

Executive Summary

This is an historic opportunity enabling the Alabama Department of Conservation and Natural Resources (ADCNR) to assess and address its outstanding wildlife diversity on a comprehensive statewide scale. Alabama surpasses all eastern states in plant and animal diversity, ranking fifth in the nation after California, Texas, Arizona, and New Mexico (Alabama Natural Heritage Program 2003). Alabama ranks first in the nation in freshwater species diversity, including more than 750 species of freshwater fishes, mussels, aquatic snails, and crayfishes. 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 (Stein 2002). Mankind's alteration of Alabama's natural landscape and waterways has contributed to the extinction or extirpation of more than 100 animal species.

This document describes a strategy for the comprehensive conservation of Alabama's wildlife by addressing specific components required by the State Wildlife Grants (SWG) federal program that provides funding and administration through the U.S. Fish and Wildlife Service (USFWS), Office of Federal Assistance. Regional and nation level coordination was maintained throughout this effort, as well as with the International Association of Fish and Wildlife Agencies (IAFWA) Steering Committees and the Southeastern Association of Fish and Wildlife Agencies SWG Ad-Hoc Committee.

During this more than two year effort, the Alabama Department of Conservation and Natural Resources, Division of Wildlife and Freshwater Fisheries (DWFF) 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. It built upon the solid framework of the 2002 Nongame Symposium which assembled scientific experts and stakeholders to compile the best data on the full array of Alabama's wildlife and from that identify those species of greatest conservation need. This conservation strategy updates and expands the symposium proceedings, *Alabama Wildlife*, by engaging public and private stakeholders, including local, regional, state and federal agencies, organizations and tribes to identify priority conservation targets and actions for the next decade.

The Comprehensive Wildlife Conservation Strategy (CWCS) planning process began with an exhaustive inventory of existing natural resource information, programs and stakeholders. DWFF staff and contractors facilitated stakeholder participation in the development of the CWCS process 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. It fostered the "system" approach that addressed wildlife species in the context of broader habitat

associations and more holistic assemblages representing biotic communities for more effective conservation.

Altogether, 314 aquatic and terrestrial wildlife species were identified as in greatest conservation need (GCN). These GCN fauna include 24 mammals, 26 reptiles, 14 amphibians, 28 birds, 57 fish, 93 mussels, 34 aquatic snails, and 28 crayfishes. A lack of information regarding the status of several invertebrate groups precluded their inclusion in this CWCS, and they will be targeted for further research with the intent of incorporating them into future revisions of the Strategy.

GCN 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 GCN species it 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 protection or information. The current distribution and status, as well as various aspects of life history and biology are poorly known for most GCN species in most habitats. Insufficient conservation-related education and outreach about biologically significant areas and species also threatens many habitats and species.

To address these threats, a series of conservation actions were developed for GCN species and key habitats. In some cases, educational outreach is needed to improve the public's level of understanding and 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 GCN species. Controlling exotic species, restoring the use of fire to certain communities and reintroducing certain extirpated 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 USFS 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, Tennessee Aquarium Research Institute, The

Nature Conservancy, Partners in Flight, watershed groups, Forever Wild, land trusts, and many others.

Local, state and federal agencies and tribal partners were asked not only for input, but also to review the draft CWCS 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 GCN species, habitats and conservation actions into their plans and programs. One example of how this occurred early on in the CWCS process is that of the U.S. Forest Service incorporating the GCN species and habitats into their Revised Land and Resource Management Plan.

The implementation of CWCS priority conservation actions will be monitored via a DWFF tracking system that is based upon collaboration between the DWFF and SLD-NHP and GIS databases that track Alabama's fish and wildlife resources. As conservation actions are implemented, their effectiveness will be reviewed biennially by DWFF, and the status of species and habitats reassessed by the expert Taxa Committees and Technical Team. 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 GCN species and habitats as intended. The CWCS will be updated every 10 years to reflect this adaptive management approach, allowing the Strategy to remain current to Alabama's needs to comprehensively conserve its fish and wildlife resources and their habitats.