Policies

A policy is a formally approved, definitive statement of a principle or course of action to guide agency decision-making or the manners of proceeding regarding its management of fish and wildlife resources for their long-term well-being and the benefit of people. The following Florida Fish and Wildlife Conservation Commission policy was created to support implementation of, and is available in full context in Florida's Imperiled Species Management Plan. It was approved by the Commission in November, 2016.

Permitting standards for incidental take of cryptic species

Issue

The 57 species included in the ISMP are diverse, both biologically and in terms of the threats each faces, and the level of knowledge and understanding varies widely from species to species. In particular, little is known about the life history and ecology of cryptic species, which are those that may be difficult to detect due to behavior, habitat, or physical features, even when using standard survey techniques in occupied habitat. Studies of snakes (Durso et al. 2011) and pond turtles (Olivier et al. 2010) point out the difficulties of using standard survey methods without also incorporating estimates of detection probability, and indicate that these methods often fall short when answering management-related questions on spatial and temporal dynamics of cryptic species. Small, benthic fish (Willis 2001), for example, are difficult to detect with standard visual-count survey methods, which underestimate both diversity and density. Even large terrestrial vertebrates such as tigers (Carbone et al. 2001) and the red fox (Vine et al. 2009) have proven difficult to detect and monitor due to rarity and behavior. Cryptic species, particularly rare cryptic species, are so difficult to detect that managers need to carefully consider when surveying efforts are no longer the best use of limited resources (Chades et al. 2008). Likewise, laws and policies that address regulation of cryptic species need to be carefully considered to best achieve conservation goals. Chapter 68A-27, Florida Administrative Code (F.A.C.), identifies prohibitions for both Species of Special Concern and state-Threatened species, and defines take for state-Threatened species. However, interpretation of when incidental take occurs, particularly harm and harass for state-Threatened species, is difficult without a clear understanding of the essential behavioral patterns of the species or the habitat features that may support these behaviors, and monitoring methods that allow for reliable detection. Lack of knowledge about a species also leads to different considerations for when scientific benefit is achieved due to the documented difficulties in detecting cryptic species. Therefore, assessing conservation or scientific benefit identically for all species is not possible.

Policy guidelines

Permitting for cryptic species will focus on cooperation and acquiring information instead of a regulatory burden, with the understanding that as information is gained, permitting may need to be adjusted. For cryptic species, information on distribution and habitat use may constitute a scientific benefit. For the purposes of this policy, cryptic species include Sherman's short-tailed shrew, Everglade's mink, Florida Keys mole skink, Florida brown snake (Lower Keys population), Key ringneck snake, Florida pine snake, short-tailed snake, rim rock crowned snake, and Georgia blind salamander. The Homosassa shrew, classified as SSC, is also cryptic; however, the definition of take for SSC does not include harm and harass, and thus the species is not included here.

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