ALASKA REGIONAL SCIENTIFIC REVIEW GROUP

SRG members:

Lance Barrett-Lennard, John Gauvin, Charlie Johnson, Brendan Kelly, Lloyd Lowry, Beth Mathews, Craig Matkin, Grey Pendleton, Jan Straley, Robert Suydam, and Kate Wynne

Address correspondence to: Beth Mathews, University of Alaska Southeast, Natural Sciences Department, 11120 Glacier Hwy, Juneau, AK 99801; Beth.Mathews@uas.alaska.edu

May 11, 2007

Ms. Bridget Mansfield
Protected Resources Division
Alaska Marine Mammal Observer Program
National Marine Fisheries Service, Alaska Region
P.O. Box 21668
Juneau, AK 99802-1668
Tel: (907) 586-7235

Dear Bridget,

The Alaska Scientific Review Group (AKSRG) would like to thank you for attending our past meetings and presenting updates on the National Marine Fisheries Service (NMFS) List of Fisheries and plans for the Alaska Marine Mammal Observer Program (AMMOP). We also appreciate your requests for input from the AKSRG on prioritization of Alaskan fisheries for observer programs. This letter summarizes those suggestions and provides broader recommendations for documenting and mitigating incidental mortality of marine mammals in Alaskan fisheries.

When asked nearly 10 years ago to prioritize observer program needs, the AKSRG indicated that its priority was for gathering bycatch information in fisheries that lacked previous observer coverage and in which strategic and other stocks were felt to be most vulnerable to entanglement. In response to those suggestions, the AMMOP first assessed marine mammal interactions with the Cook Inlet set and drift gillnet fisheries, and then with the Kodiak set gillnet fishery. However, because of the complexity and cost of running observer programs in Alaska, especially for those that involve many participants and are geographically extensive, relatively little progress has been made. As an example, several years ago the AKSRG recommended that the next fisheries of concern were the gillnet (both set

and drift) and seine fisheries in Southeast Alaska, based on our perception of the collective vulnerability of harbor porpoise, humpback whales, Steller sea lions, and harbor seals to entanglement in gillnets and seine nets. However, because sufficient funding was not available to do the required observer program in Southeast Alaska, a two-year observer program for the Yakutat set gillnet fishery was scheduled for 2007-2008 and monitoring in Southeast Alaska has yet to be initiated.

The AKSRG believes that the situation in Alaska is different from most other U.S fisheries and that NMFS needs to consider novel methods for identifying those fisheries that are frequently interacting with marine mammals and that merit full scale observer programs. We appreciate and support NMFS' goal of incorporating statistically reliable estimates of incidental serious injury and mortalities into all Stock Assessment Reports. However, enough work has been done already to demonstrate that deriving such estimates in fisheries that have low rates of incidental mortality is very expensive, and it is unlikely that sufficient funding will ever become available to observe all fisheries of potential concern on a reasonable schedule. The AKSRG therefore suggests NMFS consider applying available funds to alternative methods for assessing interactions, and also to mitigating the impact of entanglement rather than quantifying its frequency. For example, the AKSRG discussed the possibility of monitoring for "hot spots", i.e. using cost-effective indices to detect problem areas and use those results to focus observer effort if, when, and where it is needed. Two examples of such efforts were offered in recent SRG meetings:

Carcass surveys: Repeated aerial surveys of shorelines have been used successfully to monitor the occurrence and annual change in the number, distribution, and species of marine mammal carcasses washing ashore during commercial fishing seasons. For example, the expansive beaches that border Category II fisheries conducted on the Copper River Delta, Cook Inlet, Bristol Bay, and Yakutat lend themselves to repetitive aerial surveys for carcasses, and comparable areas in other regions, such as Southeast Alaska could be identified and monitored using similar methods. Carcasses could be photographed and evaluated for evidence of fisheries interactions (e.g., attached gear or gear-related injuries). If carcass counts reveal areas of concern (a "hot spot"), NMFS could then develop a more traditional observer program focused on nearby fisheries using information on the species, timing, and

areas of concern gathered from carcass surveys. In many areas, carcass surveys may also provide an opportunity to collect tissue samples needed to identify the source stock, age, sex, and reproductive status of animals involved in the interactions.

Monitoring whale entanglement: Humpback whale entanglement in Alaska often involves vertical and buoyed lines, but the source of the entangling gear is rarely determined. To date, little effort has been made to collect entangling gear and determine whether it came from commercial or personal use fisheries (using longlines, crab or shrimp pots, set gillnets), or from other sources such as vessel anchor lines. One alternative to observing multiple fisheries to quantify humpback entanglement rates is to first observe and collect detailed data on the gear involved in entanglements in order to identify the source of the entangling gear. Providing additional dedicated funding to support the stranding network and disentanglement efforts would allow the standardized collection and identification of entangling gear. Once the sources of entanglement are determined, NMFS could then focus gear-specific observer programs, research, or mitigation efforts more cost-effectively in areas of concern.

Finally, the AKSRG recognizes that it has been NMFS' policy to derive fishery-specific, statistically reliable rates of serious injury and mortality prior to seeking mitigation of incidental mortality. While the rationale for proceeding in this manner is understandable, this policy precludes the potential mitigation of infrequent takes in fisheries for which observer programs are cost-prohibitive (and therefore takes likely go undetected) but where the potential for cooperation with user groups to reduce the number of takes may be high. For example, weak links and other gear modifications are being actively pursued to reduce entanglements of North Atlantic right whales, but no such effort is being given to southeast Alaska humpbacks in spite of the fact that entanglements are known to be common. In such cases, the AKSRG recommends that NMFS consider funding the proactive mitigation of interactions (working with user groups and third parties, such as Sea Grant or universities) rather than striving to quantify their frequency with statistical precision. The AKSRG believes such an approach is consistent with the intent of the Zero Mortality Rate Goal and recommends that NMFS consider asking Congress to incorporate such flexibility into the wording

of the Marine Mammal Protection Act at such time when it is reauthorized and amended.

The AKSRG recognizes the enormous efforts needed to implement observer programs in Alaska's fisheries, and we value your hard work in this arena. As mentioned above, our intent in providing these recommendations is: 1) to encourage the development and use of alternative and more cost-effective approaches for monitoring marine mammal bycatch, and identifying bycatch "hot spots," and 2) to initiate mitigation of bycatch in the near term, rather than waiting for hard estimates of fisheries bycatch, which may not be forthcoming in any event.

Sincerely,

Elizabeth A. Mathews, Chair Alaska Scientific Review Group

cc: Bill Hogarth, NMFS

David Cottingham, NMFS

Kaja Brix, NMFS Tim Ragen, MMC