
EXECUTIVE SUMMARY

“The Nation behaves well if it treats the natural resources as assets, which it must turn over to the next generation increased and not impaired in value.”

-- President Theodore Roosevelt

In January 1996, the Pennsylvania Fish & Boat Commission and Game Commission began developing an inter-agency plan to improve the management of Pennsylvania's nongame fish, wildlife, and habitats. Since that time, and despite growing agency operational expenses, the Commissions have worked together to continue assembling, refining and carrying out this critically important work. The effort has been buoyed by the creation of the federal State Wildlife Grants Program (SWG), which has provided states approximately \$50 million annually to fund projects of greatest conservation concern. This ongoing cooperative effort is driven additionally by a SWG requirement that each state develop a Wildlife Action Plan by October 2005 in order to continue receiving federal SWG funds. The long-term goal of this inter-agency partnership, however, is to implement a comprehensive resource management program that satisfactorily addresses Commission mandates and serves all constituents, irrespective of the availability of federal funds.

Throughout their histories, both the Fish & Boat Commission and the Game Commission have relied upon hunting and angling revenues to support species management and habitat protection activities. With hunters and anglers as the direct paying constituents, the Commissions have focused management efforts primarily on 85 species of game animals and sport fish. Directed management of the more than 400 species of nongame mammals, birds, fish, reptiles, and amphibians (as well as hundreds of invertebrate species) has been limited.

The Commissions are responsible for the management and protection of both game and nongame species. The Fish & Boat Commission is responsible for the “protection, propagation, and distribution” of game fish, fish bait, bait fish, amphibians, reptiles, and aquatic organisms. Likewise, the Game Commission is mandated to “protect, propagate, manage, and preserve the game or wildlife of the Commonwealth.” Further, the federal Fish and Wildlife Conservation Act of 1980 required state agencies to develop conservation plans and programs inclusive of nongame species.

From an ecological perspective, the distinction between game and nongame species is largely artificial. To some extent, therefore, distinguishing between game management activities and nongame management activities also is artificial. Throughout the history of the Commissions, management activities and habitat protection efforts targeting game species have often benefited nongame fish and wildlife, and vice versa. There are times, however, when declining species require *targeted* management attention designed to meet their unique conservation needs. It is this type of targeted management that largely has been lacking in the Commonwealth, and it is this type of targeted management attention that is presented in this document.

Non-game species are too valuable, from either an economic and biological perspective, to be overlooked. Many of these species play important biological roles in Pennsylvania by forming the building blocks of food chains that game animals and sport fish rely on for their survival. Continued habitat loss and degradation – as well as changes in land use, however, have placed many species at greater risk. The need for increased management attention is noticeably greater: Fish species have declined in 38 of 50 streams in north-central Pennsylvania over the past 25 years; amphibian populations are declining on a global scale; 58 percent of Pennsylvania's freshwater mussels have been lost or are in jeopardy of being lost; and roughly 30 species of grassland-nesting and forest-nesting songbirds are declining. Such well-known species as the northern leopard frog (Pennsylvania's state amphibian), the northern bobwhite quail, and the eastern meadowlark are experiencing significant population declines that could ultimately threaten their survival if they continue unabated.

Conserving wildlife provides benefits to Pennsylvanians well beyond those who hunt and fish: the economic benefit of wildlife conservation is substantial. In 2001, 3.7 million Pennsylvanians participated in some form of wildlife recreation that does not involve the harvesting of a game species, such as viewing, feeding, and photographing wildlife. In fact, nearly twice as many Pennsylvanians are involved in this “nonconsumptive” wildlife recreation as are involved in hunting and fishing. Nonconsumptive wildlife recreation generates more than \$1.9 billion in economic activity annually compared with the \$2.2 billion and \$1.6 billion generated by hunting and fishing, respectively. More than 18,000 jobs are supported by nonconsumptive recreation, which contributes \$70 million per year to the Commonwealth's General Fund in state sales and income taxes.

At the same time, limited license-based resources – a historical problem for both agencies – prevent the Commissions from fully meeting their mandates to manage *all* fish and wildlife species. Management efforts that may reverse or halt declines among nongame species have frequently been and continue to be beyond the current manpower and financial capabilities of the Commissions. Though ‘nonconsumptive’ wildlife recreation generates significant economic returns for the Commonwealth, there is no direct funding linkage between these recreationists and Pennsylvania's fish and wildlife conservation programs. Unlike the case with hunters and anglers, nonconsumptive users do not directly support fish and wildlife

management.

Wildlife-related recreation generates significant economic returns in Pennsylvania, generating \$5.87 billion in total economic impact in a single year. Yet a 1999 report by the Izaak Walton League of America ranked Pennsylvania 49th in the nation in its commitment to conservation, because of a lack of public reinvestment for fish and wildlife management. At the same time, public interest and demand for wildlife-associated education, comprehensive management efforts, and additional wildlife recreation opportunities is extremely high.

Pennsylvania's Commissions are not alone in the struggle to meet public demands and legislative mandates on limited budgets: at the time of the Izaak Walton League report, there were 20 states that didn't provide annual funding appropriations to their fish and wildlife agencies. Recently, the U.S. Congress took steps to help reduce the funding crises facing wildlife conservation programs in many states. In 2000, Congress appropriated \$50 million in federal funds to manage those species of greatest conservation concern. Each year since, Congress has appropriated a similar (or slightly increased) level of funding to the State Wildlife Grants (SWG) program.

Since this federal funding began, the PGC and PFBC have entered into more than 40 cooperative projects that target high-priority fish and wildlife conservation needs, in addition to launching internal agency projects that provide directed management for species of concern. As of FFY 2004, more than \$5.6 million has been funneled to conservation partners to maximize the on-the-ground impact of funds. The PA-SWG program has been considered by many a national model for its involvement of conservation partners and stakeholders.

As a requirement of the SWG program, each state must draft a Wildlife Action Plan by October 2005. Aside from being a Congressional requirement, this Wildlife Action Plan will provide a blueprint for the Commissions to provide far-reaching management and protection of both game and nongame species and strengthen their ability to fulfill legislative mandates to preserve, protect and manage all of the fish and wildlife resources of the Commonwealth. While broadening agency management efforts will bring new challenges, a comprehensive conservation strategy also will provide an opportunity to increase the base of support for Pennsylvania's wildlife, wild lands, and conservation programs.

This document begins the process of creating a Wildlife Action Plan (WAP) for the Commonwealth of Pennsylvania. It intends to highlight and increase the understanding about the status and management of many sensitive and declining species. For this multi-year effort, the Game Commission and Fish and Boat Commission are partnering to gather information on the conservation and management needs of nearly 200 species that are

indicative of the health and diversity of the Commonwealth's wildlife. Through the work of taxonomic technical experts across the state, information has been assembled that will help conservation interests, both public and private, to begin to identify and prioritize the pressing research, management and recovery needs of species and habitats of greatest conservation concern throughout Pennsylvania.

The document is divided into three major parts: **PART I: WAP Development**; **PART II: WAP-Priority Species and Habitats**, and: **PART III: WAP Guiding Processes**. **PART I**, is composed of Sections 1-10 (with associated Appendix 1), provides background information on Strategy development, including: the need for a comprehensive management approach to fish and wildlife conservation; agency authorities and strategic planning environments; information on the scope of the WAP; a description of the stakeholder and partner involvement processes that contributed to the development of the strategy; the vision, goals, issues and objectives guiding the WAP, and; a summary list of WAP-Priority species. **PART I** largely fulfills federal SWG required Element #1-Special Concern Species Status and Element # 8-Public involvement. Chapters 11-22 (with associated Appendices 2 -5) comprise **PART II** which provides detailed information on WAP-Priority species and habitats through individual species/habitat assessments. These assessments provide information on special concern species status, habitat inventory, threats analysis, management and monitoring recommendations for each WAP-Priority species. **PART II** fulfills the federal SWG requirements for Elements # 2-5. **PART III** includes Sections 23-24, with information on WAP guiding processes, approaches to updating the plan, how stakeholders may work to coordinate efforts, and incorporation of new information into development and revision of the plan (i.e., adaptive management). **PART III** fulfills federal SWG required Elements # 5-7.

This document was created with input from agency staff, natural resource managers, technical experts, and various conservation stakeholders, yet continual input, review and revision from these and additional sources will be required for the successful implementation of Pennsylvania's Wildlife Action Plan. The agencies anticipate that interested individuals and organizations will join them in working toward the worthwhile goal of comprehensive fish and wildlife conservation in the Commonwealth.

A Note about Incorporated Planning Efforts:

To avoid redundancy and increase efficiency, existing planning efforts were incorporated into the WAP strategy at every opportunity. Citing each plan in the WAP as it occurred would not have been feasible, so the primary sources of planning information are listed below. The author wishes to acknowledge the hard work of conservationists working at the local, state, regional and national levels – whose work has provided the foundation for the WAP.

- Pennsylvania Biodiversity Plan
- Pennsylvania Game Commission Strategic Plan
- Pennsylvania Fish and Boat Commission Strategic Plan
- Pennsylvania Department of Conservation and Natural Resources-Forest Resource Management Plan
- Partners in Flight Physiographic Area Plans
 - Ohio Hills
 - Lower Great Lakes Plain
 - Allegheny Plateau
 - Mid-Atlantic Piedmont
 - Northern Ridge and Valley
 - Atlantic Coastal Plain
- The Nature Conservancy's Ecoregional Plans
 - Central Appalachian
 - High Allegheny
 - Lower New England
 - Northern Piedmont
- Local and regional plans developed by public and private interests within the Commonwealth (as appropriate).