

## **RESEARCH AND MANAGEMENT RECOMMENDATIONS**

### **Pacific Scientific Review Group – 3-5 November, 2009**

The SRG recommends the Pacific Islands Fisheries Science Center (PIFSC) Protected Species program continue to build its small cetacean research program. The SRG notes that a cetacean survey should be conducted in Hawaiian waters by 2010, and that planning for such a survey should be initiated soon, given the complex planning and extensive resources required for such a survey.

The SRG recommends continued studies of movements, abundance, genetics, and depredation behavior on fishing gear of false killer whales and other cetaceans around Hawaii and in the Central and Western Pacific to better understand stock structure, population trends, and potential fisheries takes. Additional tagging should be focused to determine differences in ranging patterns on windward and leeward sides of the islands and more information is needed about near-shore fisheries that may potentially take false killer whales to determine whether fishery mortality has played a role in the apparent decline in the insular population.

The SRG recommends that continued investigations be conducted on the causes of large whale ship strikes and effective ways to mitigate them.

The SRG recommends that harbor porpoise assessment surveys be conducted off Oregon and Washington and in Washington inland waters in light of the long duration since the last surveys, the Unusual Mortality Event that occurred in this region since the last surveys, and the evidence for recent ecosystem changes and shifts in distribution of harbor porpoise into Puget Sound.

The SRG recommends that a brief statement should be added to the SARs that indicates the level of certainty about the key elements (abundance estimate, stock structure, human-caused mortality) used for determining the status of the stock) together with a prioritized list of information or research needed to improve the assessment for that particular stock.

The SRG recommends that the stock structure of humpback whales be revised to reflect the mixed stock structure revealed by the SPLASH study. There are clear genetic differences among different feeding areas and among breeding areas but without a one-to-one connection among individual feeding and breeding areas. The SRG recommends that PBRs be calculated and all takes be apportioned among feeding areas and separately among breeding areas in such a way that it insures protection of each of these areas individually.

The SRG recommends that NMFS safely mark entangled cetaceans (*e.g.*, PIT tags, genetic sampling, visual tags, VHF/UHF tags, photo-identification) before they are disentangled to assist with identifying individuals, to help assess the effectiveness of

disentanglement efforts, and to provide probabilities of mortality after entanglement injuries.

There are no current abundance estimates, and thus no PBRs, for harbor seal stocks in Oregon and Washington and the SRG recommends that new surveys be conducted. If regularly monitored, these stocks could serve as good indicators of environmental change (such as from global warming or anthropogenic causes).

The SRG recognizes the need for NMFS to address conflicts between spinner dolphins and human swim-with-wild-dolphin activities off Hawaii. The SRG recommends more resources for enforcement of regulations. The SRG supports ongoing development of new more-enforceable regulations to better protect spinner dolphins and, where possible, recommend these also address the threat of harassment on other Hawaii cetaceans especially because restrictions related to spinner dolphins may result in increased targeting of other species.

The SRG recommends NMFS conduct regular surveys of Necker, Nihoa and the Main Hawaiian Islands to obtain abundance and trend information of monk seals on those islands. These populations appear to be increasing and now substantially influence the total abundance trend.