

PACIFIC SCIENTIFIC REVIEW GROUP

A Regional Advisory Group to the National Marine Fisheries Service

Eileen Sobeck
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Dear Ms. Sobeck,

Please find enclosed the minutes and recommendations from the most recent meeting of the Pacific Scientific Review Group held 25-26 February 2016.

The SRG recommends the development and implementation of a national survey plan to allocate both ship time and operational funding to obtain new abundance estimates for marine mammal populations in a timely and systematic manner.

The SRG also recommends that NMFS provide sufficient ship time and funding to support Hawaiian monk seal field camps in the Northwest Hawaiian Islands (NWHI). These field camps not only allow assessment of each island/atoll population, but also play a critical part in enhancing survivorship of seals by rescuing sick or malnourished pups, removing potentially entangling net debris from the islands, translocating pups to areas where survivorship probabilities are greater, and mitigating mortality from male seal aggression, Galapagos shark predation and entrapment. A recent publication (Harting *et al.* 2014) shows that about a third of the endangered Hawaiian monk seal population is alive only because of the survival-enhancement efforts of NMFS and its collaborators, efforts that are not possible without field camps and a debris-removal program. The SRG recommends that NMFS maintain sufficient resources to continue to operate the NWHI monk seal field camps, continue the current NMFS net-debris removal program near monk seal haulout areas where entanglement occurs, and maintain rescue, rehabilitation, and survivorship-enhancement programs throughout the Hawaiian Archipelago.

Once again, the SRG compliments your NMFS staff for their excellent presentations, outstanding research, and support of the SRG. The SRG is particularly grateful to the National Marine Mammal Lab for hosting the meetings of the combined SRGs and the Pacific SRG.

Sincerely,



Michael Scott
Chairman, Pacific Scientific Review Group
cc: Shannon Bettridge

**Research and Management Recommendations
Pacific Scientific Review Group Meeting, 25-26 February 2016**

There has been no update to the Washington sea otter SAR since 2008. The SRG recommends that the USFWS fulfill its MMPA responsibility by updating the SAR for the 2017 meeting of the Pacific SRG.

The SRG recommends that the NMFS continue funding for studies of movements and genetics of false killer whales and other cetaceans around Hawaii and U.S. waters in the Central Pacific to better understand stock structure, ecology, distribution, and fishery interactions.

The SRG recommends that the NMFS collaborate with the State of Hawaii to conduct two reviews that can aid in future management:

- 1) Expand upon the information presented at previous SRG meetings and the subsequent preliminary studies on the fisheries that operate in Hawaiian nearshore waters (such as the troll, handline, shortline, and other fisheries). In addition to the information that is currently collected from fishermen through self-reports, data should be collected on catch and bycatch amounts, season, location, and types of gear used, including regional gear variations. The SRG supports the collaborative NMFS-funded research planned by the Hawaii Department of Land and Natural Resources, with its emphasis on scientific research and outreach to the fishing community and public.
- 2) Depredation of bait and fish catches by cetaceans is recognized as a serious problem for both fishermen and cetaceans in Hawaii. To better understand the dimensions and dynamics of this cetacean-fishery interaction, a review and problem analysis for each of the applicable fisheries could provide both a historical perspective and a current assessment of the problem.

These reviews would be particularly valuable given the endangered status of the Hawaii insular stock of false killer whales and our current inability to identify causes for its decline.

A recent publication (Harting et al. 2014) shows that about one-third of the current Hawaiian monk seal population is alive only because of the survival-enhancement efforts of NMFS and its collaborators. Those efforts include rescuing sick or malnourished pups, translocating pups to areas where survivorship probabilities are greater, and mitigating mortality from male seal aggression, Galapagos shark predation, and entrapment. Not included in this total were the additional seals would have become entangled in debris were it not for net-debris removal efforts. To continue these vital conservation and recovery efforts, the SRG recommends that the NMFS:

- 1) Maintain sufficient resources to continue to operate the NWHI monk seal field camps and maintain rescue, rehabilitation, and survivorship-enhancement programs throughout the Hawaiian Archipelago. The field camps in the NWHI not only allow monitoring status of these subpopulations and research, but have been shown to play a critical part in survivorship-enhancement efforts

2) Continue the current NMFS net-debris removal program near monk seal haulout areas where entanglement occurs.

The SRG has recommended that NMFS develop a multi-year allocation of ship time for marine mammal surveys and increase the priority and funding for these surveys, which are necessary to obtain the abundance estimates used to calculate PBR and thereby enable fisheries to meet the required MMPA standards. A multi-year survey plan for all U.S. waters was developed but has not been implemented. In the Pacific, a West Coast survey was completed that provided new abundance estimates and a Hawaii survey is planned for 2017. The lack of operational funds threatens to delay the Hawaii survey. The SRG again recommends development and implementation of a national survey plan to allocate both ship time and operational funding to obtain new abundance estimates for marine mammal populations in a timely and systematic manner.

The False Killer Whale Take Reduction Plan instituted for the Hawaii-based deep-set longline fishery included operational changes to such things as branchline strength, hook shapes and strengths, and set procedures. The effectiveness of these changes has bearing on the comparison of mortality and PBR and, at its 2017 meeting, the SRG plans to review the effectiveness of these changes in reducing the mortality and serious injury of false killer whales. To facilitate that review, the SRG recommends that the NMFS provide, along with current mortality and effort data, an analysis on the effectiveness of the Take Reduction Plan measures, particularly with regard to 1) the interaction between the branchline strength and weak hook effectiveness, and 2) potential differences in fishing practices and location for trips with and without observers.

The Pacific Islands Regional Office's Observer Program has served the Region well by providing a long-term dataset for bycatch and effort estimation for observed fisheries. However, recent staffing shortages have limited the Program's ability to process those data, which compromises the timeliness and quality of analyses, jeopardizes bycatch estimation for 2015 and beyond, and undermines efforts to monitor the effectiveness of the False Killer Whale Take Reduction Plan. The SRG recommends that the Region quickly clear up this backlog of unprocessed data.