Notice of Permit Applications Received Under the Antarctic Conservation Act of 1978

AGENCY: National Science Foundation.

ACTION: Notice of Permit Applications Received under the Antarctic Conservation Act of 1978, Public Law 95–541.

SUMMARY: The National Science Foundation (NSF) is required to publish a notice of permit applications received to conduct activities regulated under the Antarctic Conservation Act of 1978. NSF has published regulations under the Antarctic Conservation Act at Title 45 Part 670 of the Code of Federal Regulations. This is the required notice of permit applications received.

DATES: Interested parties are invited to submit written data, comments, or views with respect to this permit application by December 27, 2016. This application may be inspected by interested parties at the Permit Office, address below.

ADDRESSES: Comments should be addressed to Permit Office, Room 755, Division of Polar Programs, National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230.

FOR FURTHER INFORMATION CONTACT: Nature McGinn, ACA Permit Officer, at the above address or ACApermits@nsf.gov.

SUPPLEMENTARY INFORMATION: The National Science Foundation, as directed by the Antarctic Conservation Act of 1978 (Public Law 95–541), as amended by the Antarctic Science, Tourism and Conservation Act of 1996, has developed regulations for the establishment of a permit system for various activities in Antarctica and designation of certain animals and certain geographic areas a requiring special protection. The regulations establish such a permit system to designate Antarctic Specially Protected Areas.

Application Details:

Permit Application: 2017–029

1. Applicant

John Durban, Ph.D., Marine Mammal and Turtle Division, NOAA NMFS Southwest Fisheries Science Center, 8901 La Jolla Shores Dr. La Jolla, CA 92037.

Activity for Which Permit Is Requested

Take: Import into USA. The applicant’s study of the health of whales, as a means to assess the health of Antarctic marine ecosystems, calls for the use of aerial photogrammetry to collect data on whale morphometrics and condition. The applicant proposes to use unmanned aircraft systems (UAS), particularly small, radio-controlled hexacopters, for aerial photogrammetry, and to use handheld cameras for photo-identification. The hexacopters will be flown greater than 100 ft above the whales for identification and assessment purposes. The applicant also proposes to sample the exhaled blow (breath) of commonly encountered larger whales by briefly descending the hexacopter to as low as 6 ft above the whale and flying through the blow plume. The breath samples will be analyzed for microorganisms as an indicator of the whales’ respiratory health. In previous studies, the applicant has noted no behavioral disturbances from the overflight of whales by hexacopters for photo- or breath-sampling. In addition to the photogrammetry and sampling via UAS, the study entails collecting tissue samples the size of a pencil eraser to be used for genetic investigations, for stable isotope analyses to describe diet and nutritional status, and for a comparison of the skin microbiome to respiratory samples. The tissue samples will also be used for steroid hormone analysis to infer pregnancy, as well as physiological and nutritional stress. The applicant’s study includes the following whale species (both sexes) and number of takes per annum: Killer whales (photogrammetry, n = 5000; biopsy, n = 475); humpback whales (photogrammetry, n = 2000; breath sample, n = 100; biopsy, n = 235); Antarctic minke whales (photogrammetry, n = 1000; breath sample, n = 500; biopsy, n = 170); common minke whales (photogrammetry, n = 1000; breath sample, n = 500; biopsy, n = 170); Arnoux’s beaked whales (photogrammetry, n = 500; biopsy, n = 55); southern bottlenose whales (photogrammetry, n = 200; biopsy, n = 85); and sperm whales (photogrammetry, n = 2000; biopsy, n = 90). Additionally, samples of dead marine mammals encountered by the applicant may be salvaged for chemical analysis or genetic determination of species (whales, n = 500 per annum; seals, n = 500). All samples will be imported into the USA for analysis and ultimate disposition at the Southwest Fisheries Science Center.

Location

Antarctic Peninsula region; southern Ross Sea;