

## XII. Permits, Species Killed, Captured

The following chart provides information on Antarctic Conservation Act (P.L. 95-541) Permits issued during 1 July 2008 to 30 June 2009.

Permit #	Active Dates	Permit Activity	Location	Purpose
2009-001	27 Apr 08 – 31 Aug 2008	Introduce non-indigenous species to Antarctica	Palmer Station Laboratory	The project will study the reconstitution of a cold-functioning chaperonin protein folding system from testis tissue of the Antarctic fish, <i>Notothenia coriiceps</i> . To demonstrate that the chaperonin is functional, proteins substrates with <sup>38</sup> S-methionine must be used. To obtain these proteins they will express <i>N. coriiceps</i> actin and tubulin substrates in <i>E. coli</i> in a medium supplemented with <sup>38</sup> S-methionine. Cultures will be autoclaved to kill the bacteria.
2009-002	01 Oct 08 – 30 Sep 2013	Entry into ASPA	Beaufort Island (ASPA #105); Cape Royds (ASPA #121); Arrival Heights (ASPA #122); Canada Glacier (ASPA #131); Cape Evans (ASPA #155); Backdoor Bay (ASPA #157); and Hut Point (ASPA #158)	National Science Foundation media officers will escort news media to these areas to interview scientists conducting research in the field and to photograph the historic huts

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2009-003	01 Oct 08 – 28 Feb 2009	Entry into ASPA	Cape Crozier (ASPA #124)	RPSC Communication Department will install radio equipment that provides voice and data services for a science team working at the site. The equipment will be located inside the fish hut. Additional visits to the camp may be necessary to repair communications equipment should a failure of the radio links occur.
2009-004	01 Oct 08 – 28 Feb 2009	Entry into ASPA	Caughley Beach, Cape Bird (ASPA # 116)	RPSC Communication Department will install radio equipment that provides voice and data services for a science team working at the site. The equipment will be located inside the fish hut. Additional visits to the camp may be necessary to repair communications equipment should a failure of the radio links occur.
2009-005	01 Aug 08 – 31 Dec 2011	Take; Import into the USA	McMurdo Sound Area	Capture, transport, weigh, measure, sedate, attach instruments, collect blood and tissue samples, and release up to 50 adult Weddell seals to study the hunting behavior, prey preference and foraging efficiency during decreasing and increasing photoperiod (autumn/spring) and the extended period of winter darkness (mid-May to early August).

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2009-006	01 Oct 08 – 31 Aug 2009	Taking; Entry into ASPA	Western Shore of Admiralty Bay (ASPAs #128); and Lion's Rump (ASPAs #151)	Continuation of a study of the behavioral ecology and population biology of Adelie, Gentoo and Chinstrap penguins and the interactions among these species and their principal avian predators: Skuas, gulls, sheathbills, and giant petrels. The plan to capture, band, weigh, stomach pump, attach instruments (Tx's PITs, TDRs), take blood, uropygial gland oil samples and collect tissue samples from dead individuals of seabirds.
2009-007	09 Jly 08 – 31 Mar 2013	Entry into ASPA	Cape Evans (ASPAs #155); Cape Royds (ASPAs #157); Hut Point (ASPAs #158); Cape Adare (ASPAs #159); and Cape Hallett (ASPAs #106)	Visits to the historic huts at each location by passengers onboard Quark's vessel, <i>Kapitan Khlebnikov</i> .
2009-008	01 Oct 08 – 30 Sep 2013	Entry into ASPA	Cape Evans (ASPAs #155) Cape Royds (ASPAs #157); Hut Point (ASPAs #158) and Cape Adare (ASPAs #159)	Recreational and educational visits to historic huts at each location by members of the U.S. Antarctic Program.
2009-009	01 Nov 08 – 30 Apr 2011	Take; Import into the USA	Cape Shirreff, South Shetland Islands, Antarctic Peninsula	Up to 150 adult and juvenile Elephant seals will be captured, anesthetized, tagged, dye marked, blood sampled, weighted, morphometric measurements taken, muscle/blubber biopsy taken and vibrissae collection. Animals will also be instrumented with TDR's, and/or ARGOS linked PIT/CTD instruments. Up to 50 leopard seals will have tissue samples taken by means of a jab stick to collect 2mm biopsy punch from the flippers.

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2009-010	02 Oct 08 – 31 Mar 2009	Entry to ASPA	Cape Evans (ASPA #155); Backdoor Bay (ASPA # 157); and Hut Point (ASPA # 158)	An Artist and Writer Program participant plans to visit the historic huts to photograph and examine the intersection of nature and culture.
2009-011	01 Apr 09 – 31 Jly 2011	Entry into ASPA	Western Bransfield Strait (ASPA #152); and Eastern Dallmann Bay (ASPA #153)	Conduct fishing via benthic trawls and fish fraps/pots to study the physiology and biochemistry of Antarctic fishes, with emphasis on Channichthyid Ice fishes.
2009-012	01 Dec 08 – 28 Feb 2009	Take; Entry into ASPA.	Cape Royds (ASPA #121); Canada Glacier (ASPA #131); Cape Crozier (ASPA #155); Backdoor Bay (ASPA #157); and Hut Point (ASPA #158)	A member of the Artists and Writer Program plans to photograph and document the historic huts to show the human presence in Antarctica and human adjustment to the extreme conditions.
2009-013	23 Dec 08 - 31 Jan 2014	Take; Import into the USA	Antarctic Peninsula and McMurdo Sound	The study of movement patterns and genetics of Killer whales and Minke whales involves using satellite tags and skin biopsy techniques. The installation of the tags and collection of biopsy tissue will involve the use of crossbows or air guns.
2009-014	07 Feb 09 – 31 Jly 2010	Take	Antarctic Peninsula, Anvers and Adelaide Islands area	Up to 250 Humpback and 50 Minke whales will be approached for observation and photo-ID purposes. Of these animals, up to 45 Humpback and 15 Minke whales will have DTag's attached and later removed in order to record the fine-scale movement patterns and foraging behavior of the whales.

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2009-015	01 Sep 08 – 31 Aug 2013	Entry into ASPA	Antarctic Peninsula area; Western Shore of Admiralty Bay (ASPAs #128); and Cape Shirreff (ASPAs #149)	The Antarctic Site Inventory Project will continue data collection by surveying and censusing fauna and flora at various sites in the area.
2009-016	01 Dec 08 - - 31 Jan. 2013	Entry into ASPA; Import into the USA	Tramway Ridge, Mt. Erebus (ASPAs #130)	The deployment and retrieval of colonization experiments and the sampling of natural minerals and rock surfaces for microbial studies. The experiments will help identify eukaryotic and prokaryotic organisms that specialize in the alteration of volcanic glass and to explore their colonization, biofilm formation and their effects on the hydration and dissolution of glass.
2009-017	01 Nov 08 – 30 Sep 2009	Take; Import into the USA	Palmer Station area, Antarctic Peninsula	A member of the Artists and Writers program plans to collect penguin and other seabird bones from salvage animals for use as musical instruments for live performances and educational outreach activities entitled, "Antarctica: Hidden Musical Worlds".
2009-018	17 Nov 08 – 01 Jan 2009	Take; Entry into ASPA; and Import into the USA	New College Valley, Cape Bird (ASPAs #116); Hut Point (ASPAs #158); and Arrival Heights (ASPAs #122)	Sites are specifically targeted because of the geology, climatic influences and topography. One site will be a reference control area for the temporal and spatial scales of various types of disturbances in and around McMurdo Station. Hut Point and Arrival Heights, as in the past, will be sampled as part of the ongoing environmental monitoring program.

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2009-020	01 Dec 08 – 31 Jan 2009	Entry into ASPA	Cape Royds (ASPAs #121); Hut Point (ASPAs 158); Backdoor Bay (ASPAs # 157); and Cape Crozier (ASPAs #124)	Media personnel will photograph and videotape interviews with scientists working at the sites and also photograph and videotape the historic huts for their educational outreach project, "Ice Stories".
2009-021	01 Dec 08 – 28 Feb 2009	Entry into ASPA	Cape Evans (ASPAs #155); Backdoor Bay (ASPAs # 157) and Hut Pont (ASPAs #158)	An Artists and Writers Program participant plans to photograph and video the physical materials that comprise the structures and their contents. Through research and a blog the artist will report on the extent to which the earlier explorers might have re-used and recycled the materials within the huts.
2009-022	15 Feb 09 – 30 Apr 2009	Entry into ASPA	Byers Peninsula, Livingston Island (ASPAs #126)	Collection of vertebrate fossils and rocks for isotope analysis in hopes of finding fossils in the 120 mya range when therian mammals were just beginning to diversify.
2009-023	08 Dec 08 – 31 Jan 2009	Entry into ASPA	Linnaeus Terrace, Asgard Range (ASPAs 138)	Collect sandstone rock samples to measure cosmogenic isotopes in quartz grains to determine age and erosion rates.

ASPAs = Antarctic Specially Protected Area (formerly SPAs and SSSIs)