XII. Permits, Species Killed, Captured

The following chart provides information on Antarctic Conservation Act (P.L. 95-541) Permits issued during 1 July 2007 to 30 June 2008.

Permit #	Active Dates	Permit Activity	Location	Purpose
2008-001	01 Dec 07 – 31 Jan 2008	Entry into ASPA	Discovery Hut (ASPA #158); Cape Evans (ASPA #155); and Cape Royds (ASPA #157)	Photography of scientists gathering and modeling environmental data, and of the history of the area as depicted by the historic huts.
2008-002	24 Nov 07 – 31 Jan 2008	Entry into ASPA	Byers Peninsula, Livingston Island (ASPA #126)	Paleontological/geological investigations of Cerro Negro and related geological formations, collection of vertebrate fossils by wet/dry screening and samples for stable isotope analysis.
2008-004	25 Sep 07 – 28 Feb 2008	Introduce non- indigenous species to Antarctica	McMurdo Station aquarium in Crary Lab	New Zealand black cod is closely related to Trematomus fishes in Antarctica. They will be fed nototheniid fish muscle supplemented with antifreeze glycoproteins. Blood samples will be taken to determine whether there is intestinal absorption of the antifreeze glycoproteins.

Permit #	Active Dates	Permit Activity	Location	Purpose
2008-005	25 Feb 08 – 10 Apr 2008	Introduce non- indigenous species to Antarctica	Lake Bonney, Taylor Valley	Chlamydomonas raudensis (formerly Chlamydomonas subcaudata and collected from Lake Bonney earlier) will be enclosed in dialysis chambers and lowered 17 m into Lake Bonney. The team will attempt to link their understanding of physiological responses in this organism in a lab setting with the photosynthetic adaptation in a natural field setting.
2008-007	01 Oct 07 – 31 Aug 2010	Entry into ASPA	Cape Hallett (ASPA # 106); Cape Royds (ASPA #121); Barwich and Balham Valleys (ASPA # 123); Cape Crozier (ASPA #124); Northwest White Island (ASPA #137); and Linnaeus Terrace (ASPA # 138)	To conduct reviews of the sites' Management Plans to verify that the reasons for special protection remain valid and update the plans where necessary.
2008-008	01 Nov 07 – 30 Apr 2011	Taking; Entry into ASPA	Cape Shirreff (ASPA #149)	Collect blood samples from penguins to analyze for stable carbon and nitrogen isotope values to examine resource utilization in relation to dive and foraging behaviors. Collect blood from fur seals for DNA analysis.
2008-009	25 Nov 07 – 31 Dec 2008	Entry into ASPA	Byers Peninsula (ASPA #126)	Support of a scientific research camp involving movement of personnel and supplies, camp setup, on-site support, maintenance and servicing of facilities and equipment, and de-installation of the tent camp.

Permit #	Active Dates	Permit Activity	Location	Purpose
2008-010	01 Dec 07 – 31 Mar 2008	Introduce non- indigenous species to Antarctica and import into the USA	Antarctic waters	E. coli cloning kits will be used onboard the R/V Nathaniel B. Palmer during experiments. Cells will be destroyed and retrograded as Biohazard.
2008-011	01 Oct 07 – 02 Apr 2010	Introduce non- indigenous species to Antarctica	McMurdo Station Laboratory, and Palmer Station Laboratory	Import commercially available bacterial host cell, Escherichia coli, or experimental use in the laboratories at McMurdo and Palmer Stations.
2008-012	15 Jun 08 – 31 Oct 2008	Entry to ASPA	Eastern Dallmann Bay (ASPA #153) and Western Bransfield Strait (ASPA #152)	Trawling for fish for use in freezing avoidance studies of Antarctic fishes.
2008-014	17 Nov 07 – 31 Dec 2007	Taking; Entry into ASPA	Cape Bird, Hut Point (ASPA #158) and Arrival Heights (ASPA #122)	Collection of soil samples and permafrost measurements as part of the ongoing environmental monitoring program.
2008-016	01 Oct 2007 – 28 Feb 2012	Take; Entry into ASPA.	McMurdo Sound and Northwest White Island (ASPA #137)	Capture, tag, weigh and tissue sample Weddell seal pups and adults as part of a study of the interactions of environmental variability, life history traits, and demography in an apex Antarctic predator.
2008-018	01 Feb 08 – 31 Aug 2008	Take; Import into the USA	Palmer Station area	Collect samples of terrestrial alga, Prasiola crisipa, widespread in Antarctica for studies of molecular systematic of the order Prasiolales.
2008-019	10 Jan 08 – 28 Feb 2008	Entry into ASPA	Avian Island (ASPA #117)	To conduct external and internal repairs to the seemingly-abandoned Chilean refugio for use by a summer-only USAP avian biology research project. Activities include movement of personnel and supplies.

Permit #	Active Dates	Permit Activity	Location	Purpose
2008-020	16 Oct 07 – 20 Sep 2012	Take; Entry into ASPA; and Import into the USA	Palmer Station area; Litchfield Island (ASPA #113); Avian Island (ASPA #117); Biscoe Point (ASPA #139); and Lagotellerie Island (ASPA #115)	Census seabird populations and breeding territories, capture, mark, band, weigh chicks and eggs, obtain diet samples, place transmitters on individuals, obtain tissue samples (oil gland, blood, feathers, yolk), and use GIS/GPS technologies to update existing breeding habitat maps. This work is part of the Palmer Station Long-Term Ecological Research Program (LTER).
2008-023	23 Nov 07 – 30 Jan 2008	Entry into ASPA	Arrival Heights (ASPA #122)	A NET Television (PBS) crew will videotape a variety of IPY scientific research, landscapes, aerials and scenes. Production work will include B-roll material and ongoing research for the International Polar Year (IPY) and will be broadcast on the PBS science series, NOVA.
2008-024	23 Nov 07 – 30 Apr 2008	Entry into ASPA	Historic huts at Cape Evans (ASPA #155); Cape Royds (ASPA #121); Backdoor Bay (ASPA #157) Discovery Hut (ASPA #158); Cape Crozier (ASPA #124); Tramway Ridge (ASPA #130); Dry Valleys and South Pole Station	Polar-Palooza will film USAP scientists conducting research for and education and outreach activity that would tour science centers and natural history museums in 25 communities across America for dynamic multimedia presentations a bout polar research and the IPY.

Permit #	Active Dates	Permit Activity	Location	Purpose
2008-025	23 Nov 07 – 20 Apr 2011	Take; Entry into ASPA; and Import into the USA	Cape Shirreff (ASPA #149)	Researchers will examine the foraging behavior and habitat utilization of the Southern elephant seal. Animals will be captured, tagged, dye marked, blood sampled, weighed, morphometric measurements taken, whisker sample, muscle and blubber biopsy, and instrumented with SRDL and VHF.
2008-027	15 Dec 07 – 31 Mar 2008	Introduce non- indigenous species to Antarctica	Onboard R/V Nathaniel B. Palmer in the Ross Sea	Use Gemingera sp.(a cryptophyta micro alga previously collected from the Ross Sea) in experiments onboard ship looking at the many different prey items with the experimental pool of grazers. This sample is needed as there may not be a high abundance of algae during the cruise.
2008-028	20 Dec 07 – 31 Jan 2008	Take; Import into the USA	Antarctic Peninsula Region	Collect lichens, moss, algae, vascular plants and invertebrates for identification and analyses to determine their various isotopic make-up of ¹⁵ N15 and ¹³ O, which indicate potential sources of nutrient cycling and water use efficiency. This project is part of an IPY education grant.
2008-029	23 Nov 07 – 31 Jan 2008	Entry into ASPA; and Import into the USA	Mount Flora (ASPA # 148)	Collection of sandstone and mudstone for analyses to constrain the age of the opening of the Drake Passage in order to assess the influence of plate kinematics ad ocean gateway development on Antarctic glaciations.
2008-030	30 Nov 07 – 30 Jan 2008	Entry into ASPA	Cape Crozier (ASPA #124); Backdoor Bay (ASPA #157); and Cape Royds (ASPA #121)	Film scientist conducting field research for an IPY education and outreach project brining cutting edge science to diverse, worldwide audiences of students, teachers, and the public.

Permit #	Active Dates	Permit Activity	Location	Purpose
2008-031	14 Jan 08 – 01 Mar 2008	Entry into APA	Cape Bird, Cape Crozier (ASPA #124); and Cape Royds (ASPA #121)	Collect samples from ornithogenic soils of Ross Island and to compare these habitats with those identified in the Dry Valleys.

ASPA = Antarctic Specially Protected Area (formerly SPA's and SSSI's)