communities. This goal will be achieved through increased community relations and support, resulting in thousands of pounds of ground venison donated to food relief organizations annually.
  - a. Increase the number of deer donation sites available to hunters.
  - b. Expand the N.C. Hunters for the Hungry processor network to new areas of the state.
  - c. Implement a 'Donate a Pound of Ground' campaign through N.C. Hunters for the Hungry.
  - d. Add a 'farmer-landowner liaison' to the program to provide technical support to landowners and interact directly with N.C. Hunters for the Hungry community-supported sites across the state.
  - e. Build community support networks around new deer



AN ANTLERED BUCK FORAGES FOR FRUIT.

© CAN STOCK / BH

- processors and organize informational seminars and deer hunting and donation events.
- f. Grow partnerships with state and federal agencies, wildlife interest groups, corporate sponsors, businesses, and other community partners.
- g. Support policies and programs that manage deer numbers for herd health.
- h. Introduce legislation that will provide hunters tax credits for deer donations.
- i. Partner with affiliates, chapters, and hunters to raise awareness of chronic wasting disease and mobilize opposition to attempts to redefine captive cervid populations (white-tailed deer, elk, etc.) from wildlife to livestock.
- **6. Migratory Birds** From game species such as dove and waterfowl to raptors and songbirds, migratory birds face many challenges including climate change and habitat loss.
  - a. Implement a chimney swift tower construction program.
  - b. Enhance the osprey conservation program by establishing a live stream osprey cam.
  - c. Support continued growth of responsible on-shore wind development on both public and private lands that protects wildlife by partnering with key stakeholders and constituencies, working with state and federal wildlife agencies on policy and siting solutions, and promoting research that provides solutions to conflicts between on-shore wind development and migratory birds.
  - d. Expand the amount of native habitat and wildlifefriendly gardens and open spaces in cities, towns, and rural communities, and engage communities in protecting and restoring habitat for migratory birds breeding in N.C. and re-fueling during migration.
  - e. Defend landmark conservation safeguards including the Migratory Bird Act.
  - f. Maintain Clean Water Act safeguards for wetlands, headwaters, and riparian areas that support waterfowl and other migratory species.

**INVASIVE SPECIES:** Invasive or introduced non-native species compromise the health and sustainability of native flora and fauna. Not only do these species pose an increasing and significant threat to wildlife and habitat, managing them can be both costly and challenging. Our goal is to support and have robust eradication and management plans in place to curtail the degradation these species cause.

- a. Develop and support plans for addressing non-native species in the coastal environment to improve native stocks.
- b. Seek removal of policy impediments to a directed commercial fishery for blue catfish in coastal waters.
- Provide assistance in developing sustainable and costeffective measures to harvest blue catfish in the Albemarle Sound complex.
- d. Work for the genetic integrity of wild oyster and finfish stocks by commenting on and educating lawmakers on triploid, sterile oysters and other aquaculture species.
- e. Comment on Coyote Management Plan.
- Provide support for coyote/red wolf interbreeding solutions.
- g. Utilize gardening for wildlife programs for educating the public about invasive species with a focus on planting native species that provide value for wildlife.
- h. Advocate for robust funding for research, development, and deployment of aggressive control and eradication techniques for invasives causing significant harm to sensitive wildlife species and habitats, such as feral hogs, coyotes, and triploid mollusks.

#### HABITAT

Habitat is the currency for all conservation. Whether the habitat supports species for hunting and fishing, watching and photographing, or for ecological services and the health of the planet, habitat is the foundation for wildlife and natural resource 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. Conservation of all wildlife species in North Carolina ultimately depends on, and is inextricably tied to, habitat as the solution. Thus, increasing public land and water habitat conservation will remain a top priority and this means investments, protections of current public lands, and engaging more people in restoring habitat.

**RESTORATION** Many lands—whether they are retired energy sites, fallow fields, or monoculture ecosystems—provide the perfect canvas for restoring, enhancing, and managing more suitable habitat for a diversity of species. From useless fescue in backyards across the state to pine plantations, opportunities exist to provide necessary habitat in rural, urban, and suburban areas.

- a. Ensure that ecological integrity, protection and restoration are priorities of the Nantahala-Pisgah forest management plan revision.
- b. Support thinning, prescribed burning, timber stand improvement, various methods of harvesting, rhododendron reduction and other management activities in the repair, recovery, restoration and maintenance of a balanced distribution of habitat conditions on national forest lands in the Southern Appalachians.
- c. Secure a legislative solution to preclude the diversion of U.S. Forest Service wildfire abatement funding needed for effective and proactive forest habitat management and restoration of the 190-million-acre National Forest System.
- d. Expand the amount of native habitat and wildlife-friendly gardens and open spaces in cities, towns, and rural communities, and engage communities in protecting and restoring habitat for declining or regionally iconic wildlife species.
- e. Restore wildlife and pollinator habitat on agricultural landscapes by promoting establishment of field borders, fencerows, riparian buffers, habitat strips within fields, restoration of irrigation pivot corners, reduced mowing of roadsides, and other wildlife-friendly practices.
- f. Restore riparian habitat along shorelines and islands.

**FUNDING** Resources are needed to support habitat protection, management, and restoration. We will work to ensure natural resource agencies' budgets are adequately funded, that NGOs have necessary funds to acquire lands, and that legislation that affords habitat incentives receives robust funding.

- a. Secure funding in N.C.'s natural resource trust funds, especially the Clean Water Management Trust Fund and Park Trust Fund, so that more gamelands and parklands are protected.
- b. Participate on the Steering Committee of Land for Tomorrow coalition to accomplish appropriate habitat funding and to re-establish stripped away, dedicated funding sources like the deed stamp tax portion.
- Ensure that a portion of royalties from renewable energy development on public lands goes to habitat conservation and wildlife management.
- d. Secure sufficient resources to enable resource management agencies—federal, state and regional—and their partners to engage in proactive, collaborative, landscapescale habitat conservation efforts.
- e. Reauthorize the Land and Water Conservation Fund at \$1 billion annually to expand the footprint of the nation's conservation estate, enhance connectivity, and sharpen the focus on protection of fish and wildlife habitat.

**CONNECTIVITY** Many terrestrial and aquatic species of wildlife in the U.S. and N.C. are in decline as a result of growing and shifting threats such as climate change, wildlife disease, habitat loss and fragmentation, and invasive species. Wildlife requires both daily and seasonal movement to survive. However, the



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habitats animals rely on continue to be fragmented by housing, roads, fences, and other man-made barriers. The threats wildlife face are exacerbated by an inability to reach food, water, shelter, and breeding sites. Mounting threats to wildlife, combined with the barriers to movement and migration, have led to a serious problem for wildlife populations across the country.

- a. Maintain, enhance, and restore connections and corridors among core wildlife habitats.
- b. Expand and connect protected areas statewide to sustain healthy fish and wildlife populations and to allow for seasonal migrations and climate-driven range shifts.
- c. Fill gaps in the network of public and private protected areas to achieve full representation of the state's diverse land-based ecosystems.
- d. Engage in and convene a broad partnership of organizations and experts to identify priority gaps in the state's system of protected areas and to target selected areas for new public and private protections.
- e. Work for the establishment of a National Wildlife Corridors System to build essential connectivity infrastructure to help wildlife cross barriers.
- f. Advance collaborative habitat conservation by supporting the management and use of agricultural and forestry lands to improve wildlife habitat, enhance habitat connectivity, and avoid or minimize damage to adjacent habitat.
- g. Conduct a gap analysis study of habitat conserved for pollinators across N.C.
- h. Partner on finding the best ways to help elk cross major roads near the Great Smoky Mountains National Park.
- Oppose ill-conceived road or other infrastructure projects that impact habitat connectivity and or do not incorporate connectivity mitigation appropriately.

Earth and sky, woods and fields, lakes and rivers, the mountain and the sea... teach us more than we can ever learn from books.

-John Lubbock

**PROTECTION** One of the most effective ways to conserve habitat is to protect it by ownership. Land acquisition by public agencies or NGOs is the best protection method, though conservation easements on privately-held lands are another important habitat conservation tool.

- a. Secure funding in N.C.'s natural resource trust funds, especially the Clean Water Management Trust Fund and Park Trust Fund, to protect gamelands and parklands.
- b. Advocate full funding in the Land and Water Conservation Fund for additional protected habitats.
- c. Support tax credit legislation for conservation easements.
- d. Work for new protected lands by expansion of Roanoke River and Pocosin Lakes National Wildlife Refuges.
- e. Defend public interests in public resources and advance public ownership of and access to public lands and waters.

**WATER FOR WILDLIFE** North Carolina is blessed with abundant rivers, sounds, estuaries, reservoirs, wetlands, and streams. These waters are the lifeblood of our wildlife resources, home to countless species of fish, mussels, and other aquatic life, and also essential to terrestrial and migratory wildlife. Our goal is to protect and restore the function and quality of our waters, wetlands, nurseries, and riparian areas to sustain healthy fish and wildlife populations.

- a. Strengthen protection of the waters and habitats that make up North Carolina's inner coast, as well as those that flow into our sounds.
- b. Increase awareness around the potential risks to fish and wildlife in aquatic ecosystems that are posed by the release of synthetic organisms, and develop broadly supported strategy for assessing and reducing ecological risks posed by these new technologies.
- c. Increase aquatic system refuse clean ups.
- d. Maintain Clean Water Act safeguards for wetlands, headwaters, and riparian areas.
- e. Defend Clean Water Act safeguards for headwaters, wetlands and riparian areas in Congress and in the courts.
- f. Secure, through the federal budget and appropriations process, funding for robust programs to ensure Clean Water Act and Farm Bill safeguards that protect wetlands, headwaters, and riparian areas.
- g. Engage in legislative debate on open water fish aquaculture and inform decision makers about the public trust implications of these potentially large operations are significant as are issues related to enforcement, water quality degradation, genetic integrity of wild stocks, and escapement.
- h. Promote adoption of ecosystem-based management by fisheries councils.
- i. Oppose and work to defeat proposals to open up coastal waters to exploration and drilling.
- j. Protect laws and safeguards that protect waterways flowing into  $N.C.\slash$ s sounds.
- k. Seek updating N.C.'s 20-year-old nursery habitat designations and definitions.
- 1. Participate with and coordinate habitat implementations in the Little Tennessee River.

m. Advocate for a nationwide permit for living shorelines under Section 404 of the Clean Water Act as a means to promote broader use of these approaches, and seek more stringent permit standards and reviews for installation of hardened shoreline erosion-control structures.

**PRIVATE LANDS** More than two-thirds of North Carolina is under private ownership. From large-scale agriculture lands to backyards and corporate holdings, privately owned lands are critical for successful habitat conservation, restoration, and connecting ecosystems.

- a. Ensure N.C.'s Agricultural Development and Farmland Preservation Trust Fund is well-funded.
- b. Secure the conservation provisions of the 2018 Farm Bill with elements that better align subsidies to natural resource outcomes and provide incentives for wetland conservation and for farming practices.
- c. Participate on N.C.'s State Technical Advisory Committee for conservation incentive program ranking and implementation.
- d. Prioritize importance of pollinator conservation on working lands.
- e. Support utility companies in developing strategic plans for pollinator habitat conservation including lands around corporate campuses, transmission right of ways, and lands used for energy production.
- f. Establish a voluntary certification program for solar pollinator initiatives.
- g. Expand the amount of native habitat and wildlife-friendly gardens through a signature gardening for wildlife habitat certification program suite.
- h. Provide landowners with technical guidance and resource support for habitat enhancement and restoration.

**PUBLIC LANDS** Publicly owned lands and waters support wildlife and scientific research, and afford citizens the opportunity to enjoy wildlife and resource-based recreation.

- a. Advance public ownership of and access to public lands.
- b. Defend against and defeat all state and federal legislation designed to affect large-scale transfer of ownership or management of public lands.
- c. Continue work with local, state, and federal governments on ways to include pollinator habitat in their strategic plans.
- d. Work through the Land for Tomorrow coalition to accomplish additional gamelands and park lands acquired.
- e. Advocate for diversity of habitats in the 1 million acres of public lands in the Nantahala-Pisgah National Forests. Lead wildlife habitat interests in a formal forest management plan revision to guide how the forests will be managed.
- f. Ensure that a portion of the royalties generated from offshore oil and gas drilling are reinvested into protecting our National Parks, providing hunting and fishing access, trails and open spaces.
- g. Participate in hydropower relicensing boat access, fishing piers, and trail implementation.



HIKERS ENJOY THE VIEW OF LINVILLE GORGE

VISITNC.COM / CHIP HENDERSON

- h. Defend and support sustainable silviculture and biological land management by state and federal agencies.
- Defend existing protected areas, including parks and wildlife refuges, from divestment efforts and from being opened to harmful development and resource extraction.

**PUBLIC TRUST RESOURCES** Resources held in trust for the public are bedrock right, and essential to a sound conservation ethic. Public trust lands must be held in trust and protected for the benefit and welfare of all North Carolinians.

- a. Challenge attempts to undermine or erode the public trust doctrine.
- b. Ensure public trust resources are not sold, given, or transferred to private interests, upholding access for all.
- c. Increase awareness around the potential risks to fish and wildlife posed by the release of synthetic organisms and develop broadly supported strategy for assessing and reducing ecological risks posed by these new technologies.
- d. Ensure that open water aquaculture in North Carolina continues to provide a positive public benefit in exchange for any granting of the public trust.
- e. Work with stakeholders and legislators to ensure that future open water aquaculture development is based on sound ecological and environmental principles consistent with the public trust.
- f. Defend public interests in public resources.



WILDLIFE / HABITAT / CONNECTING PEOPLE to NATURE: Strategic Drivers to Accomplish Conservation Impact

#### CONNECTING PEOPLE TO NATURE

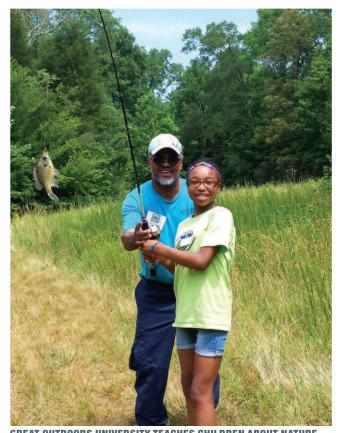
The nexus for wildlife and habitat conservation is education, and education in the conservation realm encompasses an enormous range of potential activities. A focus on fostering awareness, appreciation, and value of natural resources leads directly to sustainable conservation. Wildlife and its habitats offer awe and wonder, but only if there are dynamic, meaningful experiences that put human communities in touch with the natural fabric of North Carolina.

NCWF's efforts to foster awareness and provide conservation education are widely varied, including traditional media such as various newsletters and the quarterly Journal publication; a robust social media presence through our website, Facebook and Instagram platforms; digital-based outreach such as N.C. CAMO notifications; and conventional press releases and reports. In addition, our chapter network is a vital component of our education work. Through statewide programming with a hyper-local focus, people will be able to learn, experience and engage at levels far more broadly through NCWF than ever before.

Our Great Outdoors University has established a proven program with tremendous impact in the Charlotte area. Recognizing the strength in collaboration and partnerships, we will continue to harness them as we evolve and expand our impact. We will be a hub uniting collaboration and partnerships, and serve as a catalyst triggering exponential impact in connecting people with nature in North Carolina. This work will support the rapid expansion of a network of individuals working for conservation of all wildlife and habitat. To date, GOU has reached over 51,000 individuals, connecting kids to nature. We will focus strategically on expansion in the Triangle and Triad regions.

- a. Provide ongoing nature programming and outdoor activities and outings.
- b. Explore and evolve use of technology and social media.
- c. Educate and develop an appreciation through Great Outdoors University experiences about the importance of conservation.
- d. Inspire curiosity about the natural world that fosters a passion for continued learning.
- e. Provide scholarships to college students to assist conservation careers.
- f. Empower kids of all ages with an opportunity to discover and experience the many joys, wonders and benefits of nature.
- g. Tout and recognize conservation heroes through Conservation Achievement Awards.

- h. Provide science-based technical and policy support, guidance, and materials on pollinator conservation.
- Use Great Outdoors University as a catalyst triggering a reaction with exponential impact in connecting people with nature.
- Sustain and thoughtfully grow and expand Great Outdoors University program, curriculum offerings, partners and participation.
- k. Strategically develop, prototype, and test expansion approaches for Great Outdoors University.
- 1. Hold annual Monarch Celebration.
- m. Participate in outdoor expos and festivals especially in under-represented areas to elevate identity and capacity.
- n. Increase media presence through Letters to the Editor, Op-eds, news releases, and online outlets.
- o. Create and provide grassroots citizen participation opportunities to engage in citizen science.
- p. Organize informational seminars and deer donation events.
- q. Develop educational materials to illustrate and describe complex issues surrounding marine fisheries management and solutions offered by Sound Solutions.
- r. Provide lawmakers and the public with better interpretation of the science behind fisheries management.
- s. Strategically expand Family Fun Days.
- t. Educate fishermen on best fishing practices to reduce waste and discard mortality, and how to best engage in the management process. WF



GREAT OUTDOORS UNIVERSITY TEACHES CHILDREN ABOUT NATURE.



by Tom Bean, Director of Government Affairs

#### 2018 LEGISLATIVE SHORT SESSION WRAP-UP

he 2018 short session wrapped up on Friday, June 29. The adjournment resolution, however, calls legislators back to Raleigh on November 27 after the elections. Technically, any bills pending in committee could still be taken up in this "lame duck" session. Here are the bills and budget items related to fishery resource management and conservation funding.

#### **BUDGET**

The Wildlife Federation and our partners with Land for Tomorrow worked hard in the short session for conservation investments. Land and water investments were included in the short session budget as \$22 million dollars of additional funding were appropriated into the states' three conservation funds. A large part of the new monies went to the Agricultural Development and Farmland Preservation Trust Fund to match and satisfy federal grants that will help protect land around military bases from incompatible development and help protect family farms in the North Carolina mountains. The additional funds helped keep the Clean Water Management Trust Fund and the Parks and Recreation Trust Fund at level funding from recent years, ensuring conservation groups have the ability to continue partnering with state and local governments and private landowners to conserve North Carolina's land and water resources, preserve farmland, and expand hunting and recreation opportunities.

We will continue to work with legislative and community leaders across the state to ensure the conservation trust funds are able to protect and restore water quality, preserve family farms, and to support the \$28 billion outdoor recreation industry in NC. As one of the fastest-growing states in the country, with high demand and need far exceeding available current resources (135 local governments, conservation organizations, and state agencies requested nearly \$68 million from Clean Water Trust Fund in 2017, with only about \$20 million available) there is work to be done to get the funds the necessary resources needed.

#### **SHELLFISH PROTECTION**

House Bill 361, "Support Shellfish Industry," passed through the Senate with little opposition, but did not make it to the House floor for concurrence in Senate changes after questions were raised by the Federation about the effectiveness of the proposed legislation. The potential loss of access to traditional hunting, fishing and boating waters by the public, including both recreational and commercial fishermen, far outweighed any of the economic development gains for the shellfish industry being touted by the bill's primary sponsors. The more judicious approach to address expanding aquaculture is to work with all stakeholders to craft

good legislation in 2019 that would actually help support our state's developing oyster industry. The basis for sound aquaculture expansion should contain two elements: administrative remedies for aquaculture lease appeals; and designated enterprise zones selected for maximum potential for aquaculture success and with minimum potential for conflict among other users and the public. HB361 could still resurface when the legislature returns on November 27.

#### **COMMERCIAL FISHING LICENSES**

House Bill 1063, which addressed commercial fishing license reform, did not receive a hearing by the House Wildlife Resources Committee due to strong opposition by commercial fishing interests. The bill was introduced to support positive changes to the commercial fishing license structure proposed to the legislature by the Marine Fisheries Commission. HB1063 would set parameters to define a commercial fisherman as one who submits 15 trip tickets or catches 1,000 pounds of seafood products in 2 out of 5 continuous years prior to renewal. The bill also proposed changes to the Recreational Commercial Gear License and increases to recreational license fees to bring them in line with the inland fishing license fees. The proposed changes would eliminate unreported harvests of fish under commercial licenses that are taken for personal use or not sold to fish dealers under fish tickets, thus improving estimates of harvests upon which more effective regulations can be based. A more directed harvest by bona fide commercial fishermen will result in less by-catch from regulatory discards.

#### **FISHING COMMUNITIES**

House Bill 1049, Support Sustainable Fisheries Communities, failed to be heard by the House Wildlife Resources Committee. The intention in filing the bill was to dissolve, replace, and strip the current Marine Fisheries Commission of any regulatory authority, and to re-create a legislative oversight body to maintain the status quo for marine fisheries management. This very negative bill will not advance.

#### **RIGHT TO HUNT AND FISH**

SB 677, An Act to Amend the North Carolina Constitution to Protect the Right to Hunt, Fish and Harvest Wildlife, passed both chambers and will be on the ballot for voters this fall. If the referendum passes, then a new Section 38 will be added to Article I of the N.C. Constitution to stipulate that the right of the people to hunt, fish, and harvest wildlife shall be forever preserved for the good of the people.

### **CHECK OUT OUR CHAPTERS!** For more information on how you can participate, contact Tara Moore at tara@ncwf.org.



Capital Chapter



Community Alliance for Wildlife



Concord Wildlife Alliance



CROWN (Charlotte Reconnecting Ourselves With Nature)



HAWK (Habitat and Wildlife Keepers)



Lake James Area Wildlife and Nature Society



Lake Norman Wildlife Conservationists



PAWC (Pamlico Albemarle Wildlife Conservationists)



PAWS (Gaston County Piedmont Area Wildlife Stewards)



River Hawks (Wake Forest)



South Wake Conservationists



The Albemarle Conservation and Wildlife Chapter

#### NCWF CHAPTERS UPDATE

#### **Having Fun and Making a Difference**

Wildlife enthusiasts across North Carolina are always up to something worthwhile. Jump in the fun by joining an NCWF chapter in your neck of the woods so you can work with like-minded people ready to be a part of the answer to the challenges facing wildlife and wildlife habitat. Here's what some of our chapters have been up to.

 $\label{eq:total paddling fundraiser} 1 \text{ getTING WILD ON THE WATER} \quad \text{Based in Charlotte, CROWN's annual paddling fundraiser was once again a success, with over 70 participants paddling the Catawba River and learning from naturalists about local plant and animal species while raising money for wildlife.}$ 

2 WALKING ON THE WILD SIDE The Neuse River Hawks chapter organizes and leads naturalist walks focused on introducing interested citizens to the flora and fauna that dwell in local parks or greenways such as Mitchell Mill State Natural Area. It's a great chance for unusual activities like viewing a rare moss species.

3 **THE NEXT GENERATION** A hallmark of Gaston PAWS is supporting youth in the outdoors from its support of the local shooting sports team to sponsoring youth days like the one slated for September 29.

A SHUCKING GOOD TIME The Lake Norman Wildlife Conservationists will host its annual Shrimp and Oyster Fest on Saturday, October 13. Funds from this event go to support the Osprey Conservation Program, Hunters Offering Others Food (HOOF), and shoreline habitat stabilization projects among others. Then join the chapter the weekend after for Laketoberfest, where thousands will gather for this music and brew festival to support wildlife conservation.

**5 LENDING A HAND** Members of the Albemarle Conservation and Wildlife Chapter have been scraping and painting the boathouse at the Pine Island North Carolina Audubon bird sanctuary, which is among the top two percent of important birding areas in all of North America.





# can control the future

Here are four simple ways you can leave a lasting legacy. Consider:

- Leave a gift to NCWF in your will or trust. Find out how easy it is to put wildlife in your plans.
- ➤ Designate NCWF as a beneficiary of your retirement plan or IRA. Consider full, partial or percentage options.
- Make NCWF a full or partial beneficiary of your life insurance.
- Give real estate or 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 goals and interests, 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.

WHERE THERE'S A WILL, THERE'S A WAY... FOR WILDLIFE

### **Charlie Shaw Society**



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, or Dom Canavarro, Development and Operations Director, at (919) 833-1923; dom@ncwf.org.

Jennifer Alligood Ben and Jeanette Barker Avery Bates John Bishop John Booker Frank Bragg Robert Brown Mollie Brugh Richard and Maria Buchsbaum Pinkney Bynum Maurice and Addria Capps Bob and Judy Critz John Crosland III John Crumpler John and Pam Crutchfield Leah L. Dey

Roger Dick

Alex and Christa Dickey

Helen Eggers Ray and Judy Felton Scott and Ann Fletcher John Fuller Leonard Fumi and Lucy Quintilliano Carol Gestwicki Tim and Karen Gestwicki Stephen Graf John and Lisa Hairr Daniel and Lorainne Harris Fred Harris Susan Harris Hileman Phil Hinton John Hislop Brigid Hogan Carol Buie and Jay Jackson Steve Jester David Knight

Harry Lancaster and Jane Henderson Christa Milne Patrick O'Leary Perry Patterson and Joel Leander Karen Redfern and Joye Thomas Mark and Jane Ritchie John Robbins Marguerite Silver C. Hamilton Sloan Jack and Jenny Spruill Fred and Alice Stanback Brad and Shelli Stanback Bill Staton Victoria Sutton Kathy Watson Dewey Wells Norwood West



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#### **SEPTEMBER**

**September 10:** Wild muscadine grapes are ripe.

**September 12:** Whip-poor-wills and chuck-will's-widows are departing. Most will spend the winter in Mexico and Central America, but a few will overwinter along the Gulf Coast.

**September 14:** Migrating monarchs—though not as common as they once were—can still be spectacular this time of year. The Blue Ridge Parkway is a good place for monarch watching. Check out Tunnel Gap at milepost 415.6.

**September 15:** BugFest, an annual educational expo featuring insects and other arthropods, will be held at the North Carolina State Museum of Natural Sciences in Raleigh. This year's theme is crayfish! For more information, visit www.natural.sciences.org.

**September 19:** The Diana fritillary—a rare butterfly found only in our Mountains and Foothills—is flying after its summer diapause.

**September 21:** Hawk migration peaks. Thousands of broad-winged hawks and other species may be seen in migration at this time of year. Mahogany Rock in Doughton Park along the Blue Ridge Parkway is an especially good spot to witness this phenomenon.

**September 21-22:** Carolina Bird Club will hold its fall meeting in Greenville, SC. For more information, visit www.carolinabirdclub.org.

**September 22:** It's fall, y'all! Autumnal equinox is at 9:54 p.m. EDT (01:54 on Sept. 23 UTC). It's also the 46th annual National Hunting and Fishing Day and the 25th annual National Public Lands Day. Visit your favorite public lands, and/or take a kid (or an adult) hunting or fishing.

**September 23:** Bog turtle nests are hatching in the Mountains and Foothills.

**September 24:** Pine snake nests are hatching in the Sandhills. Several species of blazing star are in bloom.

**September 26:** Most whitetail fawns have lost their spots. Many fall warblers are migrating through.

**September 28:** Expect the first frosts in the Mountains. Carolina mantids are depositing their oothecae (egg clusters).

**September 30:** Marbled salamanders begin moving to their breeding sites on rainy nights. Males usually move first. This handsome salamander was adopted as North Carolina's official State Salamander in 2013. Females deposit their eggs under sheltering objects on land in or along dry woodland pools and guard them until winter rains flood the pool and hatch them.

#### **OCTOBER**

**October 1:** Brunner's stick mantids are active and depositing their oothecae (egg clusters). These unusual native mantids of our Coastal Plain and eastern Piedmont occur only as females, reproducing by parthenogenesis.

**October 2:** The season's last loggerhead and green sea turtle nests are hatching.

**October 3:** Peak surface activity for both our hognose snake species—the rare southern hognose and the more common and widely distributed eastern hognose.

**October 5:** Generally good surf fishing for bluefish, red drum, and some other species.

**October 5-7:** 32nd annual North Carolina Seafood Festival, Morehead City waterfront. Call 252-726-6273 or visit www.ncseafoodfestival.org.

**October 7-8:** Draconid meteor shower peak. Just after sunset and before nightfall will be the best viewing time for this shower. Clear skies, watchful eyes, patience, and a spot as far away as possible from artificial lights are all you need for successful meteor watching.

October 8: Peak sea duck migration.

**October 10:** Tail end of migration peak for many shorebird species.

**October 12:** Based on our limited knowledge of them, this time of year appears to be surface activity peak for the mimic glass lizard, a rare legless lizard associated with large tracts of pine flatwoods in our southeastern Coastal Plain.

**October 13-14:** One of NC's older festivals, the 64th annual Mullet Festival in downtown Swansboro is a celebration of Mugil—an important fish genus, both ecologically and economically. For more information, call 910-326-7370.

**October 14-20:** National Wildlife Refuge Week. Visit one of our outstanding refuges this week, or contact your favorite or nearest one for listings of special activities.

**October 15:** Eastern mud turtles and chicken turtles begin hibernating. Unlike most aquatic turtles, these species usually leave their ponds to hibernate on land, sometimes traveling for considerable distances.

**October 16:** Eastern red bats are mating. These common, solitary, tree-roosting bats often mate on the ground.

**October 16-21:** 22nd Wings Over Water Festival, a celebration of wildlife and wild lands in eastern North Carolina. For more info, call 252-441-8144 or 1-800-446-6262, or visit www.wingsoverwater.org.

**October 17:** October-flower is in bloom in the Sandhills and southern Coastal Plain.

October 18: Fall hardwood foliage colors peak in the Mountains. Many points along the Blue Ridge Parkway provide especially excellent color shows.

October 20: Pine Barrens gentian is in bloom in the Sandhills. Expect the first frosts in the Piedmont.

**October 21:** Orionid meteor shower peak. Just before dawn should be the best time for viewing this shower.

**October 22:** Yellow-bellied sapsuckers are returning to the Piedmont and Coastal Plain.

**October 23:** Acorns are mature for most oak species.

**October 27:** Expect the first frosts in the Coastal Plain. Persimmons are ripening (opossums, raccoons, foxes, coyotes, and bipedal persimmon pudding connoisseurs are salivating).