



MARINE MAMMAL COMMISSION

14 December 2009

Mr. Timothy J. Van Norman
Chief, Branch of Permits
Division of Management Authority
U.S. Fish and Wildlife Service
4401 N. Fairfax Drive
Arlington, Virginia 22203

Re: Permit Application No. PRT-225854
(Tom S. Smith, 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 application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act.

The applicant is requesting authorization to take by Level B harassment up to 18 polar bears annually over a five-year period. The takes would occur during the placement and maintenance of remote video cameras to study polar bear behavior at den sites on Alaska's North Slope near Prudhoe Bay. The applicant proposes to monitor remotely up to six polar bear dens per year. Each den may include up to three bears, for a total of 18 bears that may be taken annually. Den sites would be located by either radio-telemetry (performed by U.S. Geological Survey scientists), forward-looking infrared camera over-flights (performed by British Petroleum in conjunction with the U.S. Fish and Wildlife Service), or by chance as bears are observed emerging from dens. Once a den is located, researchers would approach to within 100 m of the den on snowmobiles to install the cameras, which would be camouflaged in white. Installation would be done at night when the bears are in their dens and, in most cases, have not yet opened the dens to the outside. The applicant states that researchers would revisit den sites weekly to recharge camera batteries and download data. If bears emerge while researchers are present, the researchers indicate that they would return to their snowmobiles and wait for the bears to re-enter the den before either departing or proceeding with camera maintenance. The applicant states that research has shown that bears that re-enter dens do not immediately abandon these sites or appear to alter their activity patterns.

RECOMMENDATION

The proposed activities appear to be relatively benign and, if conducted carefully, may not result in any discernable take. However, polar bears have an excellent sense of smell and may detect the scent of researchers at a considerable distance from their dens. Also, they respond to the sounds of snowmobiles at the distances described in the application. Despite previous studies of bear responses, the effects of potential disturbances cannot be discounted because the denning period is critical for successful reproduction and maintaining population status. In view of the potential for unintended, but nonetheless significant effects on individual animals, the Marine Mammal Commission recommends that the Fish and Wildlife Service issue the requested permit subject to the following conditions:

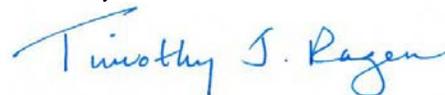
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- First, the authorization should require the researchers to build a barrier of snow blocks to shield them and their snow machines from the view of the bears. If bears come out of the dens for a period of time, the researchers should wait behind the snow barrier until the animals return to the dens and not follow the animals if they move away from the dens.
- Second, the Service should require the applicant to discontinue activities at a particular site if the bear or bears being filmed demonstrate any potentially significant response (e.g., agitation) to the filming crew. Females with cubs may stay inside their dens for extended periods if they detect disturbance outside the dens. In such cases, researchers should leave the site temporarily (for at least a couple of days). The researchers may need to leave the site permanently if a den has been open for a considerable period and the female may be approaching the time when she would abandon the den naturally. The reason for leaving the site is that disturbance toward the end of the denning period may cause the female and cubs to abandon the den prematurely, with uncertain effects on cub survival.
- Third, because polar bears are likely to come under increasing stress from consequences of climate change, keeping track of their responses to human activities seems essential to provide a basis for making permitting and other decisions in the future. Therefore, the Commission also believes that the Fish and Wildlife Service should require the applicant to document and report any adverse effects related to human presence near the denning site.
- Fourth, the Service should include requirements to ensure that the activities to be conducted under this permit and those of other permit holders who might be carrying out research on the same species or in the same areas are coordinated and, as possible, data are shared to avoid unnecessary duplication of research and disturbance of animals.

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 or your staff has questions concerning any of these comments or recommendations.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director