

## **Marine Mammal Commission 2015 Annual Meeting**

### **Management and Conservation of Florida Manatees Session Summary**

The Florida manatee has been recovering slowly since the early 1980s. The leading cause of manatee deaths has been collisions with water craft and unusual mortality events caused mainly by red tide toxins and cold weather events. Between 2009 and 2014 average annual mortality has averaged 574 with two record high levels of 830 and 766 in 2010 and 2013, respectively. Both record mortality years were associated with red tide and/or cold weather events. Statewide winter counts organized by the Florida Fish and Wildlife Institute have been conducted in most years since the early 1990s, but until 2013, methods for estimating abundance from surveys has been elusive. New, more expensive methods tested in 2011 and 2012, however, produced the first true population estimate: 6,050 manatees (5310-7,390, 95% CV). Interestingly, in January 2015 a record count of 6,063 manatees was made using earlier less expensive survey methods. The Institute is considering ways to periodically undertake the new, more expensive surveys as part of a long-term monitoring strategy.

To evaluate and predict manatee population trends, the U.S. Geological Survey has developed a core biological model for Florida manatees. The model was developed in 2003 and continues to be improved to evaluate the effects of threats to Florida manatees (e.g., vessel collisions, changes in warm water habitat, unusual mortality events) on future population trends. The most recent analysis predicted that the population would increase to a level of about 10,000 animals in the next 30 to 40 years and then stabilize. The previous analysis, however, did not consider effects of recent record cold stress and red tide die-offs or the possibility such events might occur more often given climate change. A more recent analysis through 2012 is to be published soon and steps to further update the model are to be undertaken by early 2016.

The Fish and Wildlife Service received a petition filed by the Pacific Legal Foundation on behalf of Save Crystal River, Inc in December 2012 asking Florida manatees to be reclassified from endangered to threatened under the Endangered Species Act. The agency is currently completing its response to the petition. In March 2015 it also received a notice of intent to sue from an environmental group seeking actions to minimize harassment of Florida manatees by swimmers and divers, revise designated critical habitat, and designate Three Sisters Spring in Crystal River as a manatee sanctuary. The Service has been developing new approach to provide visitors to Crystal River with a high quality in water manatee viewing experience in Crystal River consistent with manatee protection. In 2015 it prohibited human access to Three Sisters during periods of high manatee use because of concerns about harassment. Additional measures are being developed for the 2015-2016 winter manatee season. Local residents are supportive of a balanced approach for managing tourists and ensuring habitat protection and believe that enforcement efforts should be increased. However, they are also concerned about effects of growing manatee numbers on sea grasses and water quality, the need for additional efforts to promote habitat restoration, and improved coordination among involved agencies. Environmental Groups share many of those concerns and have supported efforts to limit boat speeds in the bay, set aside no entry manatee sanctuaries, remove invasive aquatic plants, increase law enforcement, and ensure coordination between involved federal, state, and local agencies.