



# MARINE MAMMAL COMMISSION

15 February 2011

Mr. Lance Smith  
Regulatory Branch Chief, Protected Resources Division  
Pacific Islands Regional Office  
National Marine Fisheries Service  
1601 Kapiolani Boulevard, Suite 1110  
Honolulu, HI 96814

Dear Mr. Smith:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's proposal (75 Fed. Reg. 70169) to list the Hawaiian insular false killer whale as endangered under the Endangered Species Act.

## RECOMMENDATION

The Marine Mammal Commission recommends that the National Marine Fisheries Service—

- proceed with the proposed listing of the Hawaiian insular false killer whale as endangered under the Endangered Species Act;
- further investigate (1) fishery-related reductions of the target fish stocks and the manner in which those reductions are realized on a spatial basis, and (2) how those reductions coincide with or may affect the foraging of Hawaiian insular false killer whales; and
- expand the scope of the False Killer Whale Take Reduction Team to include Hawaiian inshore fisheries and recommend measures to identify and, as needed, reduce their impact on Hawaiian insular false killer whales.

## RATIONALE

### **Listing Determination**

The Service's biological review team did a commendable job of reviewing the status of the Hawaiian insular false killer whale population. The team appears to have used the best available scientific and commercial data. It considered uncertainties regarding the population's demography, ecology, and threats and made reasonable assumptions when the information was insufficient. It found that Hawaiian insular false killer whales are genetically and ecologically discrete from other false killer whales and that the loss of this population would result in a significant and irreplaceable gap in its taxon. Based on that finding, it concluded that the population constitutes a distinct population segment, consistent with federal policy for identifying species units eligible for listing under the Endangered Species Act. It also found that the population is at an elevated risk of extinction if current threats and declines in abundance continue. The population appears to have declined from 470 in 1989 (the lower limit of its estimated size) to perhaps as few as 151 to 170 at

present. The team conducted a population viability analysis to quantify the population's risk of extinction. It found a greater than 50 percent likelihood of population decline to fewer than 20 animals within 75 years under current circumstances. For all these reasons, the Marine Mammal Commission recommends that the National Marine Fisheries Service proceed with the proposed listing of the Hawaiian insular false killer whale as endangered under the Endangered Species Act.

### **The Adequacy of Existing and Planned Conservation Measures**

The Commission also considered the adequacy of existing and planned conservation measures for the population. The Commission supports measures to limit marine mammal takes by fisheries, control the discharge of contaminants, prevent the proliferation of marine debris, limit harassment by wildlife viewers, and respond to other threats as they arise. Such actions undoubtedly provide important conservation benefits. Still, on a collective basis, the existing conservation measures have not been sufficient to halt the population's decline, and the planned measures do not cover all possible threat factors, such as cumulative or indirect effects. For that reason, the team and Service concluded that the full set of conservation measures is not yet adequate. Forthcoming regulations to be issued pursuant to the False Killer Whale Take Reduction Team's recommendations and possible expansion of the Hawaiian Islands Humpback Whale National Marine Sanctuary also will support conservation goals. Neither of these, however, will address all potential threats identified by the review team. These findings support the need to list the population and provide stronger protective measures.

### **Prey Availability**

The Commission generally concurs with the findings of the biological review team and the Service regarding the listing of the Hawaiian insular population of false killer whales. However, it questions whether the team and Service may have underestimated the role of prey reduction in the population's decline and potential recovery. The team judged that reduced total prey biomass presents a "medium" threat to the population, and it suggested that prey reduction was a greater problem prior to the early 1990s. At that time, longline fishing around Hawaii resulted in the harvest of 1 to 5 million pounds of fish per year and was concentrated in what is now the longline prohibited area—an area that coincides with the distribution of Hawaiian insular false killer whales. Since then, longline fishing in that area has been prohibited, but the deep-set longline fishery has expanded to harvest 10 to 15 million pounds per year in adjacent waters. Catch per unit effort, an indicator of abundance, has decreased in the fishery from about 1,000 pounds per 1,000 hooks in the mid-1990s to 500 pounds per 1,000 hooks at present (page 76, figure 4.8, in the Service's status review).

Although the increase in catch is primarily outside the core habitat for Hawaiian insular false killer whales, its effect will depend on the spatial ecology of the fished stocks and the movements of the false killer whales. That is, fishing outside the area may still reduce the availability of the target stocks to Hawaiian insular false killer whales if the fished stocks move in and out of the longline prohibited area. At least some of the fish stocks that are being targeted by these fisheries are highly migratory, so such movements would not be surprising. In addition, fishing around the perimeter of

the longline prohibited area may affect prey availability if the insular population must move outside that area to find sufficient prey. In either case, a reduction in available prey could impair the health or condition of individual whales and reduce their ability to survive and reproduce. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service further investigate (1) fishery-related reductions of the target fish stocks and the manner in which those reductions are realized on a spatial basis, and (2) how those reductions coincide with or may affect the foraging of Hawaiian insular false killer whales. Such additional research will help fisheries managers ensure that enough fish remain available to meet the population's needs for nutrition and growth, which is essential if this small population is to overcome fishery-related and other threats.

### **Take Reduction Measures and Inshore Fisheries**

In the future, the Service has the opportunity to use the False Killer Whale Take Reduction Team to help protect and recover the Hawaiian insular false killer whale population. In this proposed rule, the Service states that the long-term goal of the False Killer Whale Take Reduction Plan is to reduce, within five years, the incidental mortality and serious injury of the Hawaiian pelagic, Hawaiian insular, and Palmyra Atoll stocks of false killer whales to insignificant levels approaching a zero mortality and serious injury rate. The take reduction team recommended measures to reduce the mortality and serious injury caused by the deep-set and shallow-set longline fisheries. However, the Service did not permit the team to issue recommendations to address the potential effects of shortline and kaka line fisheries in inshore waters because of the lack of information confirming takes of insular false killer whales. Although the shortline fishery is being added to the Service's List of Fisheries as a Category III fishery, neither the shortline nor kaka line fisheries have been observed. Self-reporting is the only means of assessing their take of marine mammals, but such reporting is known to be unreliable. To address this shortcoming, the Marine Mammal Commission recommends that the National Marine Fisheries Service expand the scope of the False Killer Whale Take Reduction Team to include Hawaiian inshore fisheries and recommend measures to identify and, as needed, reduce their impact on Hawaiian insular false killer whales.

### **Critical Habitat**

Finally, the Service requested comments on the designation of critical habitat for the population. Specifically, it requested information on the location of features essential for the conservation of the population and any biological or economic information relevant to making a critical habitat designation. Given the scarcity of information about the population's behavior and habitat-use patterns, the Commission is unaware of any particular locations that may be essential for the population. The best way to assess such areas likely will be through examination of recent false killer whale satellite tracking studies by Robin Baird and others. The Commission understands that the Service is aware of these studies. With regard to relevant biological information, including the species' life history and behavior, the Commission funded a study by Robin Baird entitled "A Review of False Killer Whales in Hawaiian Waters: Biology, Status and Risk Factors" completed in October 2009. That report has been provided to the Service and can be downloaded at [http://www.mmc.gov/reports/workshop/pdf/killerwhale\\_review\\_mmc09.pdf](http://www.mmc.gov/reports/workshop/pdf/killerwhale_review_mmc09.pdf).

Mr. Lance Smith  
15 February 2011  
Page 4

Please contact me if you have questions regarding the Commission's recommendations or rationale or if the Commission can be of additional assistance as you deliberate the future of this population.

Sincerely,

A handwritten signature in blue ink that reads "Timothy J. Ragen". The signature is fluid and cursive, with "Timothy" and "J." being more stylized and "Ragen" having a more traditional look.

Timothy J. Ragen, Ph.D.  
Executive Director