

## MARINE MAMMAL COMMISSION

12 July 2011

Mr. Timothy J. Van Norman Chief, Branch of Permits Division of Management Authority Fish and Wildlife Service 4401 North Fairfax Drive Arlington, VA 22203

Re:

Amendment of Permit No. MA225854 (Tom Smith, Ph.D., Brigham Young University)

Dear Mr. Van Norman:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit amendment with regard to the goals, policies, and requirements of the Marine Mammal Protection Act.

## RECOMMENDATION

<u>The Marine Mammal Commission recommends</u> that the U.S. Fish and Wildlife Service issue the requested permit amendment.

## RATIONALE

Permit No. MA225854 authorizes the permit holder to harass 18 polar bears per year while conducting den monitoring via videotaping in Alaska. The permit is valid until 18 February 2015. It does not authorize incidental harassment of non-target marine mammal species, nor does it authorize unintentional injuries or deaths of polar bears. The purpose of the research is to investigate denning habits of polar bears to (1) understand the impacts of global climate change and (2) inform industry operators and federal wildlife managers regarding ways to minimize potential impacts on polar bears.

Dr. Smith is requesting several changes to the permit. First, he would like to install devices that would allow real-time monitoring of polar bear den activity and remote data downloading. At each subject den, he would erect a 3.4 m aluminum mast to support a 30 x 30 cm white antenna, which would transmit and receive data obtained by video cameras. He would position the mast 100–150 m from the den and secure it in place by drilling a 5 x 60 cm hole in the ice and by anchoring with three stainless steel guy wires. He estimates that it would take approximately one hour to install the devices and installation would cause minimal disturbance. Under the current permit, he or his co-investigators must visit den sites every 2.5 weeks to download data. Installation of those devices would eliminate the need to visit the sites until after den abandonment. Dr. Smith would provide the Service with an internet link to live feeds so that it can monitor camera operation and den activity, as needed. He is not requesting any additional takes for this activity, as takes incidental to installation of cameras already are authorized under his current permit (i.e., Level B harassment takes for three polar bears at each of six den sites).

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Second, Dr. Smith also proposes to conduct an aerial survey using forward-looking infrared (FLIR) technology along Alaska's North Slope from November through January of each year. He would use the survey to locate active den sites. Under his current permit, he has relied on a survey conducted by the Service, but that survey has been conducted late in the season (as late as March). By conducting the survey at an earlier time, Dr. Smith aims to increase the likelihood of detecting dens and the opportunities for monitoring before dens are abandoned at the end of the winter. The proposed survey would use a twin-otter aircraft with a mounted FLIR device, flown at an altitude of at least 305 m. The aircraft is jointly owned and operated by BP and ConocoPhilips. Dr. Smith states that in past years of research under his previous permit that allowed aerial surveys, he had not observed any evidence of den abandonment or disturbance at the time of year and distances specified. After locating likely dens by aerial survey, Dr. Smith would again use FLIR to locate each den using a snow mobile at a distance of 100 m and, if needed, on foot at a distance of 60 m. Those activities and distances are consistent with the conditions of the current permit. Dr. Smith is requesting 18 additional Level B harassment takes that could occur during the site surveys prior to installation of the monitoring devices. He would submit a written report and FLIR raw data to the Service for review and approval of den locations and monitoring activities that would occur from February through April of each year.

The Commission believes the proposed study, including these amendments, have the potential to provide valuable information on the response of polar bears to climate change and that Dr. Smith has incorporated sufficient precautions in his research design to minimize any impact of his research. Therefore, the Marine Mammal Commission recommends that the Fish and Wildlife Service issue the requested permit amendment.

The Commission believes that the activities for which it has recommended approval are consistent with the purposes and policies of the Marine Mammal Protection Act.

Please contact me if you have any questions concerning the Commission's recommendation.

Sincerely,

Tweethy J. Ragen

Timothy J. Ragen, Ph.D. Executive Director