

MARINE MAMMAL COMMISSION
4340 EAST-WEST HIGHWAY, ROOM 905
BETHESDA, MD 20814

17 November 2003

Edwin P. Roberts, D.C., Chairman
Florida Fish and Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, FL 32399

Dear Mr. Roberts:

We understand that on 19 November 2003 the Florida Fish and Wildlife Conservation Commission (FFWCC) will meet to discuss (1) possible review of the state's listing criteria for species that are endangered, threatened, or of special concern, and (2) review of the status of the Florida manatee. Both of these are issues of considerable interest to the Marine Mammal Commission and, in consultation with our Committee of Scientific Advisors on Marine Mammals, we offer the following comments for your consideration.

Our primary concern has to do with timing. Although both of these reviews seem necessary and timely, the order in which they are done is important. Specifically, we suggest that the FFWCC review and revise the state's listing criteria prior to completing its evaluation of the status of the Florida manatee.

Listing criteria

Listing criteria provide a basis for identifying those species, subspecies, or populations (hereafter referred to collectively as "species") with an elevated risk of extinction and, therefore, requiring special management measures to bring about recovery and long-term conservation. Because the risk of extinction varies as a function of many variables (e.g., types and extent of human interaction and the species' life history traits and population dynamics), it has been difficult to develop a single set of criteria that can apply in all cases. Florida's listing criteria appear to have been based, in part, on criteria developed by the International Union for the Conservation of Nature (IUCN – now the World Conservation Union). Those criteria were developed for global application and, although they may have been generally effective, they must be applied with considerable care to each specific case. Because species and circumstances vary considerably, any single set of criteria may be more or less useful for each species. The Marine Mammal Commission has several concerns regarding the adequacy and application of these particular criteria to the Florida manatee and other marine mammals. For example, criteria based on the area of occupancy or extent of occurrence may be difficult to apply to marine mammals that have highly mobile life

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histories in a variable marine environment. Similar problems limit the utility of the remaining IUCN criteria as applied by the State of Florida.

The Marine Mammal Commission has briefly discussed some of these problems with IUCN staff, who are perhaps most familiar with the difficulty of applying a single set of criteria to multiple species on a global as well as local scales. Because of potential problems applying the State of Florida's current criteria to marine mammals, we suggest that review and revision of those criteria precede review of manatee status. This approach seems necessary because any changes in the listing criteria may automatically require a status review of listed species or candidates for listing, including the Florida manatee. This approach also would allow further development or refinement of important modeling efforts by state scientists. These efforts provide an essential tool for reviewing manatee status.

Manatee status

The abundance and trends of manatees in Florida are difficult to assess, particularly for the Atlantic and southwest populations. Overall, however, it seems that the species has increased since the 1970s when research efforts were initiated. The evidence for the increase comes from trend analyses by Craig and Reynolds and the synoptic count in 2001 (when 3,276 animals were counted), as well as from photo-identification and mark-recapture models and regional or local counts. This overall increase indicates that measures taken to reduce mortality of manatees must have achieved some level of success. The resulting increase in abundance provides important insurance against the species' extinction. The Marine Mammal Commission congratulates the people of Florida and the responsible state and federal agencies on the progress that has been made toward this species' recovery.

It should be noted, however, that the most recent information on manatee numbers indicates that the two largest populations are, at best, stable and quite possibly have begun to decline, even though the overall population likely remains larger than it was in the 1970s or early 1980s. It should also be noted that the Florida manatee remains exposed to multiple risks that could rapidly reverse the progress observed over the past two or three decades. Because the determination of status is, in many respects, a projection of the species' likelihood of extinction in the foreseeable future, we encourage you to keep these risks in mind. This will not be a trivial task, as it requires the ability to anticipate future conditions that will determine whether manatee populations grow, remain stable, or decline.

Our current understanding of the species and its habitat requirements indicate that it will likely face significant threats. Known and likely threats include increasing boat-related mortality, loss of warm-water habitat created by the thermal discharge of existing but dated power plants, loss of seagrass beds due to coastal development and construction, exposure to biotoxins from red tides, loss of freshwater flow into the habitat of the northern populations, stress and other adverse reaction to anthropogenic sound introduced into nearshore waters, and disease and contamination from human sewage and discharge into

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nearshore waters. Each of these and other factors could compromise the continued growth of the populations and lessen the manatee's chance of long-term recovery.

Although the Marine Mammal Commission has not comprehensively reviewed all the manatee population data, downlisting the species to threatened may be reasonable if one considers that total numbers are greater than was the case 20 or 30 years ago. If the state were to designate the manatee as threatened under either the current or revised listing criteria, the Commission would recommend a thorough monitoring program so that a reduction in numbers or other manifestations of population problems could be addressed quickly.

Finally, we recognize the difficulty associated with both the review of listing criteria and the review of manatee status. If we can provide any assistance to the FFWCC on these matters, please don't hesitate to contact us.

Sincerely,

A handwritten signature in black ink that reads "David Cottingham". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

David Cottingham
Executive Director

cc: Mr. Rodney Barreto
Mr. Richard A. Corbett
Mr. Ken Haddad
Elsa Haubold, Ph.D.
Mr. H. A. Huffman
Ms. Sandra T. Kaupe
Gil McRae, Ph.D.
Mr. David K. Meehan,
Mr. John D. Rood