



MARINE MAMMAL COMMISSION

23 March 2011

Ms. Kaja Brix, Assistant Regional Administrator
Protected Resources Division
Alaska Region
National Marine Fisheries Service
P. O. Box 21668
Juneau, AK 99802-1668

ATTN: Ellen Sebastian, re RIN 0648-XZ58

Dear Ms. Brix:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the National Marine Fisheries Service's proposed rule and 12-month finding regarding a petition from the Center for Biological Diversity to list the bearded seal (*Erignathus barbatus*) under the Endangered Species Act (75 Fed. Reg. 77496). The Commission offers the following recommendations and rationale.

RECOMMENDATIONS

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

- proceed with listing the Sea of Okhotsk and Beringia distinct population segments of *E. b. nauticus* as threatened under the Endangered Species Act;
- devise and implement a research plan to address the major uncertainties and information gaps revealed in the status review, including a research budget that is sufficient to address the priority needs;
- seek ways to facilitate cooperation in bearded seal research and management among the five nations with jurisdiction over parts of the species' range;
- collaborate with the Alaska Native community to monitor abundance and distribution of bearded seals, and use seals taken in the subsistence harvest to collect data on demography, body condition, reproductive status, disease and parasites, contaminant loads, and other pertinent topics; and
- periodically re-evaluate *E. b. barbatus* as more information becomes available regarding the subspecies' population status and trends and/or risk factors that may threaten its existence.

RATIONALE

The National Marine Fisheries Service began its analysis of the bearded seal by examining the species' population structure. It concluded that the existing division into two subspecies (*E. b. barbatus* and *E. b. nauticus*) is warranted based on recent genetic and older morphological information. The genetic separation of these two subspecies is, in fact, considerable. For that reason, comparisons of status, trends, or biological aspects of bearded seal life history between the two subspecies may or may not be valid.

The Service also concluded that *E. b. nauticus* should be divided into two distinct population segments, one in the Sea of Okhotsk and one in Beringia, considering their discreteness and ecological significance—i.e., two of the three criteria used by the U.S. Fish and Wildlife Service and National Marine Fisheries Service for making such determinations. The Service then examined the conservation status of each population segment and the risks facing them in relation to the five listing factors set forth in the Endangered Species Act. It concluded that both distinct population segments of *E. b. nauticus* were at risk of becoming endangered in the foreseeable future and therefore warranted a designation of “threatened.”

As in the case involving the ringed seal, the Commission concurs with the Service’s findings for the two distinct population segments of *E. b. nauticus* because (1) the greatest risk to the two distinct population segments of *E. b. nauticus* is the ongoing and predicted loss of sea-ice habitat from climate disruption, (2) existing regulatory mechanisms in the United States and elsewhere are not adequate to address the factors driving climate disruption (i.e., greenhouse gas emissions), and (3) the resulting changes in arctic and sub-arctic climate will be accompanied by added risks associated with increasing human activities in the range of these two distinct population segments (e.g., oil and gas development, fishing, shipping, and activities that result in the discharge of contaminants). In essence, the Commission believes that climate disruption poses a serious threat to the arctic marine ecosystem and to a number of species that are an integral part of that ecosystem. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service proceed with listing the Sea of Okhotsk and Beringia distinct population segments of *E. b. nauticus* as threatened under the Endangered Species Act.

The Commission also concurs with the Service that *E. b. barbatus* does not warrant listing at this time. The subspecies appears to be relatively abundant and occurs largely in the North Atlantic sector of the Arctic where a substantial portion of its habitat (i.e., from Baffin Strait westward through the Canadian Archipelago north of the Northwest Passage) is expected to be less affected by climate disruption in the foreseeable future.

That being said, the past few decades have been full of surprises regarding both the nature and pace of changes in polar ecosystems from climate disruption. Furthermore, the available science on both bearded seal subspecies is limited at best. For example, the Service’s status review provides abundance estimates for the three population components of the bearded seal (i.e., both subspecies and both distinct population segments within *E. b. nauticus*), but many of the data used to derive those estimates are outdated or unreliable and pertain only to a portion of their respective ranges. In all three cases, the data are not sufficient to describe either status or trends. Without good information on even basic parameters such as abundance and trend, the Service’s ability to accurately and quantitatively assess and manage the risk to these population segments is clearly limited.

The question, then, is how to rectify the lack of information and provide an improved basis for future decision making for this species. Here, the Commission has four recommendations. First,

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the Marine Mammal Commission recommends that the National Marine Fisheries Service devise and implement a research plan to address the major uncertainties and information gaps revealed in the status review, including a research budget that is sufficient to address the priority needs. Second, because the core distribution of the species includes waters under the jurisdiction of five nations, the Commission recommends that the Service seek ways to facilitate cooperation in bearded seal research and management among the five nations with jurisdiction over parts of the species' range. Among other things, the Service should confer with the Department of State on ways to work within the Arctic Council and other institutions to increase collaboration of researchers and managers from Russia, Canada, Norway, Greenland, and the United States. Such collaboration should be focused on (1) assessing the status of bearded seal populations throughout the species range and (2) identifying protective measures where necessary. Third, because of the logistical difficulties associated with research and management of this species, the Commission recommends that the Service collaborate with the Alaska Native community to monitor abundance and distribution of bearded seals, and use seals taken in the subsistence harvest to collect data on demography, body condition, reproductive status, disease and parasites, contaminant loads, and other pertinent topics. Subsistence harvests provide opportunities to overcome logistical difficulties and collect valuable data on *E. b. nauticus* throughout a large part of its range. And fourth, the Marine Mammal Commission recommends that the National Marine Fisheries Service periodically re-evaluate *E. b. barbatulus* as more information becomes available regarding the subspecies' population status and trends and/or risk factors that may threaten its existence.

Finally, although the Commission considers the above-described listings to be warranted, it does not believe that the subsistence harvest of bearded seals in U.S. waters constitutes a significant risk factor for the Beringia distinct population segment of *E. b. nauticus*. Bearded seals are an important food and cultural resource for Alaska Natives and subsistence hunting does not appear to pose a significant risk to this population segment. Based on the best available scientific information and knowledge of traditional subsistence patterns, the Commission sees no basis for imposing any new restrictions on the subsistence harvest.

I hope these recommendations and comments are helpful. Please contact me if you have questions or need additional information.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director