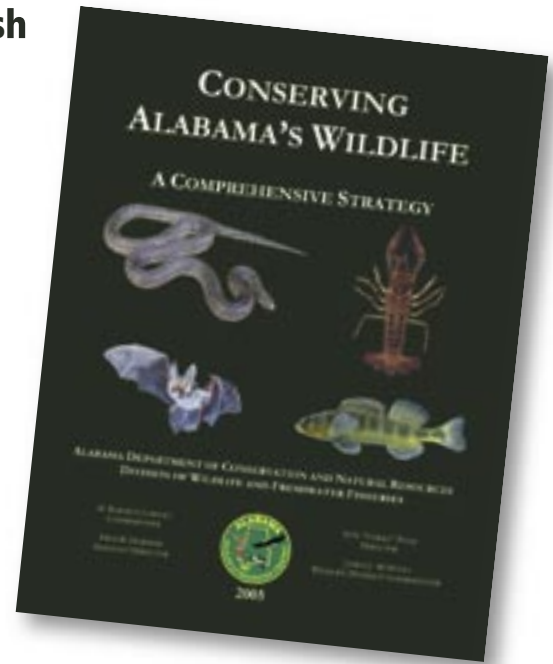


# Conserving Alabama's Wildlife A Comprehensive Strategy

By Jim McHugh, Division of Wildlife and Freshwater Fisheries

**Many Alabamians know that the state is a fish and wildlife paradise, but few are aware of its central role in the conservation of North American biodiversity.** Alabama surpasses all eastern states in plant and animal diversity, ranking fifth in the nation after California, Texas, Arizona, and New Mexico. Alabama ranks first in the nation in freshwater diversity, including more than 750 species of freshwater fishes, mussels, aquatic snails and crayfishes. By comparison, this is more than 10 times the number of freshwater species in the entire Columbia River basin, which encompasses almost all of three states: Oregon, Washington and Idaho. Unfortunately, no state east of the Colorado River has more wildlife species at risk than Alabama. Only Hawaii, California and Nevada have more imperiled species, and only Hawaii has lost more species to extinction.



## State Wildlife Grants

One aspect of the Endangered Species Act is that it provides some funding to the Division of Wildlife and Freshwater Fisheries to work with threatened and endangered species. However, little funding has been available to address the needs of species whose populations are declining but have not yet become rare enough to need the protection of the Endangered Species Act. The State Wildlife Grants Program is a relatively new federal funding source to the Division of Wildlife and Freshwater Fisheries intended to address this concern. This program is designed to identify and focus management on fish and wildlife species "in greatest need of conservation." Congress intends that State Wildlife Grant funds be used to proactively manage and conserve declining species and avoid their potential listing under the Endangered Species Act. State Wildlife Grants provide a mechanism for the Division of Wildlife and Freshwater

Fisheries to enhance our understanding and management of the many fish and wildlife species for which little funding has traditionally been available.

## Formulating a Strategy

State Wildlife Grant funding includes a requirement for each state to complete a "Comprehensive Wildlife Conservation Strategy" for approval by the U.S. Fish and Wildlife Service. The Alabama Comprehensive Wildlife Conservation Strategy was submitted to the Fish and Wildlife Service in September 2005 and received quick approval. This planning requirement represented a historic opportunity for the Conservation Department to assess and address Alabama's outstanding wildlife diversity on a comprehensive statewide scale.

During the more than two-year effort to complete the Strategy, Division staff compiled, coordinated and integrated the

best available scientific information on the status of Alabama's wildlife and the concerns, recommendations and existing conservation priorities of a diverse array of public and private stakeholders. This effort built upon the solid framework of the 2002 Nongame Symposium and resulting publication of the four-volume Alabama Wildlife, which assembled scientific experts and stakeholders to compile the best available data on the full array of Alabama's wildlife and identify those species of greatest conservation need. The Strategy updates and expands Alabama Wildlife by engaging public and private stakeholders, including local, regional, state and federal agencies and organizations to identify priority conservation targets and actions for the next decade.

The Comprehensive Wildlife Conservation Strategy planning process began with an exhaustive inventory of existing natural resource information, programs and stake-

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holders. Wildlife and Freshwater Fisheries staff facilitated stakeholder participation in the development of the Strategy as well as identification of wildlife species and habitats, threats and conservation actions. Leading experts and conservation partners from the private and public sectors helped develop, refine and prioritize conservation actions. The planning process resulted in significant coordination of conservation priorities from this diversity of programs and engaged a broad network of individuals and partners to improve communication, coordination and integration. This fostered a habitat-based approach to addressing wildlife species, which allows for more holistic and cost effective wildlife conservation.

## Species of Greatest Need

Altogether, 304 aquatic and terrestrial wildlife species were identified as in greatest need of conservation. These species include 24 mammals, 26 reptiles, 14 amphibians, 28 birds, 57 fish, 93 mussels, 34 aquatic snails and 28 crayfishes. Greatest conservation need species were associated with 15 key habitats and 15 river basins, including several types of forest, wetlands, and other unique communities such as caves and coastal beaches. The location, distribution and condition of each of these habitats was researched and summarized along with the species each supports. Problems or threats facing the habitat and/or its species; priority research, survey and monitoring needs; an itemized list of priority conservation actions and key partnerships opportunities for implementation; high priority areas of the state for conservation; anticipated products and/or performance measures for each research and conservation action item; and a list of sources for more information were developed for each key habitat.

Alabama's land and waterscapes are threatened by habitat loss and fragmentation, loss of natural community integrity, impacts from disturbance and exotic species and lack of adequate information. The current distribution and status, as well as various aspects of life history and biology are poorly known for many greatest conservation need species in most habitats. Insufficient conservation-related education and outreach about biologically significant areas and species also threatens many habitats and species.

*Congress intends that State Wildlife Grant funds be used to proactively manage and conserve declining species and avoid their potential listing under the Endangered Species Act.*

— M.N. "Corky" Pugh, Director, Division of Wildlife and Freshwater Fisheries

## Conservation Actions

To address these threats, a series of conservation actions was developed for greatest conservation need species and key habitats. In some cases, educational outreach is needed to improve the level of understanding by the public of the need for stewardship of Alabama's fish and wildlife resources and their habitats. In other instances, specific research or landowner and partner outreach and coordination are needed to protect threatened habitats and/or greatest conservation need species.

Controlling exotic species, restoring the use of fire to certain communities and reintroducing certain lost or rare aquatic species were also identified as high priority conservation actions. Supporting the full implementation of numerous partners' plans, including river basin management plans, federally listed species recovery plans, Partners in Flight bird conservation plans and the U.S. Forest Service Revised Management Plans, were found to be important conservation actions as well.

Overarching statewide conservation actions were also developed, as many actions recurred for many species and habitats, and in existing conservation plans. Alabama's conservation actions therefore addressed needs at multiple scales and levels. The implementation of conservation actions will be coordinated with key partners wherever possible, including the U.S. Fish and Wildlife Service, U.S. Forest Service, Natural Resources Conservation Service, U.S. Army Corps of Engineers, Tennessee Valley Authority, Alabama Forestry Commission, The Nature Conservancy, Partners in Flight, watershed groups, Forever Wild, land trusts and many others.

Local, state and federal agencies were asked not only for input, but also to review the draft Strategy and their comments were incorporated into the final document. An effective measure of coordination success will be the degree to which each of these partners integrates greatest conservation need species, habitats and conservation actions into their plans and programs.

## Summary

The implementation of priority conservation actions will be monitored by Wildlife and Freshwater Fisheries staff. As conservation actions are implemented, their effectiveness will be reviewed and the

status of species and habitats reassessed. As needed, the conservation actions will be modified or new actions identified based on the effectiveness of the original actions in aiding the state's greatest conservation need species and habitats as intended. The Comprehensive Wildlife Conservation Strategy will be formally updated every 10 years to reflect this adaptive management approach, allowing the Strategy to remain current to Alabama's needs to comprehensively conserve its unique fish and wildlife resources and their habitats.

The Alabama Comprehensive Wildlife Conservation Strategy is available on the Conservation Department web site, [www.outdooralabama.com](http://www.outdooralabama.com) under the "Research and Management" section. Also included is a description of the State Wildlife Grants program and a list of currently funded fish and wildlife conservation projects. ☐

## Top Ranking States for Plant and Animal Diversity\*

1. California
2. Texas
3. Arizona
4. New Mexico
5. Alabama

\*Source: Bruce A. Stein. 2002. *States of the Union: Ranking America's Biodiversity*. Arlington, Virginia: NatureServe. [www.natureserve.org](http://www.natureserve.org)

## Excerpt from the Report

*A state long overlooked from a conservation perspective, Alabama emerges from this analysis as the leading eastern state for species diversity, levels of risk, and numbers of extinct species. The state is home to an exceptionally rich freshwater fauna, thanks to an ancient and complex geological terrain and more than 235,000 miles of waterways spanning three major river basins. The state was also spared from the direct effects of the Pleistocene glaciers, enabling its flora and fauna to continue diversifying even during this unsettled geological period. Unfortunately, many of the state's rivers and streams have now been dammed and otherwise severely altered, leading to the high levels of risk and extinction among Alabama's diverse species.*