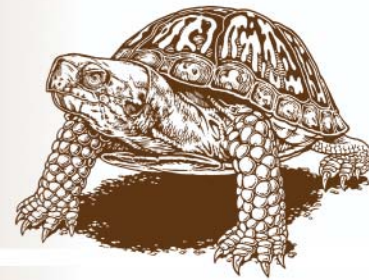


# A New Cooperation

WILDLIFE ACTION PLAN KEEP COMMON ANIMALS COMMON



Bringing together new collaborators, stakeholders and partners across the state to focus on comprehensive wildlife needs has ushered in a new era of wildlife conservation.

This is the last of a five-part series about North Carolina's Wildlife Action Plan. This final piece will focus on statewide initiatives.

MARCH	INTRODUCTION TO THE PLAN
MAY	MOUNTAIN REGION
JULY	PIEDMONT REGION
SEPTEMBER	COASTAL PLAIN REGION
NOVEMBER	STATEWIDE PROJECTS AND PARTNERSHIPS

Wildlife agencies have been around for a long time doing game and fish restoration and management, all the while supported mainly by hunters and anglers. The long-term trend is for wildlife conservation to be broader in scope. Twenty years ago, many states had small, fledgling nongame or wildlife diversity programs with minimal or no funding and few projects. Programs focused mainly on efforts to conserve and restore endangered species.

The completion of the N.C. Wildlife Action Plan on 2005 changed all that. It introduced a new approach to collaborative conservation, and a new understanding for a diverse array of interest groups that have not always read

from the same script. The advent of the Wildlife Action Plan ushered in a new era of collaboration, partnerships and comprehensive conservation focus that has never been seen before.

This series of articles has highlighted Wildlife Action Plan projects and initiatives under way in North Carolina's Mountains, Piedmont and Coastal Plain. The stories have shown a few examples of the wide range of projects under way to address the needs of wildlife and goals of wildlife conservation. The growth of interest, scope and effort towards a more comprehensive approach to conservation is evident not only in these regional examples, but in the language and

thought processes of agencies, organizations and the minds of citizens.

The Wildlife Action Plan is influencing this new approach at the state and national levels, too. Statewide initiatives and projects such as the Landowner Incentive Program, the Forest Landbird Legacy Program, Recovery Land Acquisition and numerous others are all coming together to address needs and actions identified in the plan. Every state has completed a Wildlife Action Plan, and now regional and national organizations such as the Southeastern Association of Fish and Wildlife Agencies are collaborating more than ever before to address the issues identified through this new approach. Here, we take a

look at several examples of statewide initiatives that are contributing to our goals of protecting rare creatures and keeping common animals common.

Never before has there been such a high level of collaboration toward the goal of comprehensive wildlife conservation that the plan makes possible. Partnerships with a host of individuals and organizations dramatically alter the scope of participation from anything experienced before. Partnerships with colleges and universities to study distribution, life history and habitat needs are numerous and increasing. Collaborations with other local, state and federal agencies to prioritize and protect significant natural resources and

develop new approaches to conservation are coming along daily.

The Wildlife Commission is more engaged with an array of nongovernmental organizations in pursuit of the goals and objectives of the plan, too. A part of this new collaboration is the greater availability of funding to help collectively achieve goals. The Wildlife Action Plan can focus and leverage existing funding, but it can also help develop new funding that will benefit conservation.

Sister agencies within state government have partnered on projects for many years. The Wildlife Commission's Nongame and Endangered Wildlife Program has often received grants to facilitate working together

with the N.C. Natural Heritage Program to inventory natural resources around the state. The Wildlife Action Plan has facilitated a new collaboration with the Natural Heritage Program to share funding for two aquatic ecologists. Their focus is galvanizing local, state and private partners to identify and initiate land conservation in priority watersheds to protect aquatic animals and their habitats.

The Wildlife Commission also is partnering with the Conservation Trust for North Carolina to develop a comprehensive program to share information about the plan's priorities with local land trusts. The commission is forging new relationships in some cases, strengthening others and working to make

**PROPAGATING PARTNERSHIPS** To be effective, statewide initiatives such as the ones shown below need multiple partners working together. The Wildlife Commission is leading the way or helping with each of these projects or programs in conjunction with universities, nonprofits, industry or other state agencies.

**RAFINESQUE BIG-EARED BAT**  
SOUTHEASTERN BAT DIVERSITY NETWORK  
PIGEON RIVER, HAYWOOD COUNTY  
*JESSE IVAN*

**EASTERN BOX TURTLE**  
STRATEGIC CONSERVATION PLAN  
RALEIGH, WAKE COUNTY  
*JUAN PONS*

**TAR RIVER SPINY MUSSEL**  
PLANNING FOR GROWTH  
TAR RIVER, EDGECOMBE COUNTY  
*GARY PEPPLES/USFWS*

**DWARF SALAMANDER**  
N.C. PARTNERS IN AMPHIBIAN  
& REPTILE CONSERVATION  
DAVIDSON COLLEGE, MECKLENBURG COUNTY  
*JEFF HALL/NCWRC*

**ROBUST REDHORSE**  
HYDROPOWER RELICENSING  
PEE DEE RIVER, ANSON &  
RICHMOND COUNTIES  
*TODD FUSLER*

**PAINTED BUNTING**  
PARTNERS IN FLIGHT  
WRIGHTSVILLE BEACH,  
NEW HANOVER COUNTY  
*F. EUGENE HESTER*

MAP ILLUSTRATION BY BILL TIPTON

written by **CHRIS MCGRATH**

**THREE STATEWIDE INITIATIVES MAKE GREAT CONSERVATION STRIDES**

The N.C. Wildlife Resources Commission has embraced a trio of organizations on regional, national and international levels by hiring personnel to coordinate the groups' work in North Carolina. Representatives of Partners in Flight, Partners in Amphibian and Reptile Conservation and the Southeastern Bat Diversity Network all work for the commission to conserve populations of these types of animals. By fostering many types of partnerships, these three groups have made a real difference in the conservation of these ecologically critical creatures.

**N.C. PARTNERS IN FLIGHT**

Neotropical migratory songbirds spend their summers nesting in North America and then fly to Mexico, Central America, the Caribbean and parts of South America for the winter. These birds include beloved and well-known species such as the ruby-throated hummingbird, purple martin and wood thrush. Many neotropical migrants breeding in some parts of North Carolina are vividly colored and unforgettable, such as the adult male scarlet tanager, painted bunting or rose-breasted grosbeak. Some, like the painted bunting of the immediate southern coast, have very narrow ranges in our state. Dozens of these migrants nest in North Carolina, and some fly back and forth across the Gulf of Mexico in nonstop flights each spring and fall to do so.

In 1993, the N.C. Wildlife Resources Commission formed the N.C. Partners in Flight (NC PIF) program to promote and improve the conservation of migratory birds and their habitats. This program is part of the International Partners in Flight Initiative originally organized in 1990 to create partnerships among government agencies, conservation organizations, industries, academia and concerned citizens to further migratory bird conservation. The main goal of the current NC PIF program is to increase communication, cooperation and collaboration among a diverse set of statewide partners to improve the overall status of birds

of all types through monitoring, research, management and protection efforts and strategies.

In addition, ongoing bird identification workshops for natural resource professionals and presentations related to bird conservation are conducted throughout the state by various partners. Partners in Flight provides technical guidance to government agencies and many others on quality bird management options. Each spring since 1993 there have been programs and events throughout the state related to the importance and conservation of birds via International Migratory Bird Day. Many materials on birds and bird conservation, as well as volunteer opportunities, are available on the NC PIF website at <http://faculty.ncwc.edu/mbrooks/pif/>.

Keeping common birds common is a central theme of the N.C. Partners in Flight program. Anyone can help do just that by making certain simple lifestyle choices that benefit birds and other wildlife.

**N.C. PARTNERS IN AMPHIBIAN AND REPTILE CONSERVATION**

Reptiles and amphibians are important components of healthy ecosystems in part because they can be used as indicators of overall environmental health. Worldwide declines in both groups of animals prompted the creation of Partners in Amphibian and Reptile Conservation (PARC) in 1999.

PARC was based on the Partners in Flight model set for bird conservation. Groups represented within PARC include state and federal agencies, conservation organizations, museums, the pet trade industry, nature centers, zoos, the energy industry, universities, herpetological organizations, research laboratories, forest industries and environmental consultants.

The N.C. Wildlife Resources Commission decided to support this *continued on page 24*

sure that conservation dollars, whether from public or private sources, are being focused upon the most important places and the most critical needs.

Davidson College's Herpetology Lab, which studies reptiles and amphibians, is partnering with the Wildlife Commission and just about anybody with an internet connection. You see, the Wildlife Action Plan notes that we lack information about the current distribution and status of many reptiles and amphibians. So Mike Dorcas and Steve Price at Davidson worked with the commission to develop an online herpetology atlas. Anybody who spots a reptile or amphibian in North Carolina can register at the site ([www.carolinaherpatlas.org](http://www.carolinaherpatlas.org)) and record species and

locations, upload pictures to verify species identification and do a bunch of other things. It is an amazing tool that will provide abundant information on these poorly studied animals. It's a relatively inexpensive way to gather large amounts of information, it provides people with an opportunity to participate, and it has a number of really cool educational applications built to help generate children's interest in conservation.

North Carolina boasts an abundance of outstanding educational institutions, and many of them are working with a host of partners (including the Wildlife Commission) on high-priority Wildlife Action Plan species and issues. The commission is partnering extensively with N.C. State University and numerous other schools on a wide range of research topics: investigating and evaluating bird monitoring protocols, studying Swainson's warbler breeding ecology, figuring out the life history of Carolina heelsplitter mussels, working to develop captive breeding capacity for other freshwater mussels.

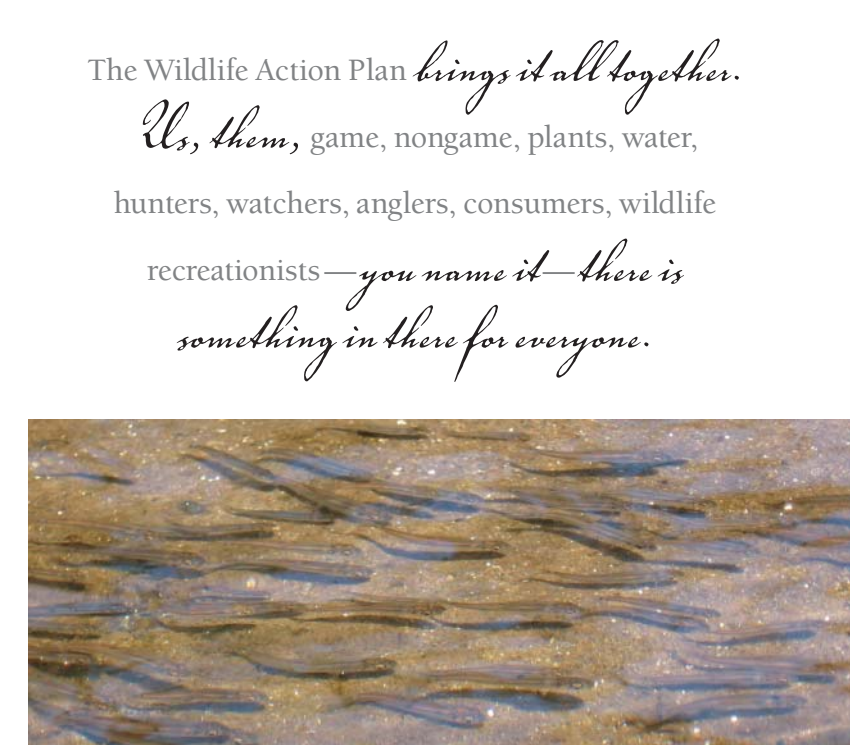
Since 1998, the Wildlife Commission has been very involved with the relicensing of hydropower dams in the state. Nongame wildlife has played an important role in most of these efforts because most of the state's priority nongame species are aquatic.

The Appalachian elktoe mussel was instrumental in making the case for restoring water to a 9-mile-long stretch of the Cheoah River that had stream flow diverted for more than 75 years. Field studies conducted during the relicensing process indicated that only a handful of mussels remained in the river after many decades of low flow conditions. A new flow pattern enacted in 2005, designed to mimic a natural stream, has already improved habitat for the elktoe and many species of fish.

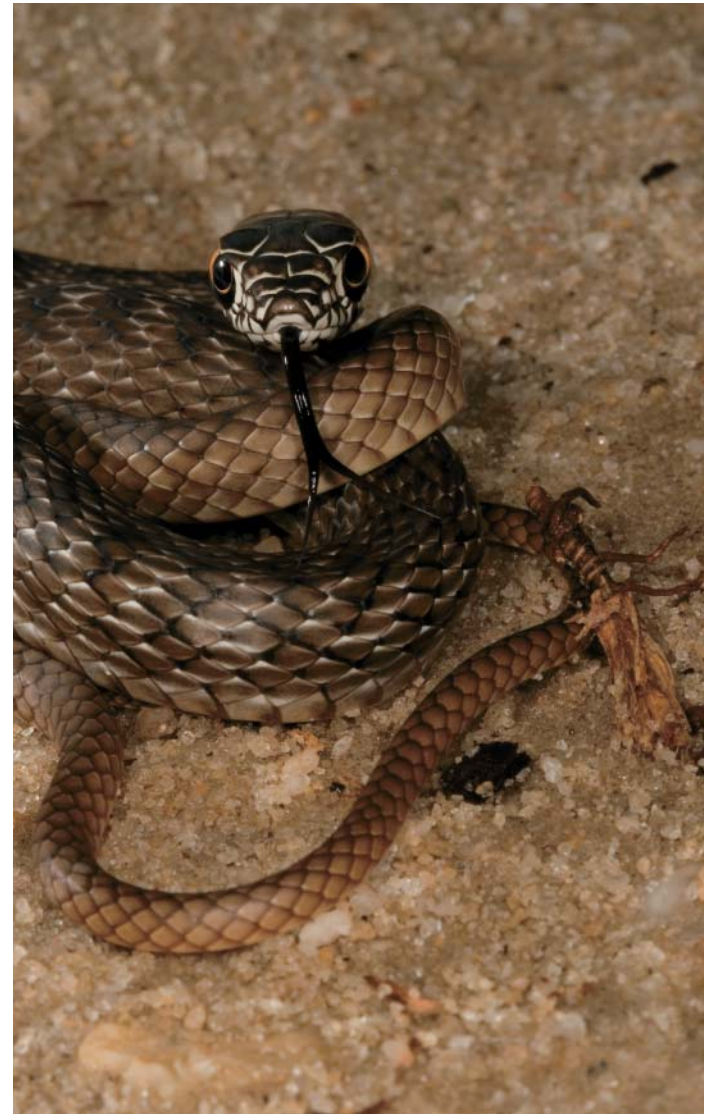
**Statewide projects help protect habitats for the rare water shrew (far left), the pine barrens treefrog (top left), the mirror shiner (top right), the Northern flicker (lower right) and the coachwhip.**



TODD PUSSER



STEVE FRALEY/NCWRC



BRADY BECK



BRADY BECK

The Wildlife Action Plan *brings it all together.*  
*Us, them, game, nongame, plants, water,*  
*hunters, watchers, anglers, consumers, wildlife*  
*recreationists—you name it—there is*  
*something in there for everyone.*



B. ANDREW PETERSON/WRP

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national effort by hiring a statewide coordinator and starting a North Carolina chapter of PARC in 2004. NC PARC has three technical working groups which regularly meet and discuss various aspects of reptile and amphibian conservation. The organization maintains an interactive Web site that allows members to keep up to date on the three working groups' projects and news related to amphibians and reptiles in North Carolina ([www.ncparc.org](http://www.ncparc.org)).

Education about reptiles and amphibians is one of the most important facets of NC PARC because these animals are often perceived as dangerous or of little environmental or economic value. Working to change these perceptions, members of the Education & Outreach working group give talks to organizations, attend festivals, visit schools and present workshops about the conservation of reptiles and amphibians. Other initiatives include producing brochures, media relations and promoting PARC publications of such as the recently published "Habitat Management Guidelines for Amphibians and Reptiles of the Southeastern United States."

The Research, Inventory, Monitoring & Management working group has developed an online registry of North Carolina herpetologists to facilitate communication and collaboration among researchers. A research bibliography is also being compiled to help locate relevant literature on the state's amphibians and reptiles. This group helped develop the Carolina Herp Atlas ([www.carolinaherpatlas.org](http://www.carolinaherpatlas.org)), a repository for species locality data, including photo documentation, from professionals and amateurs. Members of the working group were instrumental in developing the state's Calling Amphibian Survey Program (CASP) for monitoring frog and toad populations and distributions. Routes have been run in 2006 and 2007, and additional volunteers are needed to conduct routes in 2008. Find out more at [www.ncparc.org](http://www.ncparc.org).

The Policy, Regulation & Trade working group handles issues surrounding the legal status of reptiles and amphibians. Its members took a stand and supported a ban on the use of gill nets in the flounder fishery because of excessive bycatch that sometimes includes sea turtles. This group was also heavily involved in drafting regulations limiting the commercial harvest of land and freshwater turtles. Currently, this group is working hard to draft a fair and balanced system for permitting or licensing owners who keep certain inherently dangerous animals such as giant constrictors, venomous reptiles and crocodilians.

Opportunities for involvement in NC PARC abound. The only membership requirement is an interest in the conservation of amphibians, reptiles and/or their habitats. Membership is free — just by e-mail NC PARC coordinator Jeff Hall at [jeff.g.hall@earthlink.net](mailto:jeff.g.hall@earthlink.net). Individuals from all walks of life, all professions and all herpetological skill levels are welcome to join. Diverse membership creates a more broadly reaching voice for the conservation of North Carolina's rich amphibian and reptile heritage. So join a working group, volunteer to survey a CASP route, or add a record to the Carolina Herp Atlas.

To learn more about NC PARC, browse through our website ([www.ncparc.org](http://www.ncparc.org)) and the National PARC website ([www.parcplace.org](http://www.parcplace.org)).

#### SOUTHEASTERN BAT DIVERSITY NETWORK

Bats play a vital role in ecosystem health and are crucial to maintaining natural balance. All state wildlife action plans in the southeastern United States list a number of bats among the mammals of greatest conservation need. All of these plans identify habitat loss and degradation of habitat as a major conservation concern for bats.

Many bats range widely, regularly cross state boundaries in seasonal migrations, and use a variety of habitats. Efforts to maintain the diversity of bats — to keep common species common and to increase the populations of species in decline — must include actions and collaborations at local and landscape levels.

Recognizing this, in 2005 the N.C. Wildlife Resources Commission partnered with a nonprofit foundation, the Southeastern Bat Diversity Network (SBDN), to support a staff position to facilitate bat conservation efforts in the Southeastern United States. The main goals of the SBDN are similar to those of other focus groups — to increase communication, cooperation and collaboration among a diverse set of state and regional partners. The commission/SBDN partnership to support a position devoted entirely to bats is unique in the United States and represents a model effort to provide more focused and unified efforts across the region for this group of mammals.

A major project of the position is a review and synthesis of bat information in the state wildlife action plans that comprise the 16 states in the region. Products resulting from this effort will be available to land managers and agency personnel in late 2007. This synthesis will provide a valuable regional baseline and will facilitate partnerships and collaborations by identifying common trends and concerns.

Providing this kind of information serves to better inform local efforts, such as land acquisition needs for North Carolina's Strategic Conservation Plan, and more broad-scale efforts like those in place to protect bottomland hardwood forests, a habitat type that is imperiled at [www.sbdn.org](http://www.sbdn.org).

— Mark Johns, Jeff Hall, and Mary Kay Clark

The Southeastern Bat Diversity Network helped coordinate the efforts of biologists to implant transmitters in bats in Haywood County near the Pigeon River.



WALKER GOLDBER

The red knot visits North Carolina during its amazing 9,000-mile migration from its Arctic breeding grounds to South America.

Mussels and nongame fish have been important factors in several other hydropower relicensing in western North Carolina river basins such as the Little Tennessee, Tuckasegee and Hiwassee. These species have included spotfin chub, sicklefin redhorse and wavy-rayed lampmussel. Ecologically equivalent species are currently playing a large role in changing the management of river flows in the Yadkin River. Priority nongame species there include robust redhorse, Carolina redhorse, Roanoke slabshell and alewife floater.

In all these relicensing proceedings, the study, design and negotiation phases were driven, in substantial part, by the needs of rare nongame species. Providing more natural water flows will benefit not only these species, but the entire aquatic community.

In the Wildlife Commission, it's not game or nongame anymore. It's the whole package — animals and their habitats. The commission is using its personnel on several projects in the Cooperative Upland-habitat Restoration and Enhancement (CURE) Program to prioritize research and management on grass/shrub bird species. There are birds such as Bachman's sparrows and red-cockaded woodpeckers, along with bobwhite quail in those habitats.

As the population of North Carolina continues to grow and more land is developed, the strain on wildlife resources increases. However, with effective planning and foresight, we can work together to reduce the conflicts between growth in the state and its wildlife resources.

#### WHICH MILLION ACRES SHOULD WE CHOOSE?

In June 2000, the N.C. General Assembly passed the Million Acre Initiative. Its goal is to protect 1 million acres of conservation land, farmland and open space by December 2009. Land in North Carolina is being quickly converted from natural habitats into urban landscapes to accommodate the need for residential and industrial development. The purpose of the Million Acre Initiative is to protect for future generations the state's many natural resources — a spectacular array of animals and plants, clean water to sustain wildlife and humans, beautiful hiking trails, fishing waters and hunting lands, fertile farmland, and outdoor recreation areas. The N.C. Department of Environment and Natural Resources coordinates the Million Acre Initiative.

But which of North Carolina's 31 million acres are most valuable, and which are most threatened? To assess this across the state, a systematic way to identify and prioritize essential, high-quality natural resources across the state is needed. In early 2007, work began on the Strategic Conservation Plan to address this need. Spearheaded by the N.C. Natural Heritage Program, this effort reflects a state-of-the-art analysis and evaluation method. Digital maps are being collected from various sources to pinpoint where the state's natural resources can be found. Map contributors include the Natural Heritage Program, the N.C. Division of Water Quality, the state Division of Marine Fisheries, The Nature Conservancy, Audubon, the U.S. Fish and Wildlife Service and the N.C. Wildlife Resources Commission.

Each map is a storehouse of information about plant and wildlife distributions, sources of drinking water, where land is already being protected, and where working farms exist. Collectively, these maps provide a comprehensive look at the array of resources that need our protection. By layering these maps on top of one another using Geographic Information Systems technology, it becomes possible to see where natural resources are concentrated, where multiple resources can be protected with one project, and where resources may be at greatest risk. In addition, this tool focuses and prioritizes research needs and reveals areas where too little information is available.

The Strategic Conservation Plan is an endeavor to highlight areas of opportunity for collaborative conservation that will sustain the most significant natural areas across our state for years to come. Importantly, the data that underpins this plan will be updated every six months and additional map layers will be added to ensure that the most current information is being used to drive conservation decision-making processes. North Carolina is well on its way to knowing which million acres to choose.

To view a draft of the N.C. Strategic Conservation Plan, visit [conservation-nc.net](http://conservation-nc.net).

— Kim Douglass and Carol Price

In 2006, the Wildlife Commission worked with the N.C. Department of Natural Resources, the N.C. Department of Transportation and the U.S. Fish and Wildlife Service to produce a 20-page booklet entitled "Swimming with the Current: A Guide to Help Local Governments Protect Aquatic Ecosystems While Streamlining Environmental Review." This booklet details the importance of aquatic ecosystems, describes the environmental review process, and provides suggestions for minimizing impacts to aquatic ecosystems.

As a complement to "Swimming with the Current," the Wildlife Commission has organized a series of workshops entitled "Planning for Growth." These workshops discuss ways that communities can plan for growth so that impacts to wildlife are minimized. For more information on "Planning for Growth" or "Swimming with

the Current," go to [www.ncwildlife.org/planningforgrowth](http://www.ncwildlife.org/planningforgrowth).

The Wildlife Action Plan brings it all together. Us, them, game, nongame, plants, water, hunters, watchers, anglers, consumers, wildlife recreationists — you name it — there is something in there for everyone. ♦

N.C. Wildlife Resources Commission staff contributing to this article included the following: Wildlife Diversity program coordinator Chris McGrath, Partners in Flight coordinator Mark Johns, Partners in Amphibian and Reptile Conservation coordinator Jeff Hall, hydropower relicensing coordinator Chris Goudreau, special project coordinator Vann Stancil, Southeastern Bat Diversity Network coordinator Mary Kay Clark and Wildlife Action Plan coordinator Carol Price. Kim Douglass is a conservation planner with the N.C. Natural Heritage Program.