

Florida's State Wildlife Action Plan



A comprehensive wildlife conservation strategy

FLORIDA'S

Wildlife
Legacy Initiative

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Conservation Commission

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Guiding principles of Florida's Wildlife Legacy Initiative and the State Wildlife Action Plan

Comprehensive

The Action Plan has encompassed the broad array of Florida's native wildlife including vertebrate and invertebrate species in aquatic (freshwater, estuarine, and marine) and terrestrial habitats. Wildlife has been defined as "any species of wild, free-ranging fauna including fish." Wildlife also includes "fauna in captive breeding programs, the object of which is to reintroduce individuals of a depleted indigenous species in a previously occupied range" (A. Egbert, FWC, personal communication). The state lists of plants, which are designated endangered, threatened, and commercially exploited, are administered and maintained by the Florida Department of Agriculture and Consumer Services via Chapter 5B-40, F.A.C..

Habitat-based approach

Imperative for initiating a comprehensive approach to conservation in Florida, and in order to represent Florida in a spatially explicit manner, habitats have been categorized to represent terrestrial, freshwater and marine ecosystems. Since the Action Plan has identified 1036 Species of Greatest Conservation Need (SGCN), a species-based implementation approach is not feasible. However, it is recognized that dividing Florida's landscape into habitat categories may present limitations that must be balanced with species-specific efforts when needed to effectively address conservation of species.

Non-regulatory, proactive, incentive based

The focus of the Action Plan is conservation of wildlife through voluntary and cooperative efforts. The Action Plan does not propose regulatory responses, nor does the FWC intend for it to be used to support new regulations. Instead, the Action Plan provides a starting point to explore these issues and the opportunity to cooperatively develop non-regulatory action. Actions have been proposed in the form of incentive programs, public-private partnerships, improved coordination of existing activity within and among agencies, and private citizen action. The Action Plan also is the stimulus to develop new, previously unrecognized voluntary actions for wildlife and habitats. The success of this approach has been dependent upon the support of numerous partners and their willingness to participate. The Action Plan can become the framework for cooperative and incentive-driven actions for wildlife conservation.

Partnership and cooperatively driven

The FWC is committed to building partnerships by working with a broad array of public and private entities with an interest in fish and wildlife management and conservation. Partners, including representatives from other state and federal agencies, organizations, businesses and individuals, have been integral throughout Action Plan development and revision processes. Partners have contributed information about species, habitats, threats and conservation actions. Cooperative implementation of the Action Plan has strengthened existing partnerships and has forged new opportunities to expand existing resources for wildlife conservation. Success is dependent upon voluntary cooperation of partners from diverse interests in Florida's wildlife conservation.

Build upon existing information and efforts

The Action Plan is not intended to replace existing strategies or efforts. Florida already has developed and implemented significant wildlife resource management tools, top notch programs and initiatives. The Action Plan is designed to build upon these efforts in a cumulative manner, identify gaps and further needs, and create a comprehensive vision for coordinating efforts across the state. Florida's Action Plan is a strategic look at the integrated conservation efforts needed to sustain the broad array of wildlife in the state. More detailed operation-level plans will be needed to complete many actions identified.

Healthy wildlife = Healthy people

Florida faces a huge challenge of accommodating an expanding human population while conserving wildlife resources. This vision should be compatible with human needs and not preclude recreational or other use of fish and wildlife resources and landscapes. By implementing actions that provide healthier environments for wildlife, Floridians also are helping to maintain clean air and water for people, as well high-quality outdoor recreational areas. Ultimately, meeting the needs of wildlife will mean a healthier environment for future generations of Floridians.

Florida's State Wildlife Action Plan 2012

A Comprehensive Wildlife Conservation Strategy



Florida Fish and Wildlife Conservation Commission Florida's Wildlife Legacy Initiative

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Cover Photographs

Clockwise from upper left: American Oyster Catchers (Jack Rogers), Gopher Tortoise (Judy Gillan, Florida Fish and Wildlife Conservation Commission), Softwater Stream habitat (John Knight, Florida Fish and Wildlife Conservation Commission), Diver in Seagrass habitat (Amy V. Uhrin, National Oceanic and Atmospheric Administration), Tying in the fire, Sandhill habitat (Parker Titus, The Nature Conservancy), Coral Reef habitat (Walt Jaap, Florida Fish and Wildlife Conservation Commission)

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Foreword

More than five years have passed since Florida's State Wildlife Action Plan (Action Plan) was developed and approved in 2005. Much has been accomplished since then. Shortly after approval of the Action Plan, the Florida Fish and Wildlife Conservation Commission (FWC) worked with our partners to develop goals for implementation. These goals encompassed five main areas of priority based upon the Action Plan and ranged from statewide coordinated conservation to management of priority habitats. More than 150 projects have been implemented, resulting in important planning, research, conservation, and management successes for Florida's fish and wildlife. These projects leveraged a combined total of more than \$33 million in funding from State Wildlife Grants and state and partner matching resources, all of which has been instrumental in bringing significant added capacity to Florida's conservation platform. By working in concert with the extensive existing conservation resources and partnerships in Florida, implementation of Florida's Action Plan has filled key gaps, brought new capacity to ongoing programs, and initiated important new efforts.

Florida's Action Plan calls for review, assessment, and revision as needed every five years. In this regard, the FWC has coordinated with partners, stakeholders, and the public and we are excited to present the first revision to our Action Plan. We have learned a great deal through our implementation efforts over the past five years and have made some important changes to the Action Plan. First, we have updated our Species of Greatest Conservation Need (SGCN) list to better reflect our improved understanding of the life history, status, and trend of many species. Additionally, we used a more rigorous, science-based selection process to create the updated SGCN list. Second, we have developed a new approach to freshwater resource prioritization and conservation action. Through statewide landscape analyses based on hydrological units, we assessed all 54 basins in Florida and ranked them based on freshwater species richness, threat level, and potential future land use condition. Our third major change was to more fully incorporate climate change assessment and adaptation into the Action Plan. This work lays a strong foundation for improved understanding of how climate change may affect Florida's fish and wildlife and identifies strategies we can take to help safeguard these species from harm. The last major changes we made were to restructure the Action Plan to a more user friendly layout and to make many small edits and updates throughout. Overall, the newly revised Action Plan is easier to read, more clearly structured, and incorporates new information that will facilitate improved conservation delivery over the next several years.

Another exciting development in Florida has been the growing appreciation for and use of social science and human dimensions within the FWC. We long have valued partners, stakeholders, and the public and have reached out to them on conservation issues. However, we generally have done so without the benefit of an integrated approach that utilizes established social science theory and techniques. As part of our focus on human dimensions, the FWC has worked closely with Cornell University to develop human dimensions capacity with FWC staff and to create a structured approach to defining complex problems and creating durable solutions. More recently, FWC has partnered with the University of Florida to develop local social science

expertise and experience. An exciting outcome has been the establishment of a social science professorship within the School of Wildlife and Ecology focused on application to fish and wildlife issues. These efforts have advanced FWC's interactions with partners and stakeholders and consequently improved conservation outcomes. Goal implementation has helped facilitate this exciting human dimensions work and several significant projects are commencing to help strengthen this foundation and further align future Action Plan revisions with these important topics.

As with this human dimensions work, Florida's Action Plan is playing an important role in many conservation arenas for fish and wildlife in Florida, and we look forward to another five years of progress. New goals will be developed based on the revised Action Plan and these goals will drive future projects and programs. And, as we release the newly revised action plan and put it into implementation mode, already we have our eye on the next revision. Topics for future revision include revamping our habitat categories and mapping, updating the associated threats and actions, and fully integrating climate change throughout the Action Plan. Thus, the cycle of continuous learning through doing, updating of approaches and actions, and improvement of conservation moves forward another step. Florida's State Wildlife Action Plan continues to strengthen existing conservation efforts, bring added capacity and clarity of need, and improved conservation to Florida fish and wildlife and the people who enjoy them.

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Executive Summary

The primary support and focus for wildlife conservation and management within the United States historically has come from state hunting and fishing interests and Federal Assistance programs for game species under the Pittman–Robertson, Dingle–Johnson, and Wallop–Breau Acts. Additionally, the Endangered Species Act has provided support to recover federally threatened and endangered species. Although these programs have been successful, the majority of wildlife species have unmet conservation needs and many are at risk of becoming imperiled. To encourage a new conservation paradigm of working towards managing species before they become imperiled, the U. S. Congress created the State Wildlife Grants Program. This program is dedicated to a holistic approach that includes all species, but is centered on conservation of species not encompassed by historical efforts. As a requirement of participating in the State Wildlife Grants Program, the Florida Fish and Wildlife Conservation Commission (FWC) has joined the other 55 states, territories, and district by committing to develop a State Wildlife Action Plan (Action Plan, originally known as Comprehensive Wildlife Conservation Strategy) for the state.

To meet the intent of the State Wildlife Grants Program and to foster the Action Plan, the FWC created Florida’s Wildlife Legacy Initiative (Initiative). Through the Initiative, thousands of experts and stakeholders have participated and provided input to develop and implement the Action Plan. These partners, including representatives from other state and federal agencies, organizations, businesses, and individuals, will continue to be integral to meet the conservation needs of Florida.

The Action Plan is organized into chapters and follows a progression of content development:

The **Introduction** briefly outlines what the Action Plan is and provides information about Florida’s natural resources, including climate and landscape, people and economics, wildlife and ecosystems, and approach to conservation. This chapter introduces the highest priority statewide threats and key conservation challenges as identified in the Action Plan.

Highest priority statewide threats:

- *Alterations of the physical environment*- habitat loss and fragmentation is the most pervasive threat to wildlife statewide;
- *Degradation of water resources*- includes groundwater and surface withdrawal, drainage or channelization of wetlands, diversion of rainfall from impervious cover, contamination from industrial and agricultural operations, and contamination from inadequate stormwater and sewage management;
- *Incompatible fire management*- lack of appropriate fire management is a threat in many of Florida’s terrestrial habitats that lie within ecosystems that were historically fire-maintained; and
- *Introduced plants and animals*- species that become established as long-term reproducing populations have the potential to become invasive, causing damage to

native species and habitats, posing a threat to human health and safety, or causing high ecological and economic costs.

Key conservation challenges:

- *Public awareness*- conservation of Florida's fish and wildlife ultimately depends upon the commitment of Floridians to their protection;
- *Information management*- the capacity to share the most accurate, updated information on species and habitats;
- *Data gaps*- information and management needs for all species and habitats; and
- *Partnerships*- solving Florida's wildlife conservation challenges will require collaborative efforts from a wide array of partners, including groups that do not traditionally work together.

Florida's First Five Years of Action Plan Implementation chapter describes how the FWC worked with partners to establish goals to guide implementation of the Action Plan since its inception. The goals were:

- Coordinate Natural Resource Conservation
- Habitat Conservation
- Data Gaps
- Monitoring Species and Habitats
- Cooperative Conservation Blueprint

These goals are described and numerous conservation projects that the FWC and partners have accomplished are highlighted.

The chapter on **Species of Greatest Conservation Need (SGCN)** lists 1036 species in Florida that are imperiled or at risk of becoming imperiled in the future. The process and criteria used to identify these species are presented, along with a table listing all of the SGCN.

Florida Adapting to Climate Change is a chapter that provides a short synthesis of climate science in relation to Florida, a vulnerability assessment on focal species, and recommendations for adaptation actions. Sea level rise is the main theme throughout the sections and is highlighted as one of the most important threats to Florida from effects of climate change.

The **Basin Approach to Conserving Florida's Freshwater Habitats and Species** chapter outlines how basins were evaluated and ranked based on three criteria; species diversity, threats to the habitat, and future condition. Twelve highly ranked basins were identified as the basis for freshwater implementation efforts in the Action Plan. This approach focuses on two types of basins: those that are relatively pristine and need to be preserved, and those that have potential value to fish and wildlife but are imperiled and need enhancement.

Habitats and Multiple Habitat Threats and Conservation Actions form the final and most extensive chapters of the Action Plan. The habitat chapter describes 45 terrestrial, freshwater, and marine habitat categories that comprise the state of Florida. Eighteen habitats have been identified as being under the greatest overall threat and generally were associated with coastal, wetland, upland pine, reef, and seagrass.

Each of the 45 habitat chapters includes information on status and trends, associated SGCN, related threats, and conservation measures needed. The Multiple Habitat Threats and Conservation Actions chapter lists threats that apply to greater than five habitats and the suite of actions to abate each threat. The following broad actions are discussed repeatedly in the Action Plan and are considered high priority to abate multiple threats within terrestrial and aquatic systems statewide:

- Development of voluntary, incentive-based programs for conservation
- Acquisition and protection of important lands and waters
- Coordination of conservation efforts through partnership development
- Public education and awareness of conservation issues
- Research and monitoring of species and habitats
- Conservation planning (species assessments and systematic, landscape-based efforts)

Lastly, the Action Plan contains **Acknowledgments** for the 2012 Revision, **References/Literature Cited**, a **Glossary of Acronyms**, a **Glossary of Terms**, and five **Appendices**.

Florida's Action Plan is a strategic vision of the integrated conservation efforts needed to sustain the broad array of wildlife in the state. More detailed operation-level plans will be needed to complete many of the actions identified in the Action Plan. Such plans should be developed by the appropriate entities whose interest, authority, or responsibility encompass each action. Although the Action Plan is not intended to be a work plan for the FWC or any other organization, it is meant to support, compliment, and unite the more detailed operation-level plans of the multiple conservation and management entities within Florida. Support provided by the State Wildlife Grants Program will enable coordination and implementation of many projects through Florida's Wildlife Legacy Initiative. The Action Plan is an adaptive plan that will continually be updated, revised, and improved based on the input and deliberations of all those interested in wildlife conservation. Working together, Floridians can shape a future that is filled with the abundant wildlife resources that define the state and provide for the enjoyment, recreation, sustenance, and livelihood of its citizens and visitors.