



MARINE MAMMAL COMMISSION

6 August 2012

Mr. P. Michael Payne, Chief
Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3225

Re: Permit Application No. 17278
(James Shine, Ph.D.,
Harvard University School of Public Health)

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act. Dr. Shine is requesting authorization to import and receive samples from long-finned pilot whales for purposes of scientific research during a five-year period.

RECOMMENDATION

The Marine Mammal Commission recommends that the National Marine Fisheries Service encourage Dr. Shine to consider obtaining samples from other sources—if appropriate samples are not available from other sources, issue the permit as requested.

RATIONALE

Dr. Shine proposes to import and receive muscle samples from long-finned pilot whales killed in subsistence hunts in the Faroe Islands. Researchers at the Faroese Museum of Natural History sampled muscle from those whales and archived those samples for future research. The objectives of this particular study would be to (1) determine the concentrations and geographic source (including geographic origin and transport mechanisms) of mercury in subsistence-hunted whales and (2) examine how those sources may have contributed to greater concentrations of mercury observed in Arctic and sub-Arctic ecosystems than other locales. The information gained also should help the Faroese evaluate the risks (i.e., potential toxic effects) associated with consuming whales from this hunt. In 2008 the chief medical officers from the Faroe Islands declared pilot whale meat unsafe for human consumption based on concerns about contaminant concentrations.

Dr. Shine proposes to obtain 1 g samples of frozen muscle from up to 15 adult whales of either sex per year. Because of funding constraints, he proposes to analyze 12 samples from males only in 2012 and then expects to analyze additional samples in subsequent years. The samples would

be analyzed for total mercury concentrations at Harvard University and mercury stable isotope signatures at the University of Michigan.

By itself, this study seems to meet the basic requirement for obtaining a scientific research permit, that the proposed research is required to further a bona fide scientific purpose. The information to be gained from mercury concentrations may help researchers understand contaminant concentrations and effects in the whales and contaminant pathways in Arctic and sub-Arctic marine ecosystems. However, some controversy may arise from the fact that the pilot whales from which samples were collected were taken in so-called “drive hunts.” The international community has raised concerns as to whether the hunts, as practiced in the Faroe Islands, comport with international standards and are humane.

The Marine Mammal Protection Act provides the framework for evaluating these issues for purposes of authorizing imports into the United States. The Act establishes a general moratorium on the taking and importation of marine mammals, subject to various exceptions and authorizations. One exception allows for subsistence hunting by Alaska Natives, who have a long history of using and depending on marine mammals to sustain them and their culture. The Faroese hunt arguably shares some of these attributes. The Faroese have a long history of taking these whales, with records dating back to the late 1500s. The whale meat and blubber from the Faroese hunt is used locally and is shared among members of the community, essentially for subsistence and cultural purposes.

Under the Marine Mammal Protection Act, the exemption for subsistence hunting by Alaska Natives is not absolute. The responsible agencies may regulate such hunting if the species involved is determined to be depleted and in need of additional protection. The pilot whales taken by the Faroese are not considered to be depleted. Using data from 1987 and 1989, Buckland et al. (1993) estimated the total stock size for long-finned pilot whales in the northeast North Atlantic as 778,000. Annual take levels have averaged from just over 950 in the 1990s to more than 1,500 in the 1980s and 1990s combined, or about 0.1 to 0.2 percent of the total population. Clearly these numbers require updating and the stock structure of pilot whales in this area warrants further investigation. But based on the available data, the Faroese hunt likely does not have a significant population-level effect.

Section 102(c) of the Marine Mammal Protection Act specifies that it is unlawful to import into the United States any marine mammal that was “taken in violation of this title” or “taken in another country in violation of the laws of that country.” In this case, the Faroese government sanctions and regulates the hunts, and the Commission has no reason to believe that the specimens for which a permit is being sought were taken in violation of Faroese or Danish law. As a technical matter, the marine mammals from which the specimens were obtained were not taken in violation of the Marine Mammal Protection Act, inasmuch as the taking prohibition of the Act does not apply to activities within the territory of another country or to foreign nationals outside of waters subject to U.S. jurisdiction (i.e., in waters beyond the U.S. Exclusive Economic Zone).

With regard to criticism that the Faroese hunt is inhumane, the appropriate analysis should take note of the definition of the term “humane” provided in section 3(4) of the Marine Mammal Protection Act. The term humane “in the context of the taking of a marine mammal means that

method of taking which involves the least possible degree of pain and suffering practicable to the mammal involved.” Although not necessarily dispositive of the issue, it is worth noting that the International Whaling Commission adopted two resolutions during the 1990s concerning the Faroe Islands hunt. The first resolution, adopted in 1993, expressed concern regarding the methods used to kill the whales. Thereafter, the Faroese banned the use of spears and harpoons, shared information on their killing methods, and began seeking an alternative to the use of gaffs for killing the whales. In 1995 the International Whaling Commission adopted a second resolution welcoming those changes and encouraging further measures such as monitoring hunt performance and initiating training programs on killing methods. The United States supported both of those resolutions. Although the International Whaling Commission resolutions indicate that the Faroese have made improvements, divergent views remain about whether the hunt satisfies the Marine Mammal Protection Act standard of humaneness.

The Marine Mammal Protection Act contains somewhat conflicting provisions as to whether the issue of humaneness is relevant when reviewing a permit application seeking authorization to import marine mammals, or parts taken from such marine mammals, for purposes of scientific research. Section 104(b)(2)(B) of the Act, which applies to all permit types, requires the Service to determine that the manner of taking marine mammals, including those to be imported, is humane. In contrast, section 102(b)(4) of the Act establishes a general prohibition on importing any marine mammal (the definition of which includes any marine mammal part) that was “taken in a manner deemed inhumane by the Secretary,” but provides a specific exception if the importation is made pursuant to a permit for scientific research or for enhancing the survival or recovery of a species or stock. Thus, a colorable argument can be made that a marine mammal or marine mammal part may be imported into the United States for purposes of scientific research regardless of whether the animal was taken humanely.

Finally, it is worth noting here that the proposed importation and analysis of those samples was not an incentive for the hunts that resulted in the collection of the subject samples. Similarly, by issuing this permit, the Marine Mammal Commission does not believe that the National Marine Fisheries Service would necessarily be sanctioning the Faroe Islands hunt or providing any incentive to continue it.

Based on this analysis, the Commission does not believe that the Marine Mammal Protection Act explicitly prohibits the issuance of a scientific research permit authorizing the importation of samples from the Faroe Islands pilot whale hunt. Nevertheless, in recognition of the controversy surrounding that hunt and the unresolved issues that remain under the Marine Mammal Protection Act, the Commission believes that Dr. Shine should be encouraged to secure specimens from alternative sources (e.g., animals killed as bycatch in fisheries or naturally stranded on beaches), if such samples are available and would be suitable for the proposed research. The Marine Mammal Commission therefore recommends that the National Marine Fisheries Service encourage Dr. Shine to consider obtaining samples from other sources. However, if appropriate samples are not available from other sources, the Commission recommends that the Service issue the permit as requested.

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Please contact me if you have any questions concerning this analysis or the Commission's recommendations.

Sincerely,

A handwritten signature in blue ink that reads "Timothy J. Ragen". The signature is written in a cursive style with a long horizontal stroke at the beginning.

Timothy J. Ragen, Ph.D.
Executive Director

Reference

Buckland, S.T., D. Bloch, K.L. Cattanach, Th. Gunnlaugsson, K. Hoydal, S. Lens, and J. Sigurjónsson. 1993. Distribution and abundance of long-finned pilot whales in the North Atlantic, estimated from NASS-87 and NASS-89 data. International Whaling Commission Special Issue 14:33-49.