

**Internal review and thoughts by staff about FWC's imperiled species listing system
Florida Fish and Wildlife Conservation Commission (FWC)
June 2008**

This document summarizes staff review and thoughts to date and should be considered a work in progress. As staff learns more from interactions with Commissioners, stakeholders, partners, and the general public, the ideas presented here are expected to expand and change. There are no details for implementation of any of the concepts discussed and what is provided in this document is primarily for the Commissioners to develop general directions for the next steps in improving the imperiled species management system.

Introduction

At the December 2007 Commission meeting, Commissioners directed staff to conduct an internal review of imperiled species management and the listing system, and provide staff thoughts for improving any part of the system. Specific guidance from Commissioners included the following:

- continue species protection linked to science;
- continue use of management plans;
- continue use of a balanced approach to imperiled species management through collaboration and partnerships;
- minimize or eliminate the debate over nomenclature;
- define the context of a listing process within an imperiled species management system.

This analysis was to be conducted internally while seeking input from stakeholders as appropriate. The analysis will then be presented to the Commission for discussion and direction and followed by full engagement with stakeholders. While staff recognizes there will always be some controversy surrounding the listing process, most believe an acceptable solution can be found through collaboration with stakeholders and the public.

Staff evaluation and thoughts – Areas for improvement

Define the context for the listing process within the imperiled species management system

An internal FWC team was formed to evaluate Florida's imperiled species management system. The team met every other week from January through March of this year. The team did not focus exclusively on the listing process, but looked at and evaluated FWC's imperiled species management system to put the listing process in context. The team noted that designation of at-risk species (the listing process) is only one component of our imperiled species management system. Each of the components is inter-related and impacts each other in some way. In order to effectively manage imperiled species, the team believes any future efforts to revise FWC's listing process should consider all components of the imperiled species management system and not just the listing process itself.

Opportunities for improving the imperiled species management system

Following, in no specific order, are recommendations that could improve or clarify the imperiled species management system:

- Reduce the confusion between state and federal listing processes and nomenclature;
- Improve priority setting and staff/resource allocation for imperiled species management;
- Management plans do not have to be lengthy, complex documents. Simple plans covering a set of standard protections can suffice for many species;
- All species placed on the imperiled species list(s) must receive some form of management attention. Being on a “list” is not enough;
- Each species currently on the state imperiled species lists should be evaluated to determine if it meets the proposed criteria for the list. Appropriate actions should be recommended for any species that do not meet the proposed criteria. Species presently on the lists could be initially grandfathered but not in perpetuity. Species on imperiled lists should be evaluated at regular intervals to determine if they still meet the criteria for the list;
- The imperiled species management system must be integrated with rules and actions of other regulatory agencies;
- Public information programs should be developed to inform the public about how listed species are managed. In some cases listed species do not receive a high level of directed management;
- Species that are non-native, introduced or found only occasionally (vagrants) in Florida would not be listed;
- Species protected and managed by harvest regulations would not be listed.

Federal and Florida lists of imperiled species

Florida’s imperiled species lists are different from the federal endangered and threatened species lists and this causes confusion about what species are called. A species placed on a certain list under the current State (Florida) listing process, may be listed on a different named list under the federal Endangered Species Act (ESA) listing process. For example, Florida now lists the red-cockaded woodpecker as a species of special concern, while it is federally listed as endangered. In addition, 43 federally listed species occur on Florida’s existing imperiled species lists but sixteen federally listed species that occur in Florida are not listed by Florida. Staff believes that reducing confusion between state and federal listing processes and nomenclature is an important step to improving the system. Following are staff suggestions to reduce the confusion regarding the state and federal listing processes:

- Establish two categories of listed species: The first category would contain those species which occur in Florida that are listed as threatened or endangered under the federal ESA. The second category would be Florida species that are at risk of extinction, but are not listed under the federal ESA.

- Anything listed federally in Florida would be considered listed in Florida and would not be evaluated further for listing by the State of Florida. However, federally listed species may still receive management attention by the State.
- As Florida species are added to, removed from or shifted among the federal ESA lists (threatened and endangered), they would also be added to, removed from or shifted among Florida's federal lists.
- A separate state list would be developed to identify species at risk of extinction in Florida that are not listed federally. Examples of these species include the gopher tortoise and the Panama City crayfish. There would be no overlap of species on the federal and state lists.

This process would also eliminate the need to use state employee time and resources to categorize species that are federally listed and instead would allow resources to be directed towards management actions to conserve imperiled species.

Staff has not considered what the most appropriate name for the category (or categories) of the state (Florida) listing process would be and recommends it should be a topic for stakeholder discussions.

Possible listing process scenarios for further discussion

Staff discussed numerous options for listing processes specific for Florida, but narrowed the focus to three potential new scenarios. All of the scenarios contain the separate federal listing category proposed above with no overlap with state listed species. The pros and cons of each of the three scenarios were evaluated and are listed under each scenario below. All proposed scenarios would have species protections linked to science, management plans, and collaboration and partnerships with stakeholders.

Scenario A: Species would be listed under this scenario if (1) they occur in Florida and are federally listed under the ESA as Threatened or Endangered or (2) they occur in Florida and are not federally listed under the ESA but meet the **IUCN criteria for the Vulnerable** category. FWC currently uses the IUCN process for listing species in three imperilment categories. This scenario would use the lowest category of imperilment under the IUCN process to list a candidate species and/or remove a species from the list. This scenario would result in the federally listed endangered and threatened species that occur in Florida and a single category of Florida listed species that are not federally listed under the ESA.

Pros

- The IUCN listing process is used internationally by over 35 countries to assess species' risk of extinction.
- This method is not a radical change from Florida's existing listing process.
- The IUCN process uses quantifiable data and has measures to account for data gaps or deficiencies that may lead to uncertainty.
- The IUCN process is continuously reviewed and improved by scientific panels.

- The IUCN process is time tested and has been used globally for over 25 years for many species.
- The IUCN process uses five criteria to describe extinction risks. These criteria serve as multiple independent triggers for determining species risk of extinction (a species only needs to meet one of the criteria to be assigned to a listing category).
- A single category for Florida species not federally listed under ESA will minimize the debate over the category into which a species falls. This should eliminate pressure to move species between categories and focus the efforts on management rather than on what a species is called.
- A single listing category is easier to explain.

Cons

- IUCN listing criteria are not easily explained to the public.
- The IUCN process requires specific training to use.
- The IUCN process is not specifically designed for use at the state level and is not Florida specific although it does have regional guidelines to account for smaller geographic scales.
- There is some question whether the public will readily accept a single listing category for species that are not federally listed.
- A single listing category that does not distinguish species by their risk of extinction may create debate about what species should receive management priority.
- A single listing category may have an impact on county comprehensive plans and local regulations that refer to endangered and threatened species.

Scenario B: Species would be listed under this scenario if (1) they occur in Florida and are federally listed under the ESA as Threatened or Endangered or (2) they occur in Florida and are not federally listed under the ESA but which receive a biological score established in **Millsap et al. 1990** that exceeds a defined threshold. This publication entitled “Setting priorities for the conservation of fish and wildlife species in Florida” describes a species assessment system designed by FWC staff. It uses seven biological variables to assign a biological score ranging from 0-70, with a score of 70 being the most vulnerable to extinction. Florida species not listed under ESA would be placed on a state list after determining their biological score exceeded the listing threshold. A threshold of 30 of a possible 70 is proposed. This scenario would result in the federally listed endangered and threatened species that occur in Florida and a single category of Florida listed species that are not federally listed under the ESA.

Pros

- The Millsap methodology has been in use in Florida since 1990 to assess the relative vulnerability of species to extinction.
- The methodology was developed by Florida scientists for use in Florida.
- Currently used by FWC as an accountability measure for legislatively required Long Range Performance Planning (LRPP) that requires an annual assessment of the number of Florida species whose populations are stable or increasing.
- The methodology was peer reviewed by scientists.

- The methodology uses scientific criteria and data.
- A single category for Florida species not federally listed under ESA will minimize the debate over the category into which a species falls. This should eliminate pressure to move species between categories and focus the efforts on management rather than on what a species is called.
- A single listing category is easier to explain.

Cons

- The Millsap methodology was not specifically developed to categorize imperiled species.
- The methodology uses a combination of quantitative data derived assessments and subjective assessments.
- The methodology is somewhat subjective and does not account for data deficiencies and uncertainty.
- There is some question whether the public will readily accept a single listing category for species that are not federally listed.
- A single listing category that does not distinguish species by their risk of extinction may create debate about what species should receive management priority.
- A single-tiered listing system may have an impact on county comprehensive plans and local regulations that refer to endangered and threatened species.

Scenario C: Species would be listed under this scenario if (1) they occur in Florida and are federally listed under the ESA as Threatened or Endangered or (2) they occur in Florida and are not federally listed under the ESA but which are evaluated by the **ESA five factor analysis** currently used by the US Fish and Wildlife Service and the National Marine Fisheries Service to determine federal ESA listing. Species under this scenario would be categorized (like under the ESA) as either endangered or threatened. The five ESA factors are 1) habitat destruction, 2) over-utilization, 3) disease or predation, 4) inadequacy of existing regulations, and 5) other natural or manmade factors. These five factors would be applied in a FWC process to Florida species thought to be at risk but not listed under the ESA. This scenario would result in the federally listed endangered and threatened species that occur in Florida and two categories (endangered and threatened) of Florida listed species that are not federally listed under the ESA.

Pros

- The state and federal list are similar so there are no conflicting terms.
- Uses terms ‘threatened’ and ‘endangered’ which are referenced throughout Florida statutes, the administrative code, comprehensive plans, and county ordinances.
- Allows for Florida to highlight species that are imperiled or at risk in Florida even if they are not recognized as imperiled in the United States.
- There is widespread understanding and public acceptance of ESA terminology.

Cons

- Approach may have strong opposition from some stakeholders who do not trust the federal ESA system.
- The ESA process is not specifically designed for use at the state level and is not Florida specific.
- Does not include Species of Special Concern designation which is found in some comprehensive plans, ordinances, etc.
- By having two state listing categories there may be public debate on what a species is named.
- The subjective science-based classification is sometimes incompatible with public understanding.
- There is no guidance on thresholds for endangered or threatened – it is a subjective determination based on scientific training and experience.

This document summarizes staff thinking on the topic to date and should be considered a work in progress. As staff learns more from interactions with Commissioners, stakeholders, partners, and the general public, the ideas presented here are expected to expand and change.

Supporting Documents and References:

Millsap, B.A., J. A. Gore, D. E. Runde, and S. I. Cerulan (1990). Setting priorities for the conservation of fish and wildlife species in Florida. Wildlife Monographs 54(3) 57pp.
(insert Web link)

Florida's rules pertaining to listed species -- Chapter 68A-27
<http://myfwc.com/imperiledspecies/pdf/Chptr-68-27.pdf>

Florida's Endangered Species, Threatened Species, and Species of Special Concern
<http://myfwc.com/imperiledspecies/pdf/Threatened-and-Endangered-Species-2007.pdf>

IUCN red list categories and criteria
http://www.iucnredlist.org/info/categories_criteria

U.S. Endangered Species Act
<http://www.fws.gov/endangered/whatwedo.html#General>