



NATIONAL SCIENCE FOUNDATION

Notice of Permit Applications Received
Under the Antarctic Conservation Act of 1978 (P.L. 95-541)

AGENCY: National Science Foundation

ACTION: Notice of Permit Applications Received under the Antarctic Conservation Act of 1978,
P.L. 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 **[Insert 30 days from date of publication in the Federal Register]**. This application may be inspected by interested parties at the Permit Office, address below.

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

FOR FURTHER INFORMATION CONTACT: Polly A. Penhale at the above address or (703) 292-7420.

SUPPLEMENTAL 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 requiring special protection. The regulations establish such a permit system to designate Antarctic Specially Protected Areas.

The applications received are as follows:

1. Applicant Permit Application: 2012-011
Daniel P. Costa
Department of Ecology and Evolutionary Biology

University of California – Santa Cruz

Long Marine Lab

100 Shaffer Road

Santa Cruz, CA 95060

Activity for Which Permit is Requested

Take and Enter Antarctic Specially Protected Areas. The applicant plans to enter the Antarctic Specially Protected Areas of Cape Evans (ASPA 155), Backdoor Bay (ASPA 157), and Hut Point (ASPA 158) to collect 1 cm² samples of skin and fur, and 1 whisker from up to 50 dead seals caught during the early 1900's by the explorers and are found in and around the historic huts located in these protected areas. Naturally occurring stable isotopes of carbon ($\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) have been increasingly used to study trophic relationships and feeding habits of marine mammals, based on the demonstration that isotopic ratios in tissue samples from a given species are correlated with those of the prey items included in the diet. As stable isotope composition does not change over time, the isotope signature of seals collected by the historic explorers early in the 20th century will reflect the diet of Weddell seals at that time. These data will be compared to the isotopic signature of Weddell seals in the Ross Sea today. Such data may provide evidence of a potential shift in the diet of this apex predator that might be indicative of ecosystem change.

Location

Cape Evans (ASPA 155), Backdoor Bay (ASPA 157), and Hut Point (ASPA 158)

Dates

December 1, 2011 to December 31, 2012

Nadene G. Kennedy
Permit Officer
Office of Polar Programs

