

# North Carolina Wildlife Action Plan

## What is a wildlife action plan?

Congress asked each state to develop a wildlife action plan, known technically as a comprehensive wildlife conservation strategy. These proactive plans examine the health of wildlife and prescribe actions to conserve wildlife and vital habitat before they become more rare and more costly to protect.

## North Carolina snapshot

**Geography:** North Carolina stretches from a thin strand of sand known as the Outer Banks that extends out into the Atlantic Ocean, and stretches back across 1.8 million acres of the Albemarle-Pamlico estuary and over the black water streams and pocosins of the coastal plain. The state covers the rolling hills of the piedmont, then climbs into the mountains where elevations may exceed 6,000 feet and plants and animals from colder climates are common.

**Landscape:** North Carolina's population has grown from 5 million people in the 1970s to more than 8 million people today, putting pressure on all wildlife species and their habitats, including special wild areas like beaches and dunes along the coast, large tracts of habitat in the piedmont, and wetlands in the mountains.

**Wildlife highlights:** Sea turtles nest on the state's Atlantic beaches. Thousands of nesting pairs of royal terns may take flight simultaneously off an island rookery when disturbed. Red cockaded wood-



Little Fishing Creek freshwater mussel distribution survey/NCWRC

peckers live in remnants of what was once a vast longleaf pine forest. The small wavy-rayed lampmussel lies on the floor of a mountain stream displaying her offspring in a package designed to look like a small fish in the hope that the smallmouth bass will strike the lure and give her offspring the chance to attach to the fish's gills. The fluorescent flecked green salamander lays her eggs attached to the roof of a moist crevice at the base of a large rock outcrop in the mountains.

## North Carolina's planning approach

North Carolina's Wildlife Action Plan is a guide and planning resource for

*"It is a comprehensive Strategy for fish and wildlife, whose success will not be measured by population estimates or growth rates, but by the cultivation of long lasting conservation partnerships and by the promise of fish and wildlife resources for future North Carolinians."*

*—John E. Pechman,  
Chairman,  
North Carolina Wildlife  
Resources Commission*



Green salamander/NCWRC

conserving North Carolina’s wildlife and habitats. It builds on the strategic thinking of many organizations in North Carolina’s conservation community and reflects the ideas and input of many of the state’s citizens. It takes a habitat-based approach to addressing the needs of the state’s conservation priority wildlife. The plan gives 371 species statewide priority status for conservation efforts. It categorizes



Northern Flying Squirrel/NCWRC

those species with 23 habitat types, such as “beach/dunes”, “floodplain forests”, “bogs and associated wetlands”, or one of 17 river basins in the state. The plan then identifies threats and appropriate conservation actions by habitat type or river basin. The Wildlife Action Plan also includes sections on strategies for urban wildlife management, private lands management, land conservation, and conservation education, outreach, and recreation.

## Primary challenges to conserving wildlife in North Carolina

North Carolina is located in the rapidly developing southeast. Its population has increased from 5 million people in the 1970s to more than 8 million today. Many of the threats facing species of conservation concern and their habitats are derived from this growth. The challenge is to manage human population growth to minimize those threats.

**Direct habitat destruction:** Only 3% of a formerly vast longleaf pine forest and 1% of its canebrake and white

*“Wildlife in North Carolina will benefit for decades to come as a result of your efforts and those of everyone who contributed to this project.”*

*–Ann B. Somers, Chair  
NCWR Nongame Wildlife  
Advisory Committee*



Robust Redhorse in the Pee Dee River/NCWRC

Wildlife	Total number of species	Species of conservation concern*	Threatened/endangered
Mussels	56	40	7
Snails	62	10	0
Crayfish	41	21	0
Fish	231	83	4
Amphibians	80	41	0
Reptiles	79	43	7
Birds	260	92	8
Mammals	80	38	10
<b>Totals</b>	<b>889</b>	<b>368</b>	<b>36</b>

*\*\* Each state is using its own criteria for this category. North Carolina used a combination of current protection status (state and/or federal listing) and known population trends. Knowledge of status, distribution, and trends was evaluated and species were awarded priority status if available information was poor.*

### Wildlife highlights



Highlight habitats	Wildlife (examples)	Issue (examples)	Action (examples)
<b>Dry Longleaf Pine</b>  <b>Ownership:</b> <b>Mix of public and private ownership</b>	Red-cockaded woodpecker Bachman's sparrow Seminole bat Southern hognose snake	<ul style="list-style-type: none"> <li>• Fire suppression</li> <li>• Displacement by other species</li> </ul>	<ul style="list-style-type: none"> <li>• Prescribed burning to manage understory.</li> <li>• Longleaf planting to re-establish stands.</li> <li>• Promote larger tracts of longleaf pine to meet habitat requirements of some conservation needy species</li> </ul>
<b>Pocosins</b>  <b>Ownership:</b> <b>Mix of public and private, most altered are private.</b>	Oak toad Southern dusky Salamander Pine barrens tree Frog Long tailed weasel	<ul style="list-style-type: none"> <li>• Invasive plants</li> <li>• Fire suppression</li> <li>• Draining</li> <li>• Fragmentation</li> <li>• Conversion to cropland or silviculture</li> </ul>	<ul style="list-style-type: none"> <li>• Prescribed burning to manage plant species composition.</li> <li>• Restore natural hydrology.</li> </ul>
<b>Little Tennessee River</b>  <b>Ownership:</b> <b>Land within the basin is a mix of public and private.</b>	Sicklefin redhorse Olive darter Spotfin chub Appalachian elktoe (mussel) Wavyrayed lampmussel (mussel)	<ul style="list-style-type: none"> <li>• Sedimentation</li> <li>• Flow alteration</li> <li>• Dams</li> <li>• Invasives</li> </ul>	<ul style="list-style-type: none"> <li>• Riparian protection (buffers) to stabilize banks and reduce erosion.</li> <li>• Species re-introductions where water quality has improved.</li> <li>• Use the hydropower re-licensing process to improve flow management and obtain other mitigation measures.</li> <li>• Support site specific water quality management plans for listed species.</li> </ul>

### Recommended actions to conserve North Carolina's wildlife

cedar forests still exist in the southeast. Experts estimate that North Carolina has half of its presettlement wetlands, the rest having been converted to development or cropland. Land use changes have increased sediment deposits and altered streamflows, resulting in smothered stream bottoms and changed natural stream channels. All of these changes are direct threats to those species dependant upon the habitats destroyed.

**Habitat Fragmentation:** Road construction, urban corridors, and dams are examples of manmade barriers that break larger habitat units into smaller units, hinder wildlife movement, and isolate wildlife into smaller and more vulnerable populations. Dams deny access to spawning grounds to fish that live in the sea and reproduce in freshwater, while associated reservoirs may isolate freshwater mussel populations trapped in the small headwaters of drowned tributaries to the impounded waters. Available



Wildlife stakeholders meeting in Wake County, NC/WRC

space for animals that need large blocks of habitat can become too small to continue to support those animals.

## Working together for North Carolina's wildlife

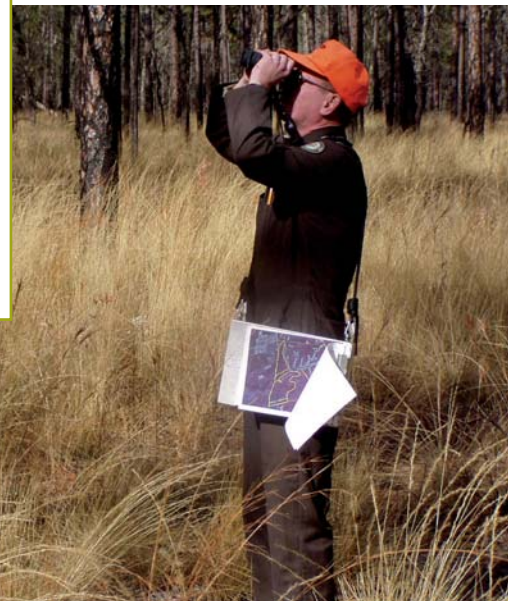
The North Carolina Wildlife Resources Commission made a concerted effort to involve other state and federal governmental agencies, local governments, conservation NGO's, academia, and

private citizens. Over 40 meetings were held with nearly 50 stakeholder groups in order to solicit direct input on the plan. Outreach to the general public included more than 15 magazine and newspaper articles designed to introduce the public to the planning process, and a web site created to allow the public to respond to drafts of the plan. An e-mail list was developed from all of these public interactions and quarterly communications were issued reporting on the plan's progress and inviting input and response. Finally, several of the Commission's partners reviewed the final draft of the strategy.

The North Carolina Wildlife Action Plan charts the course, and North Carolinians now have the opportunity to help conserve the wildlife resources of the State of North Carolina for the use and enjoyment of present and future generations.



Royal tern colony/NCWRC



Songbird surveys on gamelands/NCWRC

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